

**NRLMG**

**NATIONAL ROCK LOBSTER  
MANAGEMENT GROUP**

**2003 ANNUAL REPORT**

# TABLE OF CONTENTS

<b>1.1</b>	<b>PURPOSE</b>	<b>5</b>
<b>1.2</b>	<b>NRLMG BACKGROUND</b>	<b>6</b>
<b>2.1</b>	<b>STRATEGIC VISION</b>	<b>12</b>
<b>2.2</b>	<b>FRAMEWORK FOR MANAGING ROCK LOBSTER FISHERIES</b>	<b>13</b>
<b>3.1</b>	<b>INTRODUCTION - RESEARCH</b>	<b>18</b>
<b>3.2</b>	<b>RESEARCH ACTIVITIES</b>	<b>19</b>
<b>3.3</b>	<b>MANAGEMENT PROCEDURES AND HARVEST CONTROL RULES</b>	<b>21</b>
<b>3.4</b>	<b>REVISED NSS MANAGEMENT PROCEDURE</b>	<b>23</b>
<b>3.5</b>	<b>STOCK DEFINITIONS</b>	<b>25</b>
<b>3.6</b>	<b>STOCK ASSESSMENT OVERVIEW</b>	<b>27</b>
<b>4.1</b>	<b>RESEARCH AND MANAGEMENT - UNCERTAINTY IN ESTIMATES OF TOTAL REMOVALS</b>	<b>34</b>
<b>4.2</b>	<b>COMPLIANCE AND ENFORCEMENT ISSUES</b>	<b>36</b>
<b>4.3</b>	<b>CAPTURE METHODS</b>	<b>37</b>
<b>4.4</b>	<b>CATCH IDENTIFICATION</b>	<b>39</b>
<b>4.5</b>	<b>ALLOCATION PRINCIPLES – “SHARED FISHERIES”</b>	<b>40</b>
<b>5.1</b>	<b>INTRODUCTION – REGULATORY PROPOSALS</b>	<b>44</b>
<b>5.2</b>	<b>AMATEUR ROCK LOBSTER POT LIMIT.</b>	<b>45</b>
<b>5.3</b>	<b>SOUTHLAND CONCESSION AREA REGULATIONS</b>	<b>52</b>
<b>6.1</b>	<b>INTRODUCTION – FISHERY INFORMATION</b>	<b>54</b>
<b>6.2</b>	<b>CRA 1</b>	<b>55</b>
<b>6.3</b>	<b>CRA 2</b>	<b>57</b>
<b>6.4</b>	<b>CRA 3</b>	<b>59</b>

<b>6.5</b>	<b>CRA 4</b>	<b>62</b>
<b>6.6</b>	<b>CRA 5</b>	<b>64</b>
<b>6.7</b>	<b>CRA 6</b>	<b>66</b>
<b>6.8</b>	<b>CRA 7</b>	<b>68</b>
<b>6.9</b>	<b>CRA 8</b>	<b>70</b>
<b>6.10</b>	<b>CRA 9</b>	<b>72</b>
<b>6.11</b>	<b>PACKHORSE ROCK LOBSTER – PHC</b>	<b>73</b>
<b>7.1</b>	<b>SUMMARY OF RECOMMENDATIONS</b>	<b>75</b>

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# ***Part One***

## ***INTRODUCTION***

## 1.1 PURPOSE

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- 1 The purpose of the NRLMG report is to provide primary advice on sustainability measures and management controls for rock lobster fisheries to the Minister of Fisheries. The report also outlines other matters considered by the National Rock Lobster Management Group (NRLMG) during the 2003 calendar year.
- 2 The report fulfils the role of the Ministry of Fisheries Initial Position Paper (IPP) and forms the basis of the Minister's statutory consultation with stakeholders on rock lobster issues.
- 3 The report reviews a range of topics considered and activities undertaken by the NRLMG during 2003 and contains advice and recommendations to the Minister of Fisheries to guide his TAC and Sustainability decisions in relation to the 2004-05 fishing year commencing April 2004.
- 4 The principal recommendations and advice contained in this report include –
  - a) Adjustments to the CRA 7 and CRA 8 TACs as a consequence of the application of the NSS Management Procedure, including advice on the allocations to be made for customary, amateur, commercial and other fishing related mortalities of those stocks.
  - b) Changes to the Southland Concession Area Regulations as a consequence of recent changes to the status of Licensed Fish Receivers under the terms of the Animal Products Act. These changes will be made separately so as to ensure implementation on 01 April 2004, and the consultation for those changes is running on a different timetable to the NRLMG Annual Report.
- 5 These recommendations and the background to the advice are discussed in greater detail in the body of this report.

## 1.2 NRLMG BACKGROUND

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- 6 In 1992, the then Minister of Fisheries, Hon D L Kidd, endorsed the establishment of a national group, the NRLMG, to revise and develop the Rock Lobster Management Plan devised by the Rock Lobster Steering Committee (RLSC) (1991) and asked sector groups to nominate representatives. The RLSC was established by the same Minister to develop a long-term management plan for the lobster fisheries which at that time were considered to be seriously depleted by overfishing. The NRLMG has since made ten annual reports, which contained recommendations for the sustainable management of this, the most important NZ inshore fishery.

### ***Role of the NRLMG***

- 7 In 2001 the NRLMG completed an extensive review of the role and objectives of the Group in consultation with the Minister of Fisheries. The Group and the Minister agreed : -
- a) To maintain the Group as the primary source of advice to the Minister of Fisheries.
  - b) To encourage and coordinate the development and implementation of Fishery Plans for rock lobster fisheries.
  - c) To act as a default regional planner for rock lobster research and management in circumstances where no Fishery Plan proposal was contemplated, or where a lack of organisation and coordination precludes any regional oversight by sector groups.
  - d) To retain a national coordinating body with well established and identifiable links to and from regional sector groups.
  - e) To coordinate and provide sector group input to research and information planning processes.
  - f) To coordinate and provide input to, and maintain an oversight of, the relevant Working Group processes and timetables.
  - g) To provide well informed, credible, and consistent research and management information and advice to sector groups, Government agencies, and Ministers.

### **Roles and responsibilities of members and advisers**

- 8 Noting a preference for membership/participant numbers being kept at current levels with some flexibility accorded to need and circumstance, the NRLMG also agreed the roles and responsibilities of the participating members and advisers as follows –
- a) **Sector Representatives** – TOKM, NZ RLIC, NZRFC, ECO<sup>1</sup>
    - i. To provide consistent expertise, experience, knowledge, networking – to and from sector constituency. *“It is important that each member represents the views of their constituent groups and relays discussions from the Group back to their constituents”...* (Hon. Pete Hodgson, March 2001)

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<sup>1</sup> Te Ohu Kai Moana, NZ Rock Lobster Industry Council, New Zealand Recreational Fishing Council, Environment and Conservation Organisations of New Zealand.

b) **MFish** – Fisheries Management, Compliance, Science

- i. To facilitate and coordinate information and advice to and from the NRLMG
- ii. To ensure consistent information and advice to MFish personnel and to tangata whenua.
- iii. To enable science (including stock assessment and biological), economic, social policy, and other advice deemed necessary by the NRLMG.

c) **Advisory members** – Stock Assessment, Biology and Behaviour, Economic, Social

- i. To maintain oversight of NRLMG deliberations and offer advice and guidance, including cautions, to assist the development and implementation of research and information plans, Fishery Plans, or regional harvest initiatives.

d) **Chairman**

- i. To facilitate NRLMG meetings and to oversee the development and delivery of the NRLMG Annual Report.

- 9 The NRLMG seeks technical advice from experts, and develops refinements and improvements to the management regimes currently in place for rock lobster fisheries. The NRLMG strives to provide quality advice to the Minister to assist in the statutory decisions on Total Allowable Catches (TACs), Total Allowable Commercial Catches (TACCs), and other management controls.
- 10 The NRLMG continues the important role of being a co-operative user group forum with specific focus on rock lobster fisheries issues. The NRLMG is perceived as a model for multi-sector management of fisheries in New Zealand. The NRLMG encourages co-operation between user groups at local and regional levels, and undertakes a co-ordinating role to ensure that the informed views of the represented sectors are incorporated into management and planning considerations.
- 11 The NRLMG has not only played a role in developing a significant level of consensus among user groups, which aids the decision making process, but also has encouraged the development of management initiatives throughout the country which have contributed to the improvement in rock lobster stocks over recent years. Stock assessments since 1992 have tracked increasing abundance in most fisheries, and where stock rebuild has been less than optimum, management responses have been implemented which should ensure the sustainable utilisation of those fisheries within acceptable stock rebuild timeframes.
- 12 The NRLMG advises and informs regional stakeholder groups. This ensures that local issues are addressed within the context of the Fisheries Act and in a manner that is consistent with the overall harvest strategy for rock lobster fisheries.
- 13 The Group continues to persevere with its efforts to formulate robust and enduring harvest strategies that will not require annual review, rather only fine-tuning when new information indicates that some adjustment is necessary. To that end, the NRLMG continues to develop and refine management procedures incorporating 'harvest control rules' which are designed to guide management actions.

## **2003 Work Programme**

- 14 Over the past year, the NRLMG convened on seven occasions to deliberate on a range of research planning and management issues with the aim of confirming recommendations for regulatory amendments to meet statutory timetables and to ensure the presentation of this annual report and recommendations to the Minister of Fisheries by 15<sup>th</sup> December 2003.
- 15 In addition, some members of the NRLMG have attended and participated in the Rock Lobster Fisheries Assessment Working Group (RLFAWG) meetings held during 2003 and the Stock Assessment Plenary convened by MFish in November 2003.
- 16 Also in 2003 the NRLMG again provided the core sector group participation in the annual Rock Lobster Research Planning Group process which culminates in the Research Co-ordinating Committee recommendations to the Minister of Fisheries in relation to required research services.
- 17 The NRLMG contributed to the development of management procedures and agreed biological reference points for incorporation into fisheries management decisions.
- 18 The NRLMG had oversight of the revised NSS Management Procedure recommended to the Minister of Fisheries in September 2003 and subsequently endorsed by him for use in future CRA 7 and CRA 8 TAC and Sustainability decisions.
- 19 The NRLMG participated in the stock assessment procedures that delivered new assessments for CRA 4 and CRA 5 to the November 2003 Plenary.

## **Attendance During 2003**

<i>Representation</i>	<i>Meetings Attended</i>	<i>Apologies</i>
Chairman	7	-
Ministry of Fisheries	7	-
NZ Recreational Fishing Council	7	-
Maori – Te Ohu Kai Moana	7	-
Environment and Conservation	0	2
NZ Rock Lobster Industry Council	7	-
Science Advisors	7	-

## **Organisational Arrangements**

- 20 Costs of participation in the NRLMG are borne by the representative organisations, and the NZ Rock Lobster Industry Council (NZ RLIC) supplies venues and facilities. Secretarial and administrative duties are shared by the NZ RLIC and the Ministry of Fisheries (MFish).

## **Recommendation**

- 21 The NRLMG recommends that the Minister:
  - a) **note** that whilst supporting and encouraging the development and implementation of Fishery Plans for rock lobster, the NRLMG will continue to operate the current management framework outlined in this document and will work within the roles and responsibilities confirmed in the most recent review.
  - b) **confirm** the NRLMG as the primary source of TAC, TACC and management advice for New Zealand rock lobster fisheries; and



- c) **confirm** the NRLMG as an appropriate body to consult on any matters relevant to the management of rock lobster fisheries.

## ***NRLMG membership in 2003***

Dr Kevin Stokes	<i>Chairman</i>
Scott Williamson	<i>MFish</i>
Dr Kevin Sullivan	<i>MFish</i>
Lee Robinson	<i>MFish</i>
Alan Riwaka	<i>Iwi/Te Ohu Kai Moana</i>
Stan Pardoe	<i>Iwi/Te Ohu Kai Moana</i>
Max Hetherington	<i>NZ Recreational Fishing Council</i>
Keith Ingram	<i>NZ Recreational Fishing Council</i>
Barry Weeber	<i>Environmental and Conservation Organisations</i>
Ron Brady	<i>NZ Rock Lobster Industry Council</i>
Daryl Sykes	<i>NZ Rock Lobster Industry Council</i>
<b>Science Advisers to the Group</b>	
David Banks	<i>SeaFIC Science Group</i>
Nokome Bentley	<i>Trophia Research</i>
Dr Paul Breen	<i>NIWA</i>
Susan Kim	<i>NIWA</i>
Paul Starr	<i>StarrFish</i>
<b>Secretarial and Administrative Services</b>	
Helen Regan	<i>NZ Rock Lobster Industry Council</i>

***Part Two***

***STRATEGIC VISION***

***and***

***FRAMEWORK FOR ROCK LOBSTER  
FISHERIES***

## 2.1 STRATEGIC VISION

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- 22 The NRLMG has developed a *Strategic Vision for the NZ Rock Lobster Fisheries*. The vision is consistent with the Fisheries Act 1996, enhances an agreed management framework, and provides a basis for consideration of short, medium, and long term research and management issues such as:
- i. rock lobster stocks will be managed effectively (including cost effectively) to maintain the status of the stocks at or above the agreed biological reference points, consistent with the Minister's legislative responsibility;
  - ii. fisheries will be managed using a property rights/ Quota Management System (QMS) regime with the principal management actions exerted via output controls (TACs) while a range of input controls will still apply where this proves appropriate to individual situations;
  - iii. the strategy will provide for management flexibility, whilst ensuring sustainability, to enable all sector groups to maximise their benefits within a shared fishery;
  - iv. management of the fisheries will take place within a clear policy environment, e.g., there will be clear, explicit, and agreed rules to describe property rights in the fisheries and the allocation between user group sectors. In addition, there will be explicit and agreed decision rules to prescribe management actions that result from monitoring and assessment of fisheries;
  - v. reliable and cost effective means to monitor and assess fish stocks will be in place. The catches taken and effort deployed by all extractive user groups will be effectively quantified, documented, and managed in accordance with the exercise of rights;
  - vi. adverse environmental effects of fishing activities will be averted or minimised;
  - vii. aquaculture of rock lobsters will be a permissible activity, governed by policies which ensure sustainable use of the wild stock within a rights based framework;
  - viii. a shift of management responsibility to user groups will be promoted within the Fishery Plan framework provided for in the 1996 Fisheries Act; and
  - ix. collaborative/consultative national co-ordination of research and management recommendations and development of policy will continue within the NRLMG or similar organisation; and
  - x. co-operative management initiatives, which may include the development of regional user groups and Fishery Plans, will be encouraged; and
  - xi. sustainable management and use of rock lobster fisheries will occur in an environment where the New Zealand public are well informed and educated on matters dealing with fisheries in general, and rock lobster fisheries in particular.

## **2.2 FRAMEWORK FOR MANAGING ROCK LOBSTER FISHERIES**

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23 The framework for managing rock lobster and the attendant recommendations of the Group are consistent with expectations of a robust and enduring harvest strategy leading to a continuing sustainability of rock lobster stocks, and in the view of the Group is also consistent with the statutory obligations enshrined in the Fisheries Act 1996.

### **Goal**

24 The rock lobster fisheries should be managed and be maintained at or above the assessed and agreed biological reference points, using a comprehensive approach that recognises a range of commercial, customary non-commercial, amateur and environmental concerns and values.

### **Strategies to Achieve Goal**

25 The strategies will allow the population size to:

- a) increase in each fishing year that it is below the target in agreed management procedures; or
- b) be maintained at or above that level.

26 The extent of change in population size that can be sought will be determined after consideration of:

- a) economic and social factors including:
  - i. the economic cost and benefits, social factors and rate of adjustment to the fishing industry,
  - ii. the availability of rock lobster to Maori and amateur fishing groups, and
  - iii. the economic return from the fishery; and
- b) biological and environmental factors including:
  - i. the uncertainty in the assessment of stock size and other biological parameters, and
  - ii. the risk to the population; and
- c) the timeframe over which the management options will have effect.

27 The strategies will identify the effects of fishing on the aquatic environment and provide for the implementation of measures to:

- a) avoid, remedy, or mitigate any adverse effects of fishing on the aquatic environment;
- b) maintain associated or dependent species above a level that ensures their long-term viability;
- c) maintain the biological diversity of the aquatic environment; and

- d) protect habitat of particular significance for fisheries management.

## **Implementing the Strategies**

28 The tactics or actions developed to implement the strategies will:

- a) be produced through a process that involves all sector groups, minimises conflicting views, and involves all participants in the group disclosing their positions on the issues considered in order to promote co-operation and encourage full and frank discussion;
- b) be based on advice from scientists on the steps necessary to achieve the goal within various time frames;
- c) consider available management options including but not limited to catch reductions, area closures, gear restrictions, enhancement, legal size changes, measures to maximise egg production, recruitment, and to minimise juvenile mortality;
- d) promote and enable effective, including cost effective, compliance with fishery rules;
- e) consider the costs and implications of management options including:
  - i. the resources that are needed and currently available for research, compliance and administration;
  - ii. the integrity of the research database;
  - iii. whether the management alternatives can be effectively implemented;
  - iv. how the impact of the management options are to be measured or estimated;
  - v. the impact of the management options on industry, customary non-commercial, and amateur fishers and the degree of their acceptance of the measures; and
  - vi. the impact on other fisheries and the aquatic environment.
- f) be based on the best available information;
- g) recognise any uncertainty in the available information and be precautionary when information is uncertain, unreliable, or inadequate; and
- h) not use the absence of, or any uncertainty in, any information as a reason for postponing or failing to take any measure to achieve the purpose of the Fisheries Act 1996.

29 The NRLMG will provide a timely annual report containing recommendations for management, research and compliance of rock lobster fisheries to the Minister.

## **Harvest Strategy**

30 The NRLMG pursues a dynamic harvest strategy for rock lobster fisheries. It is willing to consider and accept TAC changes in two situations:

- a) where stock modelling demonstrates that, after a TAC change, abundance is likely to move towards agreed biological reference points within an agreed period; and

- b) where a TAC change is triggered by a fully tested and accepted management procedure (including a harvest control rule), such as the one described in paragraph 69 of this report, designed either to rebuild a stock unit or to maintain the stock unit near an agreed biological reference point.

## **Assessment and Indicators**

- 31 In accordance with the goal for managing rock lobster fisheries, stock assessment research will continue to be an important component of the management framework. The Rock Lobster Fisheries Assessment Working Group (RLFAWG) continues to refine and improve stock assessment techniques and to identify areas of uncertainty and information needs.
- 32 For a number of years, MFish has commissioned a major rock lobster stock assessment project incorporating extensive stock monitoring, data grooming and stock modelling, and a rock lobster recruitment project, based on monitoring puerulus settlement at selected sites around the New Zealand coast.
- 33 Since 1997 NZ RLIC has been contracted to provide stock monitoring and assessments in collaboration with NIWA, Trophica Research, StarrFish and, for the first two periods, the SeaFIC Science Group. Within the overall project, the NZ RLIC has contracted NIWA, Lat37 Ltd,<sup>2</sup> and Trophica Research to undertake catch sampling and data entry, and to construct and maintain databases for the tagging projects. NIWA holds the contract for the rock lobster recruitment project.
- 34 Intensive catch sampling (including Logbooks) and tagging are undertaken to MFish agreed standards and specifications.
- 35 Vessel logbook data are now routinely incorporated into the stock assessment process. Logbook programmes supervised by technicians are well established in CRA 2, CRA 5, and CRA 8.
- 36 NIWA, Trophica Research, and StarrFish scientists continue to refine and improve stock assessment methods with routine oversight from the RLFAWG chaired by MFish Science Group. The SeaFIC Science Group provides a useful peer review of the process.
- 37 An independent peer review of rock lobster stock assessment methodology commissioned by MFish in 2001 concluded that key aspects of the current assessment represent state-of-the-art methodology and are appropriate for assessments of the rock lobster stocks.
- 38 The review identified several areas where additional research or modifications to the assessment were required, and these were subsequently incorporated into the CRA 3 model presented to the RLFAWG in 2001 and have been continued in subsequent stock assessment programmes.

## **Management Procedures and Decision Rules**

- 39 The NRLMG has established two simple decision rules for the NSN and NSC substocks (paragraph 65). Each year, the rule for each substock compares the current estimate of standardised CPUE with the index from 1992-93. The two estimates are considered significantly different if their 1-standard-error bars do not overlap. Under these rules, TAC changes are considered only when the two CPUE estimates differ significantly.

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<sup>2</sup> Lat37 is a private company contracted to the NZ RLIC to provide stock monitoring services.

- 40 For the NSS substock (CRA 7 and CRA 8) the NRLMG recommended, and the Minister accepted, a more complex and extensively tested decision rule, called a management procedure, in 2002. This specifies the data to be used and how it is to be analysed, specifies a new CPUE target for the fishery, specifies how the rule is “triggered” and specifies how the TACC is modified when the rule is triggered. This procedure, designed to rebuild the CRA 8 fishstock to the target level, is scheduled to be reviewed in 2007. It is accepted that CRA 7 may develop and test an alternative management procedure for their area, leaving this procedure to operate for CRA 8 only.
- 41 Management procedures designed to maintain the stock near agreed target levels were tested under the stock assessment research contract (CRA2000-01) in 2003. These were designed around a decision rule matrix that enables stakeholders to consider biological, economic and other outcomes, and their associated risks, when choosing fishery goals. More work is scheduled on this project for 2004.

## **Tactics**

- 42 There are a number of mechanisms by which total removals from the fishery can be adjusted if circumstances dictate:
- i. adjusting the TAC;
  - ii. changes in minimum legal size (MLS) limits;
  - iii. adjustments to escapement provisions;
  - iv. closed seasons;
  - v. fishing method restrictions;
  - vi. effort controls;
  - vii. closed areas;
  - viii. adjustments to commercial quotas and amateur bag limits;
  - ix. limitations on the numbers of participants in the fishery;
  - x. improved handling to reduce sub-legal mortality;
  - xi. protection of soft-shelled lobsters and berried females.
  - xii. effective enforcement which provides a greater deterrent to illegal fishing;
  - xiii. effective compliance services, such as education, which encourages voluntary compliance; and,
  - xiv. maximised voluntary compliance with fisheries laws by fishers;

## **Recommendation**

- 43 The NRLMG recommends that the Minister:
- a) **confirm** the framework for managing rock lobster fisheries contained in this Report.



# ***Part Three***

## ***MATTERS CONSIDERED BY NRLMG***

***in 2003***

### **3.1 INTRODUCTION - RESEARCH**

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- 44 The NRLMG has given consideration to a number of rock lobster fisheries management issues during 2003. The most important of these are:
- c) the 2003 stock assessment outcomes, including the CRA 4 and CRA 5 models, and the revision of the agreed management procedure for the CRA 7 and CRA 8 (NSS) stocks.
  - d) Changes to regulations that apply to landing, receiving and processing rock lobsters taken from the Southland Concession Area.
  - e) Convening a Catch Identification Sub-Group to investigate and report the efficiency and effectiveness of mechanisms and systems that might enable increased compliance with and less expensive enforcement of rock lobster regulations.
  - f) A consideration of rock lobster capture methods used by non-commercial participants and an evaluation of new harvest technologies not specifically covered by existing Regulations.
- 45 The Group continued to review roles, functions, accountability, and responsibilities in anticipation of the completion of the Fishery Plan framework, and in the expectation of a satisfactory resolution to the outstanding definition of amateur fishing rights.
- 46 In 2003 a primary function of the NRLMG was to conduct Rock Lobster Research Planning, and in that role considered the full range research activities for the period 2004 to 2006 considered relevant to the agreed plan and strategic vision for rock lobster fisheries.

## 3.2 RESEARCH ACTIVITIES

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### ***2003 Rock Lobster Research Programme***

- 47 The NZ RLIC is nearing completion of the three-year CRA2000-01 Fisheries Services stock assessment contract in collaboration with NIWA, Trophia Research, StarrFish and other parties.
- 48 NIWA completed the second sequence of a two-year rock lobster larval settlement project.
- 49 MFish commissioned work to estimate the recreational harvest of rock lobsters (*Jasus edwardsii*) in selected fisheries.
- 50 MFish has received tenders for ongoing stock assessment and larval settlement research programmes from 2004 to 2007.

### ***Stock Monitoring***

- 51 Industry logbook data from CRA 2, CRA 5, and CRA 8 continue to be incorporated into the stock assessment process. These programmes are supported by individual lobster fishermen who measure and record all rock lobsters in four designated pots each fishing day. These data, which are designed to be representative of the respective fisheries, are providing reliable and consistent information for stock assessment.
- 52 Sequences of stock monitoring are undertaken as Fisheries Services in CRA 1, CRA 2, CRA 3, CRA 4, CRA 7 and CRA 8.
- 53 Industry-funded technicians and administrative support staff continue to be employed in the Northland, Bay of Plenty, Canterbury-Marlborough, Chatham Islands, Otago, and Southern rock lobster fisheries.
- 54 Regional administrative and support staff are contracted and supervised by the NZ RLIC on behalf of industry. The NZ RLIC contracts Trophia Research to maintain the Vessel Logbook database and to analyse and report logbook data to participants and to the annual assessment process. The NZ RLIC and Trophia Research are developing a web-based tag and release “track and trace” system that will enable more timely reporting of tag recapture data by commercial and non-commercial extractive users.

### ***Effects of Rock Lobster Fishing on the Environment***

- 55 The work programme for the final year of the CRA 2000-01 Research Contract contains an objective looking at methods to identify and explore data needs associated with managing the effects of rock lobster fishing on the environment.
- 56 The contract output from this objective will be a Final Research Report due for delivery in early 2004. NIWA is the lead agency in the research collaboration for this project.

### ***Research Planning***

- 57 In 2003, MFish again designated the NRLMG as the forum for the Rock Lobster Research Planning process. This process contributes to the MFish Business Plan. The NRLMG was selected as a model for fisheries research planning groups because of its multi-sector

representation and participation, and the degree of recognition given by the Minister of Fisheries when seeking TAC and sustainability advice.

- 58 The NRLMG sought and actively encouraged additional participants to the Rock Lobster Research Planning process that commenced in August and concluded with the Research Co-ordinating Committee in October 2003. These included interest groups not directly represented on the NRLMG, and potential service providers.
- 59 The initial focus was to identify the information needs for rock lobster fisheries. The planning process also took account of the research projects in progress during 2002-03.
- 60 The NRLMG has previously confirmed a range of immediate and medium term research needs, the results of which will inform the Minister when making TAC and sustainability decisions, and may assist stakeholders wanting to develop and implement Fishery Plans.
- 61 The projects that are considered essential to the stock assessment and modelling, to the management procedures including harvest control rule evaluation and analysis, and to management decisions are:
  - a) stock assessment;
  - b) stock monitoring
  - c) better non-commercial catch estimates including estimates of illegal removals.

## **Recommendation**

- 62 The NRLMG recommends that the Minister:
  - a) **note** the scope of current rock lobster fisheries research;
  - b) **note** the level of industry involvement in stock monitoring, including catch sampling, vessel Logbooks, and tag release and recapture, undertaken to MFish agreed standards and specifications; and
  - c) **note** the role of the NRLMG in the Rock Lobster Research Planning Process, the results of which form the basis of fisheries research services described in the MFish Business Plan.

### 3.3 MANAGEMENT PROCEDURES AND HARVEST CONTROL RULES

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- 63 Harvest control rules for rock lobster fisheries were first implemented following agreement by the Minister of Fisheries in 1993.
- 64 Generically the main benefit of harvest control rules and management procedures is that they enable the Minister's legislative obligations to be met in relation to sustainable utilisation while providing greater certainty to stakeholders over future management interventions.
- 65 Specifically, the benefits of harvest control rules are that:
- a) they allow users to plan rationally;
  - b) they force stakeholders and managers to define management goals clearly;
  - c) they force stakeholders and managers to agree on data used in making decisions;
  - d) they force stakeholders and managers to establish clear rules in advance to guide management interventions;
  - e) they incorporate uncertainty into the decision making process formally and objectively; and
  - f) they may act to increase the users' understanding and acceptance of decisions.
- 66 There are currently two types of decision rule in operation. The rule for the NSN and NSC substocks provides guidance, based on commercial CPUE, on when stock assessments should be undertaken. The decision rule does not provide guidance on management interventions, except that TAC changes should not be considered unless CPUE is significantly different from that in the reference year. The decision rule for NSN and NSC substocks was constructed to allow for increases in TACs where rebuild would not be significantly delayed by taking such an action.
- 67 The application of these decision rules will result in management action consistent with the Minister's legal obligations.

#### Recommendation

- 68 The NRLMG recommends that the Minister:
- a) **note** that management procedures continue to be evaluated to discover rules that deliver the desired outcomes while being robust to wide varieties of uncertainty.

**Management objectives and associated performance indicators to be considered in development of harvest control rule candidates.**

	Objective	Performance indicators
<b>Yield</b>	Maximise catch	Mean and median annual catch (t)

<b>Abundance</b>	Maintain high abundance – there are economic, biological, and social benefits of high catch rates	Mean of CPUE (kg per potlift)
<b>Stability</b>	Minimise frequency of quota adjustments – a maximum of 3 to 5 years is preferred	Frequency of TAC adjustments  Average annual variation in TACC  (% AAV)
<b>Safety</b>	Minimise risk of low biomass levels	Probability of CPUE staying above the 1997 level
<b>Diversity</b>	Maintain a wide size range of lobsters – fishers are able to respond to changes in market demand	The proportion of lobsters in the catch that weigh 1kg or greater (%)
<b>Rebuild</b>	Maximise rate of rebuild	Mean annual percentage increase in CPUE  Time to rebuild (yrs)

### 3.4 REVISED NSS MANAGEMENT PROCEDURE

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- 69 TAC and sustainability decisions for the NSS substock, comprising the CRA 7 and CRA 8 fishstocks, were until 2001 informed by a “decision rule”. This was first agreed to by the NRLMG and the Minister in 1996, after the NRLMG considered extensive testing of specific rule candidates. The agreed rule was first used to decide whether a TAC change was warranted in 1997. The rule operated to cause TAC/TACC reductions for CRA 7 and CRA 8 in 1999 and again in 2001.
- 70 In June 2002, and after seeking input from stakeholders, obtaining advice from stock assessment scientists, and considering a variety of results from preliminary runs, the NRLMG recommended that the 1996 NSS decision rule be replaced by a management procedure that has a high probability of achieving the following specifications in the face of a variety of uncertainties:
- a) It is expected to rebuild the fishery to the target CPUE with a median time of 8 years and within 14 years with a high probability;
  - b) It is expected to result in CPUE higher than the starting CPUE in at least 17 of the next 25 years with a high probability;
  - c) It is expected to result in an average annual variation in catch of less than 10% with a high probability.
- 71 The NSS management procedure adopted in 2002 was extensively tested through simulation modelling, and specifies in detail the data used, the mathematical comparison rules, and the harvest control rules used to calculate revised TACCs. Under this management procedure there is a management objective for the substock – a rebuild target CPUE - and a target period for the rebuild.
- 72 A target level of CPUE based on the history of the CRA 8 fishery is being used in the NSS management procedure. This approach continues the use of commercial CPUE as an index of abundance in rock lobster fisheries and uses the average of the standardised CPUE indices from CRA 8 for the 1979–80 to the 1981–82 fishing years. These are the first three years for which reliable CPUE data are available and the average CPUE for these years was higher than at any subsequent time.
- 73 The NSS management procedure is based on standardised CPUE each year, compared with a target trajectory, and has a single target CPUE value at which the fishery is considered to be rebuilt. It has a latent year, under which the TACC cannot be changed in consecutive years. It uses a one-year lag in data: catch rate data from one year are analysed the following year and are used to calculate the catch one year ahead.
- 74 The target CPUE is 1.9 kg per potlift standardised CRA 8 CPUE. The target trajectory is linear between the 1997-98 CPUE (0.729 kg/potlift) and the target final value for 2014-15. This is consistent with the revised and agreed (October 2003) goal of rebuilding the fishery in 12 to 14 years from a starting point in 2001-02.
- 75 The rule examines both the position of CPUE (i.e., is it higher or lower than the target?) and the gradient (i.e., is observed CPUE increasing or decreasing?). The management procedure specifies an algorithm (the harvest control rule) for calculating the new TAC, and uses threshold parameters to prevent small TACC changes.

- 76 In 2003, it was concluded that the method of standardising CPUE data derived from commercial catch effort and landing reports was biased because it removed data for trips with no landings, leading to estimates of CPUE which were too high. This bias was increasing because of the increasing trend in landings that are passed through holding pots. The current catch/effort data system operated by MFish allows landings from previous trips, held in holding pots, to be combined with landings from the active trip. This means that tracing capture from the fishing event to the landing event for the same lobster is not possible under the current system.
- 77 The problems stemming from the use of holding pots made the previous NSS rebuilding trajectory invalid, because the 1997 CPUE, used as a starting point, was positively biased. The revised value is 0.73 kg/pot lift, substantially lower than the original value of 0.94 kg/pot lift. Thus the trajectory needed to be revised. The target value is almost unchanged.
- 78 In 2003, on the recommendation of the NRLMG, the Minister of Fisheries chose to retain the existing slope of the rebuilding trajectory by moving back the year that the target is achieved, rather than keep the target year and increase the slope of the rebuilding trajectory.
- 79 The RLFAWG and the NRLMG agreed that the NSS management procedure should be reviewed and revised in 2007, but the ongoing Working Group and research contract procedures may highlight further refinements before that time, as they have done during 2003.

## **Recommendation**

- 80 The NRLMG recommends that the Minister:
- a) **note** the agreed changes to CPUE standardisation methods which necessitated your agreement in October 2003 to revise the NSS management procedure;
  - b) **note** that this Annual report contains recommendations for management actions in response to the NSS management procedure. (See Section 5).

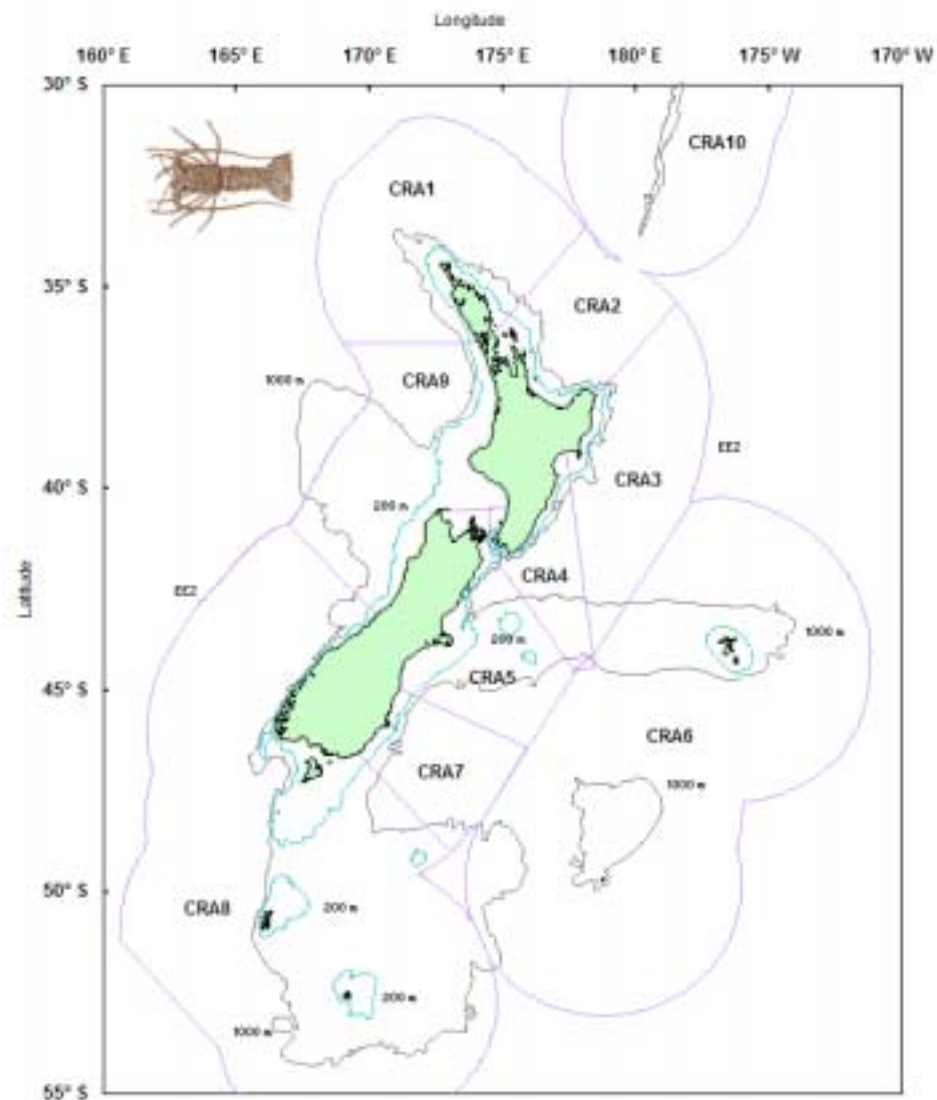


## 3.5 STOCK DEFINITIONS

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- 81 There are two rock lobster species in New Zealand, *Jasus edwardsii* (commonly referred to as quota management stocks CRA 1–10) and *Sagmariasus verreauxi* (commonly referred to as quota management stock Packhorse rock lobster (PHC 1)).
- 82 No genetic subdivision has yet been detected for *Jasus edwardsii* within Australasia, but geographic discontinuities do exist for several other factors including morphology, physiology, behaviour, catch and effort, and abundance patterns.
- 83 The RLFAWG and the NRLMG have agreed to an overall management strategy that recognises New Zealand red rock lobster (*Jasus edwardsii*) as a single species, but substocks and regional differences are taken into account when considering management options.
- 84 The RLFAWG defines two *Jasus edwardsii* lobster stocks in New Zealand: the North and South Islands stock (NSI) and the Chatham Islands stock (CHI). The RLFAWG divides the NSI stock into three *Jasus edwardsii* substocks in its analyses. These substocks are:
- a) **NSN** — CRA 1 and CRA 2;
  - b) **NSC** — CRA 3, CRA 4, and CRA 5; and
  - c) **NSS** — CRA 7 and CRA 8.
- 85 In recent years the RLFAWG has also reported assessments for individual stocks (CRA 3 in 2001, CRA 1 and CRA 2 in 2002)
- 86 In 2003 stock assessments were undertaken for CRA 4 and CRA 5.
- 87 CRA 9 is considered a separate entity within the NSI stock but is not assessed. CRA 10 is neither assessed nor included in the NSI stock because there is no fishing in the area.
- 88 The Chatham Islands (CHI–CRA 6) stock appears to be genetically the same as the New Zealand stocks. Changes in the CHI stock abundance are unlikely to affect the NSI stocks. CRA 6 is considered separately for stock assessment purposes.
- 89 There is only one species of packhorse rock lobsters in New Zealand, considered to be a single stock (PHC 1) and it appears to be genetically distinct from that in Australia. No assessment has been undertaken for this stock.

# Rock Lobster Quota Management Areas



Species	Quota Management Area	Stock	Fishstock	Substock
Spiny Rock Lobster	Northland	NSI	CRA 1	} NSN
	Bay of Plenty		CRA 2	
	Gisborne		CRA 3	} NSC
	Wellington/Hawkes Bay		CRA 4	
	Canterbury/Marlborough		CRA 5	
	Otago		CRA 7	} NSS
	Southern		CRA 8	
	Westland/Taranaki		CRA 9	
Kermadec	-		CRA 10	
Chatham Islands	CHI	CRA 6		
Packhorse R/L	All NZ Fisheries waters	PHC 1	PHC 1	

## 3.6 STOCK ASSESSMENT OVERVIEW

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### Status of the Stocks

#### *Introduction*

90 Stock assessments were updated for the CRA 4 and CRA 5 fishstocks and were reported to the Mid-Year Fishery Assessment Plenary in November 2003. The NSS management procedure was revised and operated in 2003. No assessments were done in 2003 for the CRA 1, CRA 2, CRA 3, CRA 6, CRA 9, or the PHC 1 fisheries.

#### Reference points

91 In the absence of stakeholder group agreed management strategies, and in the absence of estimates of the biomass that could produce the maximum sustainable yield, the NRLMG believes that biological reference periods provide appropriate alternatives for management consideration for the reasons outlined in the discussion that follows.

92 Stock assessments for CRA 4 and CRA 5 were undertaken in 2003 using the length based model (described in detail in the Plenary Report, Annex 1). Because estimates of virgin biomass are very uncertain, the status of a stock relative to *B<sub>msy</sub>* is not estimated in these (and previous) assessments.

93 To assess the status of a stock, the Rock Lobster Fishery Assessment Working Group (RLFAWG) selects two estimates of “vulnerable biomass” as reference points, to use as indicators of stock status. These reference points are:

- a) Vulnerable biomass for a selected period in the history of the fishery (the reference period), and
- b) Vulnerable biomass as at 01 April in the year the assessment is done.

94 Vulnerable biomass is the quantity of stock available to the fishery: the weight of lobsters above the MLS, excluding berried females, as modified by selectivity at size and seasonal vulnerability to capture and removal.

95 When selecting reference periods the RLFAWG and the NRLMG are considering a number of important factors:

- a) a period for which good data are available from which to estimate vulnerable biomass;
- b) a period during which the fishery was well developed, but by no means fully developed – the fishery has continued to produce catches after the end of the reference periods;
- c) a period in which the biomass was relatively stable.

96 Recent assessments (CRA 3 in 2001 and CRA 4 and CRA 5 in 2003) provide an indicator that is the average biomass from a reference period. For simplicity this is referred to as *B<sub>ref</sub>*. This is the biomass level calculated from the average start-of-season vulnerable biomass for the reference period. In assessments and model projections, *B<sub>ref</sub>* is a reference biomass, and can be regarded as the “fishable” biomass.

- 97 For the CRA 4 and CRA 5 assessments completed in 2003, the reference periods from which *Bref* is calculated are selected from the history of the fisheries from 1979 onwards, when data are known to be more reliable, and from periods when the stock biomass appeared to be stable. Longer periods of stability indicated that the reference period was better determined. The interpretation of a relatively long period of stability was that a fishery could be considered “sustainable” at the levels of removals existing during the period, especially if removals were stable as well.
- 98 *Brefs* are neither the highest nor lowest biomass levels that have been experienced and observed in the CRA areas for which reference periods are chosen. In every case, stock abundance has fallen lower than the *Brefs* and biomass has increased from those lower levels.
- 99 The lowest biomass observed anywhere in the history of the fishery is suggested as the “limit” reference point – *Bmin*. In compiling advice to the Minister, the NRLMG has determined that the probability of being below that reference level should be small (<10%). In simple terms the limit *Bmin* is an undesirable stock status.
- 100 The NRLMG has therefore adopted *Brefs* as “target” reference points because, in the absence of estimates of *Bmsy*, they provide credible and practical benchmarks of sustainability and utilisation against which management actions that are consistent with legislative obligations can be recommended to the Minister.

#### **CRA 4**

- 101 The stock assessment of CRA 4 was updated in 2003. The model results suggest that 2002-03 abundance was higher than in the 1979-88 reference period, with moderate to high exploitation rates under the levels of catch used in the assessment. Those levels of catch would produce a median 30% reduction in model biomass over five years (to April 2008) to a level slightly below reference levels. Projections are sensitive to the assumed level of non-commercial catch.
- 102 The reference biomass – *Bref* – for CRA 4 is a good candidate for a reference point:
- i) It was a biomass that was stable for about a decade;
  - ii) It supported high catches that were also stable for much of the period;
  - iii) The biomass subsequently declined to a much lower level but recovered.
- 103 In principle the NRLMG would prefer an even chance (50% probability) of being at the reference biomass level in the long term. However, consistent with the ability of the Minister to allow fluctuations in stocks over short periods, the NRLMG would accept minor fluctuations in that probability. Notwithstanding, the NRLMG would ensure a very high probability (90%) of the CRA 4 stock being above the limit reference point – *Bmin*.
- 104 The NRLMG was advised that five year CRA 4 model projections showed increasing uncertainty on an annual basis and should not be considered reliable much beyond two to three years (to 2005 and 2006). Given the preference to avoid stock decline to less than reference biomass, the Group commissioned more detailed projections to 2006.
- 105 In the model projections to April 2006, 40% of the model runs resulted in a biomass greater than the reference biomass. 60% of the model runs resulted in a biomass below the reference level. The Group does not consider this result to be substantially different from 50/50 given the modelling uncertainties.

- 106 Only 2.4% of the model runs showed an April 2006 biomass less than *Bmin*. This indicates a high probability of the stock remaining above *Bmin* in 2006. Therefore, maintaining catches at the status quo over that period of time will not raise any sustainability issues.
- 107 Given the acknowledged uncertainties of the modelling, the median projection close to *Bref* (87%) in 2006 and the very low (2.4%) probability of being below *Bmin* in 2006, the NRLMG does not consider that there is any need for an immediate management response.
- 108 Stakeholder group representatives on the NRLMG are satisfied that the projected biomass provides for utilisation at levels of catch used in the model, and that fishing is not likely to be unduly compromised by seasonal and/or within season fluctuations.
- 109 Furthermore, the NRLMG anticipates another full CRA 4 stock assessment from which it could recommend TAC and sustainability measures to be implemented in April 2006.
- 110 Given the outcome of the assessment and the projections, under levels of catches used in the model, the NRLMG is confident that on balance there are no sustainability or utilisation issues for the CRA 4 fishery and no specific management action is necessary for 2004.

### ***CRA 5***

- 111 The stock assessment of CRA 5 was updated in 2003. The model results suggest that 2002-03 vulnerable biomass was higher than in the 1979-88 reference period, with moderate exploitation rates under levels of catch used in the assessment. With those levels of catch model projections at the end of the five year projection period show a median biomass smaller than the 2002-03 biomass, but still well above the reference levels. The 2002-03 vulnerable biomass is estimated to be greater than at any time in the last twenty years and the predicted decrease is expected to be modest.
- 112 Because the projections are made under the assumption of constant catches fixed at levels used in the assessment, an increase in future catch levels would result in an increased probability of lowering the biomass for the future.
- 113 The NRLMG is confident that there are no sustainability or utilisation issues raised by the CRA 5 stock assessment and that no management action is required for April 2004.

### ***Jasus edwardsii*, NSS substock (CRA 7 and CRA 8)**

- 114 There was no new assessment of the NSS stock in 2003. However, a revised management procedure was accepted by the Minister of Fisheries in October 2003 and was used to determine any management action (TAC adjustments) required for the NSS stocks.
- 115 The outcome of the harvest control rule used to operate the management procedure was to trigger a 5.4% increase in the CRA 7 TAC, from 109 tonnes to 114.886 tonnes; and a 5.4% increase in the CRA 8 TAC, from 655 tonnes to 690.37 tonnes, effective on 01 April 2004. (The details of the harvest control rule are described in paragraphs 72 to 76 of this Report).
- 116 The NRLMG considers that CRA 7 and CRA 8 TAC increases should be allocated as TACC increases because two previous TAC reductions generated by the application of the NSS decision rule (1999-00 and 2001-02) were effected by reductions to TACCs only. In the case of CRA 7 the TAC was reduced from 131 tonnes to 109 tonnes in April 2000 by reducing the TACC from 111 tonnes to 89 tonnes (22 tonnes reduction). In the case of CRA 8, the TAC was reduced from 798 tonnes to 655 tonnes in April 2000 by reducing the TACC from 711 tonnes to

568 tonnes (143 tonnes reduction). Further, there is no information to suggest changes to the other allowances are required.

## **Recommendation**

117 The NRLMG recommends that the Minister:

### ***Stock Assessments and Management Procedure***

- a) **note** that assessments were updated in 2003 for CRA 4 and CRA 5, and that a revised management procedure was implemented for CRA 7 and CRA 8;
- b) **note** the detail of the stock assessments in the Mid-Year Fishery Assessment Plenary Report (November 2003) [Annex 1 to this Report];
- c) **note** the discussion in this report related to the use and choice of reference periods, and in particular the distinction between “target” and “limit” reference points.
- d) **agree** the choice of reference periods used for stock assessments, noting that the goals of sustainability and utilisation are encompassed in the reference points used in catch projections.
- e) **agree** that, based on the stock assessments, no sustainability issues for any stock (other than CRA 7 and CRA 8) require action for the 2004–2005 fishing year.

### ***CRA 4***

- g) **note** that for CRA 4 the model results suggest that the levels of catch used in the assessment appear to be sustainable but that any increase in future catch levels would result in an increased probability of a decrease in biomass.
- h) **note** that in the model projections to April 2006, 40% of the model runs resulted in a biomass greater than the reference biomass. 60% of the model runs resulted in a biomass below the reference period. The median of all model runs shows an April 2006 biomass at 87% of the target biomass. The NRLMG consider these probabilities to be acceptable and to meet your legislative obligations.
- i) **note** that the NRLMG anticipates another full stock assessment for CRA 4 from which the Group could recommend measures to be implemented in 2006.
- j) **agree** that no management action is required for CRA 4 in April 2004.

### ***CRA 5***

- k) **note** that for CRA 5 the model results suggest that the levels of catch used in the assessment appear to be sustainable.
- l) **agree** that no management action is required for CRA 5 in April 2004.

### ***NSS: CRA 7 and CRA 8***

- m) **note** that the agreed NSS management procedure has invoked a 5.4% increase in the CRA 7 TAC and a 5.4% increase in the CRA 8 TAC.
- n) **agree** to increase the CRA 7 TAC from 109 tonnes to 114.886 tonnes effective 01 April 2004;
- o) **agree** that within the new TAC, the allowances made for customary, amateur, and other sources of fishing related mortality should remain unchanged, and that the CRA 7 TACC should increase to 95.886 tonnes effective 01 April 2004.

- p) **agree** to increase the CRA 8 TAC from 655 tonnes to 690.37 tonnes effective 01 April 2004;
- q) **agree** that within the new TAC, the allowances made for customary, amateur, and other sources of fishing related mortality should remain unchanged, and that the CRA 8 TACC should increase to 603.37 tonnes effective 01 April 2004.





# ***Part FOUR***

## ***ONGOING ROCK LOBSTER ISSUES***

## 4.1 RESEARCH AND MANAGEMENT - UNCERTAINTY IN ESTIMATES OF TOTAL REMOVALS

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### Overview

- 118 Accurate information about total removals is necessary to enable appropriate management decisions to ensure sustainability. Information on the level of commercial removals is collected by the Quota Management System (QMS) reporting system. However, the infrastructure for collecting information on amateur, customary, and illegal removals is poorly developed.
- 119 The lack of accurate information on non-commercial and illegal catch contributes to the uncertainty of the stock assessment, detracts from the effectiveness of agreed harvest strategies, and undermines the incentives created by the QMS.
- 120 In the case of rock lobster fisheries, to allow any or all of the individual catch components to increase without control will jeopardise the rebuild strategy and erode existing harvest rights and opportunities. No control is possible if catch components are unknown. No effective control is possible if catch components are uncertain.
- 121 Because the catch projections contained in stock assessments are made under the assumption of constant catches fixed at levels used in the assessment, an increase in future catch levels would result in an increased probability of a decrease in biomass and likely lower future biomass.
- 122 There is clear evidence of significant uncertainty associated with non-commercial removals from rock lobster fisheries and this situation has potential to confound the reliability of stock assessments, and to confound the expectations of, or to compromise the implementation of, regional harvest initiatives and/or Fishery Plans.
- 123 In the case of those stocks generally regarded as “shared fisheries”, or those where stock abundance is less than optimum and high levels of non-commercial fishing activity are evident, the need for reliable and credible non-commercial catch data is urgent.

### *Customary Harvest*

- 124 There is minimal information on customary non-commercial harvest even though Customary fishing regulations have been promulgated. In the South Island the *Fisheries (South Island Customary Fishing) Regulations 1998* became law on 20 April 1998. Customary fishing regulations for the North Island and Chatham Islands, the *Fisheries (Kaimoana Customary Fishing) Regulations 1998* came into force on 1 February 1999. The regulations become effective in different areas as nominated representatives of the tangata whenua are appointed.
- 125 The regulations provide for quarterly reporting of permits issued for customary fishing purposes. Information derived from the permits is intended to improve the estimates of the level of customary harvest but no new information has been available to the RLFAWG or to the NRLMG since those regulations came into force.

## ***Amateur Harvest***

126 MFish telephone, diary and ramp surveys have provided some amateur landing data from which estimates have been derived. Estimates of amateur harvest exist only for recent years and the results of the amateur catch surveys commissioned by the Ministry in 2000 remain highly uncertain and are not used in stock assessments. As previously noted, MFish has since commissioned work to estimate the recreational harvest of rock lobsters (*Jasus edwardsii*) in selected fisheries.

## ***Illegal Take***

127 MFish Compliance provided point estimates of 'unreported' illegal removals in the order of 378 tonnes in 2000-01. MFish advised the NRLMG that "*the estimates cannot be verified and have an associated low level of confidence*". Estimates of unreported illegal removals for CRA 4 and CRA 5 were updated by MFish Compliance for the use in the 2003 stock assessments. Estimates of illegal take are highly uncertain. The Rock Lobster Fishery Assessment Working Group has very little confidence in them.

## **Recommendation**

128 The NRLMG recommends that the Minister:

- a) **acknowledge** that accurate and reliable data for all sectors are essential to the stock assessment process.
- b) **acknowledge** that accurate and reliable data for all sectors are essential to the fishery management decision making process, particularly in circumstances where catch reductions are considered necessary to maintain or improve stock abundance.
- c) **ensure** that sufficient resources are deployed by MFish to monitor non-commercial removals from rock lobsters fisheries in order to maintain the integrity of the TACs set for stocks, and to maintain the integrity of the allowances made to extractive users within the TACs and the fishing opportunity associated with those allowances.

## 4.2 COMPLIANCE AND ENFORCEMENT ISSUES

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### Illegal Removals

- 129 The level of illegal removals from NZ rock lobster fisheries, previously estimated to be 378 tonnes nationally, and recently updated to 60 tonnes and 52 tonnes for CRA 4 and CRA 5 respectively, remains of concern to the NRLMG.
- 130 The NRLMG has consistently stated that reduced illegal fishing activity will facilitate attainment of the goal of the framework for managing rock lobster fisheries and improve harvest opportunities for legitimate extractive users.
- 131 Industry, Iwi, environmental, and amateur fishing representatives on the NRLMG have consistently expressed the view that Government should make a greater contribution to the existing Compliance budget and therefore enable more resources to be deployed into minimising illegal removals from the rock lobster fisheries.
- 132 Industry, Iwi and amateur fishing representatives on the NRLMG agree that better compliance could be attained if rock lobster compliance strategies were developed and implemented.

### Recommendation

- 133 The NRLMG recommends that the Minister:
- a) **note** the significance of the illegal catch component and its negative effect both on the stock and on legitimate extractive users;
  - b) **note** that all user groups recommend that the Minister take steps to ensure that compliance strategies and services (including enforcement and education services) are sufficient to minimise illegal catch;
  - c) **ensure** that sufficient resources are deployed by MFish Compliance to constrain illegal unreported removals in the first instance to the levels of the allowances made in setting TACs, and ideally to much lower levels so as to improve the quality of the fishing experience to be enjoyed by legitimate users.

## 4.3 CAPTURE METHODS

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- 134 Late in 2003 the NRLMG was asked to review and evaluate a range of rock lobster capture methods and devices available for use by non-commercial extractive users. Current amateur regulations specify “potting” and “handgathering” as lawful capture methods, but there are variations on the latter which are not specified in regulations.
- 135 When evaluating capture methods and devices for use in rock lobster fisheries, the Plan of Management for the fisheries has provided guidance to the NRLMG.
- 136 The Plan is one that essentially relies on catch “savings” to bring about a rebuild and/or to maintain stock abundance at some optimum level. That level will be a biological reference point that satisfies a Ministerial statutory obligation, or a level above, which has been agreed by stakeholders as the goal of a Harvest Initiative or Fishery Plan.
- 137 The incremental successes or otherwise of those catch saving strategies are reflected in annual TAC and Sustainability decisions, and the quality of the commercial and non-commercial fishing experiences.
- 138 Given the underlying savings strategy, the NRLMG considers it inappropriate to endorse any method of capture that is indiscriminate in terms of its capacity to damage and/or to kill sub-legal or “illegal” rock lobsters.
- 139 An “indiscriminate” method is one that has potential to ghost fish: a device that cannot be retrieved, is not bio-degradable, does not discriminate size of lobsters captured, and will retain catch or continue to catch. Hence the current prohibition on baited nets and tangle nets.
- 140 An indiscriminate method is one that has potential to “hide” handling damage and subsequent mortalities – for example, devices used underwater that might penetrate shells or exacerbate stress-induced leg loss will never have the full extent of their consequences observed. Whereas estimates of rock lobster pot fishing related mortalities can be factored into assessments and those estimates benchmarked against observer data.
- 141 The NRLMG has briefly discussed the development of a method evaluation matrix or checklist which can be used to assess capture methods and determine whether or not they should be legally allowable. Proposed new capture methods could be weighted according to the risk they pose to the intended outcomes of the Plan of Management. At the upper end of the scale would be methods that have potential to catch indiscriminately and/or to damage rock lobsters.
- 142 In addition to evaluating any “new and improved” non-commercial capture methods or devices, the NRLMG intends to review the methods traditionally used by the sector but which are not specified in Regulations. Ring potting is one. “Bobbing” is another. (“Bobbing” entails fishers dangling a baited stocking to which lobsters cling and are subsequently lifted from the water). Neither is size selective *per se*, but each at least provides an opportunity for undersized, unmeasurable or berried lobsters to be returned to the sea. Each method does have a history of use which is implied in current amateur catch estimates and TAC allowances.
- 143 The problem remains as to how best to reflect those methods in regulation if they are formally endorsed by the NRLMG. These are matters which will be further considered by the NRLMG during 2004.

## **Recommendation**

144 The NRLMG recommends that the Minister:

- a) **note** that the NRLMG reviewed capture methods for use by non-commercial operators with a view to compiling advice and recommendations during 2004.

## 4.4 CATCH IDENTIFICATION

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- 145 The NRLMG reviewed two recommendations that in 2001 and 2002 were deferred by MFish for further consideration in 2003. MFish did not assess the two issues – the amateur pot limit proposal (discussed in Section 5 of this report), and the telson clipping initiative – as having high enough priority to proceed in 2002 or 2003 (when balanced against available resources and all other regulatory amendment proposals).
- 146 The NRLMG therefore agreed to defer any further advocacy for the telson clipping recommendations pending more detailed investigation and evaluation of a comprehensive range of catch identification methods.
- 147 To this end, an NRLMG Catch Identification Sub-Group comprised of NRLMG members was established late in 2003. The Sub-Group has exchanged ideas and preliminary views, but intends to compile more detailed information in 2004 with a view to confirming advice and recommendations to stakeholders and to the Minister of Fisheries.
- 148 The NRLMG has chosen to focus on the wider issue of catch identification rather than the more restricted option enabled by telson clipping of amateur catches. Notwithstanding the further endorsement of the telson clipping recommendation by the NZ Recreational Fishing Council AGM in July 2003 as requested by MFish, their representatives to the NRLMG have agreed to support and participate in the more extensive review to be coordinated by the Catch Identification Sub-Group.

### Recommendations

- 149 The NRLMG recommends that the Minister:
- a) **note** the establishment of the Catch Identification Sub-Group, the members of which are drawn from NRLMG stakeholder representatives including MFish.
  - b) **note** the intention of the NRLMG to review and evaluate catch identification options, including telson clipping, during 2004.

## **4.5 ALLOCATION PRINCIPLES – “SHARED FISHERIES”**

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- 150 The NRLMG is agreed that the current fisheries management regime aims to achieve sustainable utilisation by controlling total removals to levels which allows stocks to move towards optimum levels. Total removals are expressed as the TAC.
- 151 The Fisheries Act requires that when recommending any variation in the TACC after having regards to the TAC, the Minister must allow for non-commercial interests in the fishery. However, the Act does not provide guidance as to amount that should be allowed.
- 152 Courts have determined that legislation does not require the Minister to give priority to amateur fishing over commercial interests or that the allowance must fully satisfy amateur requirements, and that it is not outside or against the purposes of the Act for the Minister to allow a preference to non-commercial fishing when setting TACCs.
- 153 Courts have also determined that a Minister should not reduce the TACC for conservation reasons unless able to take, and taking, reasonable steps to avoid the reduction being rendered futile through increased amateur fishing.
- 154 Consistent with those Court decisions, MFish holds the view that, when a TAC is set, the Minister will have an obligation to consider controls to constrain amateur fishing limits within that allowance, but that it is not intended to constrain customary harvest.
- 155 The Court held that there was no implied duty for the Minister to fix or vary the amateur allowance at any particular proportion of the TACC or the TAC. The appropriate allocation is a matter for the Minister’s assessment bearing in mind all relevant considerations on each occasion the Minister revisits the issue.
- 156 Unconstrained increases in legitimate take by any sector, or illegal take by fish thieves, will potentially have a number of consequences. These are:
- a) a risk that the TAC will be exceeded;
  - b) a risk that the stock will decline or that a rate of increase will be reduced;
  - c) an erosion of other sector group fishing opportunity;
  - d) an erosion of the value and utility of the quota fishing right;
  - e) a possible failure of an agreed management plan; and
  - f) an obstacle to reaching a useful harvest initiative or Fishery Plan agreement within and between sectors.
- 157 In the case of rock lobster fisheries, to allow any or all of the individual catch components to increase without control will jeopardise the rebuild strategy and erode existing harvest rights and opportunities.
- 158 The NZRFC representatives wish to ensure that the amateur fishing right is not further eroded and therefore any increase in TACC needs to incorporate a concurrent increase in the amateur allowance required by the Act. In addition to such an increase they consider that the bag limits need upward adjustment to allow those fishers who take their limit to benefit from the increased abundance. They note that in the past the bag limit was reduced from ten to six rock lobsters for sustainability reasons and for that reason the reverse must occur.



- 159 Amateur fishing representatives consider that the legislation gives customary Maori rights and amateur fishing interests precedence over commercial rights. It is their submission that after setting a TAC the Minister must first satisfy all Maori and amateur expectations of catch allowance, then make allowance for '*other sources of fishing related mortality*' including illegal catch, and having attended to those matters, allocate any remaining portion of the TAC to commercial users as the TACC for the fishstock.
- 160 Industry, Iwi, and MFish representatives do not agree with that interpretation because it fails to give adequate recognition to the security of fisheries property rights already held by commercial users, including Maori, and the associated husbandry incentives. They do not believe that the amateur fishing view is consistent with the determination of the Courts.
- 161 Industry contends that by its very nature the TAC/TACC setting process allocates defined 'shares' of available harvest to extractive user groups based on the catches used in assessments. Further, the principle of proportional allocation of explicit catch allowances has been partially pre-determined by the existence of quota rights and a TAC. However, MFish notes that the Courts held that there was no requirement for proportionality in allocative decisions.
- 162 Industry is concerned that in the absence of sufficient information and the implementation of appropriate measures to constrain amateur catch to an allowance, and adequate constraints on illegal removals, a Minister of Fisheries may consider recourse to reducing TACCs in an attempt to hold total removals within the limit (TAC) required to ensure sustainability. If total non-commercial catch is not constrained, any TACC reduction may only facilitate an increase in non-commercial catch and illegal activity, through a relative increase in stock availability.
- 163 For this reason, industry representatives advocate a proportional allocation arrangement which allows each extractive user group to share in the available stock abundance and would therefore provide each legitimate sector with an incentive to protect and enhance their respective harvest opportunities.
- 164 These issues apply to other than rock lobster fisheries. Nonetheless, the debate has raised issues of fairness and equity. In those rock lobster fisheries such as CRA 1 and CRA 2, where industry suggest an increasing proportion of the total catch is being taken by non-commercial fishermen, allocation policies are of strong interest to commercial fishermen. In the absence of allocation principles, industry is concerned that any future actions required to maintain stock sizes could come at the expense of commercial operators and erode the property rights which are the foundation of the QMS.
- 165 Industry representatives acknowledge that rock lobster fisheries are 'shared' fisheries which have significant social and cultural values in addition to economic values. However, industry cannot support other than a proportional aggregate amateur fishing allowance within the constraints of a TAC. Industry also submits that the initial allowances made in the TAC setting process establish a 'benchmark' for shares of the available yield which can then become the basis for negotiation between user groups at a regional level as to future levels of access and use of rock lobster fisheries.
- 166 Industry submits that a formal allocation of 'shares' to amateur fishing provides an incentive required to bind that stakeholder group into an ongoing co-operative management, compliance, and research planning process at a regional level.
- 167 The NZRFC has noted the admission by the Minister and MFish that the amateur fishing right is poorly defined and poorly managed. They further note the admission that over a

period the amateur fishing right has been eroded. The NZRFC accepted a challenge by the Minister and MFish to work jointly towards properly defining that right and setting an appropriate management structure.

168 Representatives of the NZRFC and officials from MFish formed the Recreational Rights Working Group to define the nature and extent of the amateur fishing right. The Rights Working Group report was released for widespread consultation. The Group then reported to Cabinet with an analysis of the public submissions and recommendations. The Minister then established a Ministerial Consultative Group (MCG) which discussed the outcomes of public consultations and possible solutions.

169 Following consideration through the MCG process the Minister reported to Cabinet, who agreed objectives to provide a basis for continuing discussion and development of options for further public consultation.

170 The Minister established a "Rights Reference Group" to continue discussions and develop options for possible change. That Group reported to the Minister in October 2003 and is continuing in discussions.

171 The decisions announced to date by the Minister and Cabinet have not materially changed the uncertainty related to the nature and extent of amateur fishing rights.

## **Recommendation**

172 The NRLMG recommends that the Minister:

- a) **note** the positions of the stakeholder group representatives together with their concerns and urgently take steps to define the rights and allocative requirements needed for management of rock lobster and other fisheries resources.

# ***Part FIVE***

## ***REGULATORY PROPOSALS***

## 5.1 INTRODUCTION – REGULATORY PROPOSALS

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- 173 During 2003 the NRLMG considered a number of issues for regulatory amendment in April 2003. For the third successive year, NRLMG stakeholder representatives have reconfirmed their support for the amateur pot limit proposal.
- 174 New recommendations contained in the 2003 Annual Report relate to previous NRLMG recommendations to amend Amateur Fishing Regulations to specify that for all NZ waters there should be restrictions on the numbers of rock lobster pots able to be used by the amateur sector.
- 175 Regulation proposals already submitted to the MFish Regulatory process relate to the continued operation of the Southland (CRA 8) “Concession” Regulations where law changes have been made that remove a statutory reference for premises processing and exporting CRA 8 rock lobsters. These recommendations apply to changes which are intended to come into effect as from 01 April 2004, the commencement of the 2004-05 fishing year.

## 5.2 AMATEUR ROCK LOBSTER POT LIMIT.

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### Proposal

176 The NRLMG proposes to amend the Fisheries (Amateur Fishing) Regulations 1986 to limit the number of rock lobster pots that can be used, set, or possessed by amateur fishers in all Fishery Management Areas (FMAs). The regulations will specify that:

- a) no individual may use, set, or possess more than three rock lobster pots in any one day. This individual pot limit also applies to an individual who is the only person on a vessel;
- b) no vessel carrying two or more people may use, set, or possess more than six rock lobster pots in any one day;
- c) using, setting, or possessing more than the daily rock lobster pot limit, but not more than twice the daily rock lobster pot limit is subject to tiered infringement notice penalties;
- d) using, setting, or possessing more than twice the daily rock lobster pot limit is a serious non-commercial offence, liable on summary conviction to a fine not exceeding \$20,000.

177 As a consequential amendment, the NRLMG proposes to amend the Fisheries (Infringement Offences) Regulations 2001 to create tiered infringement fees for rock lobster pot limit offences. The proposed penalty structure for an individual using, setting or possessing rock lobster pots is:

- a) \$250 infringement notice for an individual using, setting, or possessing four rock lobster pots.
- b) \$500 infringement notice for an individual using, setting, or possessing five or six rock lobster pots.
- c) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending for an individual using, setting or possessing more than six pots.

178 The proposed penalty structure for two or more people on a vessel using, setting or possessing rock lobster pots is:

- a) \$250 infringement notice for using, setting, or possessing more than six rock lobster pots, but not more than nine rock lobster pots, from a vessel;
- b) \$500 infringement notice for using, setting, or possessing more than nine rock lobster pots, but not more than 12 rock lobster pots, from a vessel;
- c) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending for using, setting or possessing more than 12 rock lobster pots from a vessel.

179 The NRLMG proposes for Mimiwhangata Peninsula and Paterson Inlet **either**:

- a) To retain the current rock lobster pot limits and offences and penalties regimes, **or**
- b) to amend the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986; the Fisheries (Southland and Sub-Antarctic areas Amateur

Fishing) Regulations 1991; and the Fisheries (Infringement Offences) Regulations 2001 to revise the existing rock lobster pot limits by:

- i) increasing the rock lobster pot limits and offences and penalties regime to be in line with the national proposal; or
- ii) retaining the more restrictive pot limits currently associated with Mimiwhangata Peninsula and Paterson Inlet but bring the offences and penalties associated with breaching those restrictions in line with the national proposal.

## **Background**

180 The setting of a Total Allowable Catch (TAC) is the primary mechanism for controlling the overall take of a fish stock. Within the TAC, allowances can be made for Maori customary fishing, recreational interests, and other sources of mortality caused by fishing. Commercial fishing is provided for within a Total Allowable Commercial Catch (TACC).

181 Individual amateur fishers are able to take their share of the recreational allowance within the constraints of daily bag limits. The daily bag limit for rock lobster is specified in the Amateur Fishing Regulations 1996 and allows six rock lobsters to be taken per person, per day.

182 Pot limits for amateur fishers are already regulated in some areas, and these are used in conjunction with daily bag limits to further control the take of amateur fishers (refer Table 1).

183 Rock lobster is the most valuable inshore fishery in New Zealand with a total allowable catch (TAC) of 3,277.6 tonnes and commercial (TACC) landings of 2589.9 tonnes in 2002–03. The fisheries are accessible and the black market can be readily supplied. The cost of rock lobster on the legitimate domestic market means there is a steady demand for illegal product in restaurants and homes. The Ministry of Fisheries (MFish) estimates removals by poachers may be up to 25% of the TAC in some rock lobster quota management areas.

**Summary of current rock lobster pot limits for recreational fishers, and associated infringement fees and penalties.**

Area	Pot limit per person	Pot Limits per vessel	Infringement	Maximum fine if proceed summarily
Mimiwhangata Peninsula	One	One	<ul style="list-style-type: none"> <li>\$250 if more than one pot</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if more than one pot</li> </ul>
Bay of Plenty, from East Cape Lighthouse to Te Arai Point	Three	Three if only one person on the vessel	<ul style="list-style-type: none"> <li>\$250 if 4-6 pots</li> <li>N/A if more than 6 pots</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if 4-6 pots</li> <li>\$20,000 if more than 6 pots</li> </ul>
	-	Six if two or more people on the vessel	<ul style="list-style-type: none"> <li>\$250 if 7-12 pots</li> <li>N/A if more than 12 pots</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if 7-12 pots</li> <li>\$20,000 if more than 12 pots</li> </ul>
Gisborne, Hawke Bay and Wellington waters	Three	Three if only one person on the vessel	<ul style="list-style-type: none"> <li>\$250 if 4-6 pots</li> <li>N/A if more than 6 pots</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if 4-6 pots</li> <li>\$20,000 if more than 6 pots</li> </ul>
	-	Six if two or more people on the vessel	<ul style="list-style-type: none"> <li>\$250 if 7-12 pots</li> <li>N/A if more than 12 pots</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if 7-12 pots</li> <li>\$20,000 if more than 12 pots</li> </ul>
Paterson Inlet (Stewart Island)	Two	Two	<ul style="list-style-type: none"> <li>\$250 if 3-4 pots</li> <li>N/A if more than 4 pots</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 if 3-4 pots</li> <li>\$20,000 if more than 4 pots</li> </ul>

**Problem definition**

- 184 In the absence of a pot limit, some non-commercial fishers are setting large numbers of rock lobster pots thereby increasing their ability to catch well in excess of the amateur daily bag limit. Rock lobsters taken under this scenario are most probably being sold on the black market. The extent of the problem is unknown.
- 185 Where possible, MFish attempts to detect illegal sale of product. However, investigations to prove sale are difficult, require specialist skills, and are time and resource intensive.
- 186 In the absence of evidence of a sale, MFish focuses its efforts on detecting fishers in possession of rock lobsters in excess of the daily bag limit. However, fishers are able to operate high numbers of pots and avoid detection by making several trips to clear the gear. If intercepted by Fishery Officers on any one trip, the fisher will possess no more than their daily bag limit of rock lobsters.
- 187 The incentive for fishers to act in this way is created by the high value of rock lobster and the limited quantities (and high cost) of rock lobsters available on the domestic market. The high value of rock lobster means relatively small quantities of fish can generate an attractive cash flow for illegal operators.
- 188 In addition to concerns that the absence of a rock lobster pot limit for amateur fishers is being used to the advantage of fishers supplying the black market, are those relating to the impact those pots may have on the environment. Unless tended regularly, baited pots retain rock lobsters which are vulnerable to predation.

**Options for Achieving the Desired Result**

***Non-regulatory Measures***

- 189 One non-regulatory option would be for MFish to direct considerably more enforcement resources at on-the-water or beach detection, or by initiating more in-depth investigations of potential fish thieving and black market and poaching offences. However, in the absence of an injection of additional resources, that effort would come at the expense of effort currently directed at the offending in the amateur or customary sectors. The NRLMG does not support options that would reduce compliance effort in the amateur or customary sectors.

190 Another non-regulatory option would be to work with the recreational sector to create “codes of best practice”. Although such an initiative may go some way to addressing the problems relating to untended or lost pots, it would, most probably, have no influence on the behaviour of fishers involved in poaching and black market activities. Consequently, the NRLMG is not promoting this as a viable option.

### ***Regulatory Measures***

191 A third option is to create a regulatory environment that increases the difficulties for operators taking large quantities of rock lobster for sale under the guise of their entitlements as an “amateur fisher”. This could be achieved, to some extent, by introducing an amateur rock lobster pot limit. The NRLMG supports this option.

192 Rock lobster pot limits for amateur fishers are already in place in some parts of New Zealand. The proposed amendment would extend the pot limit regulations for the Bay of Plenty, Gisborne, Hawke Bay, Wairarapa and Wellington waters to all New Zealand waters. The offences and penalties structure associated with these limits would be altered to allow a further infringement tier.

193 The proposal will limit the number of rock lobster pots that can be used, set or possessed by any one individual amateur fisher to three, and limit the number of pots that can be used, set or possessed by a vessel to six. The vessel rock lobster pot limit will prevent fishers wanting to operate a large number of pots from circumventing the person limit, by declaring the pots are for other people.

194 The proposed new limits will need to include offence and penalty provisions. Infringement offences are in effect for the existing rock lobster pot limits. The NRLMG proposes to alter the offence structure in place for the existing amateur pot limits by creating a second tier of infringement offence. This would enable Fishery Officers to issue infringement notices for \$250 and \$500 for specified offences, and retain the ability to prosecute (with the option of summary conviction) fishers using, setting or possessing more than six pots for an individual, and over 12 pots for a vessel with two or more people aboard.

195 A tiered offence structure will allow penalties to be ramped in relation to the seriousness of the offending. Retaining the ability to prosecute amateur fishers using large numbers of pots is important given that the product is, most probably, feeding the black market.

196 Pot limits are currently in place for Mimiwhangata Peninsula and Paterson Inlet and are lower than the proposed national limits. From a compliance and enforcement perspective, pot limits and associated offences and penalties provisions should ideally be applied consistently across the country. Consideration should therefore be given to increasing the pot limits for these two areas. The NRLMG has little information on the purpose of the original pot limit implementation and would require more information before making recommendations for changes.

197 A marine reserve application is currently being considered for Paterson Inlet. If that marine reserve proposal is approved by Ministers, the pot limit regulation for that area will need to be amended. The Mimiwhangata Peninsula limit applies to a relatively small area that was developed as a Marine Park concept to protect the reef benthic environment, although only commercial fishing is excluded from the area.

198 Options to be considered for rock lobster pot limits in Mimiwhangata Peninsula and Paterson Inlet are given in paragraph 210. At this time, the preferred option of the NRLMG is to retain the specific rock lobster pot limits currently in place at Mimiwhangata



Peninsula and Paterson Inlet, but bring the offence and penalties provisions into line with those proposed for national implementation.

### ***Costs and Benefits of the Proposal***

- 199 The key benefit of the proposal is that a pot limit will provide a regulatory tool that should make it more difficult for poachers to operate. It is relatively easy for Fishery Officers to detect when a person is operating in excess of a pot limit. Consequently, enforcement of the proposed regulation should be a cheaper intervention than those requiring lengthy and expensive surveillance and investigations.
- 200 The addition of the ability to issue infringement notices, while retaining the ability to prosecute with summary conviction for serious breaches of the regulation, should provide a meaningful deterrent to offending.
- 201 The second benefit is that the proposed limit may reduce the number of pots left untended, thereby, reducing rock lobster mortalities.
- 202 Amateur pot limits could constrain the ability of some amateur fishermen in some areas to take the current daily bag limit. The effect on the fishing success of amateur divers as a consequence of the proposed regulation is nil.
- 203 The imposition of an amateur pot limit does not guarantee a reduction to the overall level of illegal removals through poaching and blackmarket activities. Fishers intent on circumventing the limit could either not label their pots, or label them under several different names. Both steps would increase the difficulty of detecting breaches and imposing penalties.

### ***Administrative Implications***

- 204 The proposed amendment will need to be supported by educational material to ensure amateur fishers are aware of the new provision. This will involve re-printing of MFish pamphlets and signs. The cost of this exercise has yet to be estimated.
- 205 Other than the cost associated with education, there are no additional administrative implications from the proposed regulation change.

### ***Consultation***

- 206 The New Zealand Recreational Fishing Council was first to propose extending the current recreational pot limits to all New Zealand waters. The proposal was discussed and supported at the Council's Annual General Meetings in 2001, 2002, and the policy re-affirmed at the 2003 AGM. Previous NRLMG annual reports included the proposal and were subject to consultation in December 2001 and 2002. However, the proposal did not proceed because MFish determined that, at that time, it was not a priority, and that the resources needed to guide the proposal through to a decision were best deployed in other areas.
- 207 MFish notes that any changes in relation to amateur fishing regulations should be considered in light of the recreational reform process.

## Conclusion

208 The NRLMG believes that any change to improve enforceability and increase compliance in the amateur sector will provide long-term benefits to the rock lobster stocks and to other legitimate users of the resource.

209 Poaching and black market activities are often detected from intelligence gathered from reports by public and other fishers. Although pot limits are not a panacea, the ease of detecting method restriction breaches should inhibit poaching activity in a way that is cost effective for the Crown.

## Recommendation

210 The NRLMG recommends that the Minister:

a) **amend** the Fisheries (Amateur Fishing) Regulations 1996 to specify that:

- i) no individual may use, set, or possess more than three rock lobster pots in any one day. This individual pot limit also applies to an individual who is the only person on a vessel;
- ii) no vessel carrying two or more people may use, set, or possess more than six rock lobster pots in any one day;
- iii) using, setting, or possessing more than the daily rock lobster pot limit, but not more than twice the daily rock lobster pot limit, is subject to tiered infringement notice penalties;
- iv) using, setting, or possessing more than twice the daily rock lobster pot limit is a serious non-commercial offence, liable on summary conviction to a fine not exceeding \$20,000.

### For individuals

b) **amend** the Fisheries (Infringement Offences) Regulations 2001 to create tiered infringement fees for rock lobster pot limit offences. Specifically, the proposed penalty structure for an individual using, setting, or possessing rock lobster pots is:

- i) \$250 infringement notice for an individual using, setting, or possessing four rock lobster pots
- ii) \$500 infringement notice for an individual using, setting, or possessing more than four rock lobster pots but not more than six rock lobster pots
- iii) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending where an individual uses, sets, or possesses more than six pots.

### For two or more people:

c) **amend** the Fisheries (Infringement Offences) Regulations 2001 to create tiered infringement fees for two or more people on a vessel using, setting, or possessing rock lobster pots. Specifically:

- i) \$250 infringement notice for using, setting, or possessing more than six rock lobster pots, but not more than nine rock lobster pots from a vessel;
- ii) \$500 infringement notice for using, setting, or possessing more than nine rock lobster pots but not more than 12 rock lobster pots from a vessel;

- iii) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending for using, setting or possessing more than 12 rock lobster pots from a vessel.

**EITHER**

- d) **amend** the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986; the Fisheries (Southland and Sub-Antarctic areas Amateur Fishing) Regulations 1991; and the Fisheries (Infringement Offences) Regulations 2001 to revise the existing rock lobster pot limits in place for Mimiwhangata Peninsula and Paterson Inlet by **either**:
  - i) increasing the rock lobster pot limits and offences and penalties regime to be in line with the national proposal; **or**
  - ii) retaining the more restrictive pot limits currently associated with Mimiwhangata Peninsula and Paterson Inlet but bring the offences and penalties associated with breaching those restrictions in line with the national proposal.

**OR**

- e) **retain** the current rock lobster pot limits and offences and penalties regime provisions, specific to those identified regions.
- f) **note** that the NRLMG has a current preference for option **d(ii)**

## 5.3 SOUTHLAND CONCESSION AREA REGULATIONS

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- 211 In addition to the other issues described on this report, the Ministry of Fisheries is separately proceeding with an amendment to the Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986 to remove references to licensed concession fish packing house and replace it licensed fish receiver. This is similar to the amendment made last year in the Fisheries (South-East Area Commercial Fishing) Regulation 1986. Both amendments are consequential to the repeal of the Meat Act 1981 and the loss of the specific designator “licensed concession fish packing house”. The amendment is technical and necessary to insure that licensed fish receivers are able to continue to receive and process concession (alternative minimum size limit) rock lobster.
- 212 To limit the risk of this anomaly extending into the next fishing year, the Ministry of Fisheries is undertaking consultation and final advice separately and to an earlier timeline than the main issues in this report. The Ministry of Fisheries intends to promulgate this regulatory amendment by 1 April 2004.
- 213 The Initial Position Paper (IPP) for the proposed regulatory amendments was released for statutory consultation on December 10<sup>th</sup> 2003, and submissions close on January 16<sup>th</sup> 2004.
- 214 The NRLMG has considered representation from the CRA 8 industry wanting a new clause inserted into the Regulations to allow domestic sales of concession rock lobsters. Industry contends that the prohibition on domestic sales is a barrier to business opportunity and commercial flexibility, impeding industry’s ability to derive maximum economic value for their product. Industry has also highlighted a number of apparent inconsistencies in policy, and anomalies in regulations, that allow concession lobsters from another area to be sold on the domestic market.
- 215 The NRLMG has taken advice from MFish that the April 2004 timetable for the implementation of amended regulations does not allow for the addition of new clauses to existing regulations. However industry representatives to the NRLMG are keen to see the prohibition on domestic sales addressed at the first opportunity in 2004 with a view to having that prohibition removed during the 2004-05 fishing year.

# ***Part SIX***

## ***STOCK SUMMARY***

## 6.1 INTRODUCTION – STOCK SUMMARY

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- 216 This section outlines the principal rock lobster fishing activities in each of the quota management areas and a brief summary of stock status taken from the most recent assessments.
- 217 The NRLMG has continued to encourage the formulation of fishery specific regional initiatives consistent with the guidelines established by the NRLMG in 1992. The Group is continuously revising and updating those guidelines to ensure consistency with new fisheries legislation and compatibility with the move to greater devolution of management responsibility to stakeholder groups.
- 218 The *Jasus edwardsii* species of rock lobster is managed in areas CRA 1–10; the *Sagmariasus verreauxi* species (PHC) is managed in a single quota management area PHC 1. No summary is provided for CRA 10, comprising of the Kermadecs, as the QMA has a TACC of 0.1 tonnes and has never been fished.

## 6.2 CRA 1

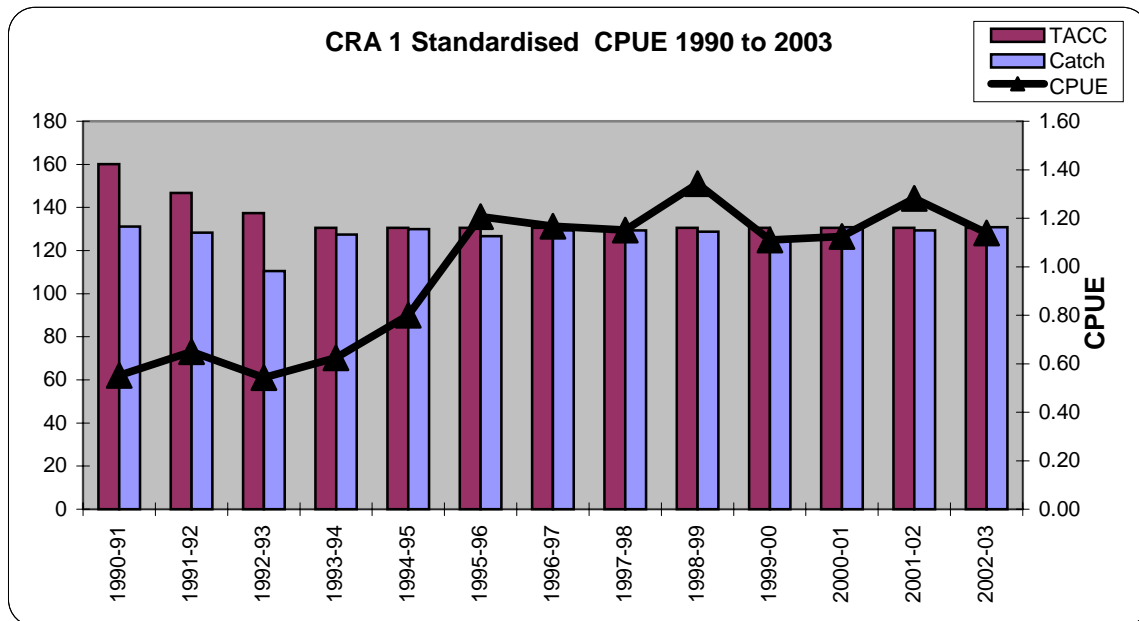


Figure 1: Catch against TACC and CPUE in CRA 1

- 219 The CRA 1 fishery extends from the Kaipara Harbour on the west coast of the north island around North Cape and then south to Waipu. No TAC has been set for this fishery. The 130.46 tonnes TACC has remained unchanged since April 1993. The commercial fishery extends offshore to the Three Kings, but the bulk of the commercial harvest is taken from waters adjacent to the mainland.
- 220 CRA 1 is assessed using commercial catch and effort and quota monitoring report data. In addition, the CRA 1 commercial stakeholders group commissioned intensive catch sampling sequences for the fishery in the 1997–98 and 1998–99 seasons. CRA 1 stock monitoring was part of the CRA 1999–01 and CRA 2000-01 Research Services contracts and 60 catch samples and 7000 rock lobster tag and releases were completed during the three most recent fishing years.
- 221 The 130.46 tonnes CRA 1 TACC is distributed amongst 27 quota share owners. The TACC is harvested by approximately 20 permit holders. The landed value of commercial catch in CRA 1 is \$4.1 million (based on average port price paid to fishermen), making rock lobster an important contributor to the local and regional economy.
- 222 Amateur catch of rock lobster is estimated at 51 tonnes (Mfish 1996). Diving using UBA is the predominant method used by amateur fishermen and women, although hand gathering, ring potting, and potting from vessels contributes to the amateur catch.
- 223 No reliable estimates are available for customary catch. The progressive implementation of reporting procedures within the North Island Customary Regulations might assist in future evaluations of customary harvest for the CRA 1 fishery. A large Maori population in the Northland region ensures that rock lobster retains significant customary value.

- 224 CRA 1 is part of the NSN substock that was assessed in 2002. The model results showed that the April 2001 stock abundance was higher than in the 1979-88 reference period. Projections at the end of a five year period (April 2006) had a median expected biomass near the 2001 level if catches were constrained to the levels used in the assessment.
- 225 The assessment noted that these projections should not be considered reliable much beyond two to three years but CPUE has increased slightly and stabilised from 2001 to 2003, suggesting stable stock abundance.



## 6.3 CRA 2

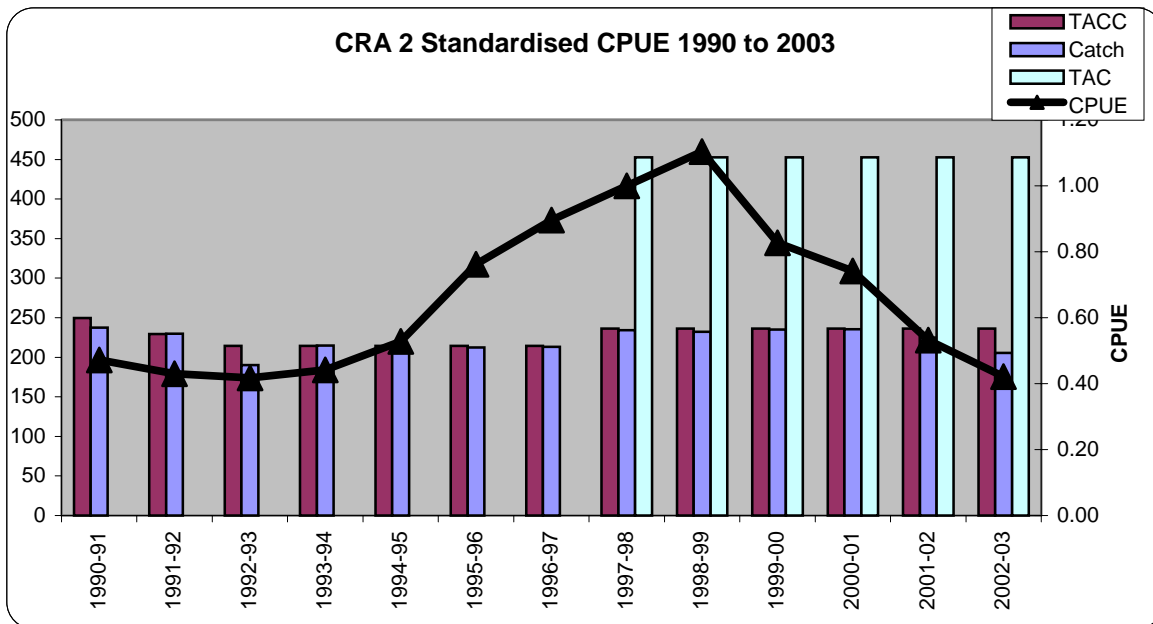


Figure 2: Catch against TACC and CPUE in CRA 2

- 226 The CRA 2 fishery extends from Waipu through the Hauraki Gulf and Bay of Plenty to East Cape. The current 452.6 tonnes TAC for the fishery was set in 1997. The TAC is comprised of 140 tonnes for amateur catch, 16.5 tonnes for customary harvest and 60 tonnes for illegal removals. The current TACC is 236.1 tonne.
- 227 The 236.1 tonnes TACC is distributed amongst 52 quota share owners. There are an estimated 45 vessels in the CRA 2 rock lobster fleet and the commercial season generally extends from June to January. The estimated landed value of the CRA 2 catch is \$9.3 million (based on average port price paid to fishermen) and the industry sustains a number of processing and export companies in Tauranga, Coromandel, and Auckland.
- 228 Amateur catch in this fishery is estimated at 140 tonnes (MFish 1996). Potting and diving are the preferred methods, and there is a large recreational charter vessel industry catering to the sector.
- 229 Customary catch is conservatively estimated at 16.5 tonnes. Anecdotal evidence in recent seasons suggests that the actual harvest may have been much greater. A large Maori population in the Bay of Plenty region ensures that rock lobster retains significant customary value.
- 230 The CRA 2 Rock Lobster Company Ltd is the representative commercial stakeholder group for this region. The Company has made significant investments in rock lobster research since its formation in 1995, including a comprehensive vessel logbook programme, tag and release projects, and sequences of intensive catch sampling to MFish standards and specifications. This data continues to be collected for use in the CRA 2 assessment.
- 231 Stock monitoring activities for the 2003–2004 season included the continuation of logbook coverage, intensive catch sampling sequences within season, tag and release, and tag recapture reporting.

- 232 The CRA 2 Rock Lobster Company Ltd has also endeavoured to develop and promote agreed compliance strategies for the CRA 2 fishery, and strengthen working relationships between sector groups.
- 233 CRA 2 was assessed as part of the NSN substock in 2002. The model results suggested stock abundance in April 2001 was higher than in the 1979-88 reference period. Projections at the end of a five year period (to April 2006) had a median expected biomass near the 2001 level if catches were constrained to the levels used in the assessment.
- 234 The assessment noted that these projections less reliable than for CRA 1, as the uncertainty of future recruitment had more impact on the short term projected biomass. CPUE for this fishery has declined from 2001 to 2003, suggesting a decline in stock abundance, but CPUE in this fishery has been variable over time since 1979-80. The CRA 2 fishery is one that has been highlighted by the NRLMG and the RLFAWG as a candidate for a full stock assessment in 2004.

## 6.4 CRA 3

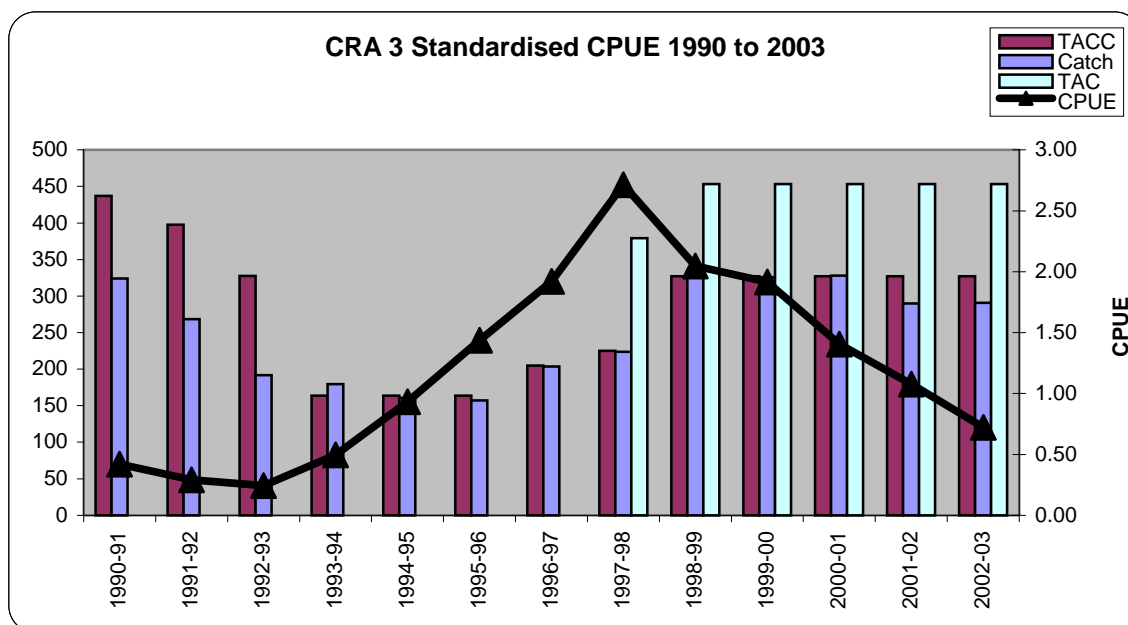


Figure 3: Catch against TACC and CPUE in CRA 3

- 235 The CRA 3 fishery extends from East Cape south to the Wairoa River. The current 453 tonnes TAC was set in 1998. The TAC is comprised of a 20 tonnes allowance for amateur catch, a 20 tonnes allowance for customary harvest, a 86 tonnes allowance for illegal removals and a TACC of 327 tonnes.
- 236 The TACC is distributed amongst 35 quota share owners. An estimated 36 commercial vessels reported CRA 3 landings in the 2003-04 fishing year. There is significant Iwi involvement in quota share ownership and fishing. The commercial harvest has a landed value of \$9.1 million (based on average port price paid to fishermen). There are two processing plants in Gisborne, and product is also shipped to Wellington and Auckland for processing and export.
- 237 Amateur catch is currently estimated at 14 tonnes (RLFAWG 2001), although an allowance of 20 tonnes was made in the 1998 TAC decision. Potting and hand gathering are the preferred methods.
- 238 Rock lobsters have great cultural significance to local Maori and there is a very high level of customary harvest activity. Customary removals are estimated at 30 tonnes (RLFAWG 2001) although an allowance of 20 tonnes was made in the 1998 TAC decision.
- 239 Catches and catch rates have declined in recent seasons, and in 2003 the CRA 3 Industry Association took advice from fisheries research and management service providers and initiated an extensive consultation with industry members to determine a response to ensure a rebuild of stock abundance.
- 240 The 2001 CRA 3 stock assessment noted that the April 2000 biomass was high compared to the 1974-79 reference period agreed for the assessment. The model had difficulty in fitting the observed decline in stock abundance from 1997-98 to 2000, suggesting a problem with

assumptions used in the model, with the data, or possibly by an additional population process not captured in the modelling.

- 241 Five year projections showed that the stock could increase or decrease at the levels of catch used in the assessment. Additional uncertainty in those projections came from several sources. Levels of amateur, illegal, and customary catches are poorly determined. Those catches, especially historical illegal catches, are substantial in some years and errors in estimation translate directly into uncertainty in the projections.
- 242 CPUE in the CRA 3 fishery has declined from 2000 to 2003 suggesting a decline in stock abundance. The significance of that decline is highlighted by the shortfall in catches against TACCs in the 2001-02 and 2002-03 fishing years. The current (2003-04) fishing year shows a similar trend.
- 243 In response to the decline and the shortfall in catches, the CRA 3 industry convened four meetings in 2003 at which options for improving the situation were discussed and debated. An options paper prepared by the NZ RLIC was distributed to all CRA 3 quota share owners (QSOs) and ACE owners/permit holders. The paper highlighted industry preferences for a mix of input controls – including catch spreading and pot limits – and output controls – which comprised an ACE shelving initiative to reduce the “target” commercial catch as from 01 April 2004.
- 244 The ACE shelving initiative was confirmed as the preferred option, and with assistance and advice from FishServe, the NZ RLIC has coordinated a shelving programme to be confirmed by a final vote of CRA 3 QSOs in December 2003.
- 245 Features of the shelving programme are that the “target” catch for the 2004-05 season has been agreed at 207 tonnes (current TACC is 327 tonnes, most recent season landings were 291 tonnes). Each QSO has been asked to shelve 37.5% of their quota shares to effect that reduction. Shelving will be done by way of forward ACE transfer to an independent third party – in this instance the NZ RLIC Ltd – secured by a consensual caveat on the numbers of quota shares needed to cover the ACE transaction. At time of writing this NRLMG Annual Report, only one CRA 3 QSO had declined to participate in the shelving programme.
- 246 The shelving initiative protects the “grandfather clause” status of QSOs who currently hold permits and fish with less than the required three tonnes minimum of ACE. The QSOs who would have been reduced to less than 3 tonnes of ACE as a consequence of shelving have been “guaranteed” the minimum ACE holding by shelving less than 37.5% of their quota shares.
- 247 The shelving initiative is also linked to a proposed CRA 3 Management Procedure, incorporating harvest control rules, to be developed by stock assessment scientists during 2004. The management procedure will inform QSOs as to the need for a continuation of the shelving initiative from April 2005 if stock abundance has not significantly improved.
- 248 The management procedure is also intended to inform QSOs in future on the possibility of “within-season” incremental releases of shelved ACE in response to seasonal variations in abundance.
- 249 The CRA 3 shelving initiative has been widely consulted with, and is supported by, QSOs and iwi who will be recipients of the Treaty Settlement quota share allocations from TOKM currently subject to legislative approval. Through the Gisborne/Tatapouri Sportfishing Club rock lobster fishery representative, the amateur sector has been kept fully informed of

the options considered by the CRA 3 industry and the decision to progress the shelving initiative.

- 250 The efficacy of the shelving initiative in terms of halting stock decline and consolidating a basis for stock rebuild is dependent on non-commercial catches being constrained to allocations made in the 435 tonnes TAC, and on illegal unreported removals being constrained and preferably reduced.
- 251 The failure to manage non-commercial and illegal removals will result in the re-allocation to other extractive users of the estimated 80 tonnes “saving” effected by shelving, with no benefit accruing to the stock, and no future dividend from increased stock abundance available to the CRA 3 QSOs and fishermen.

## 6.5 CRA 4

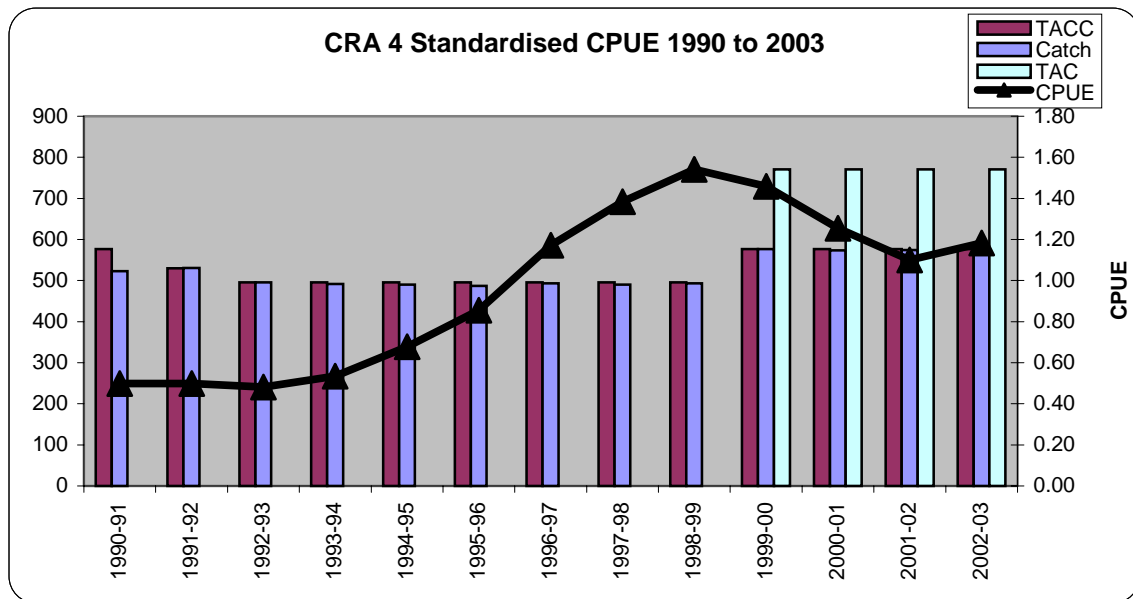


Figure 4: Catch against TACC and CPUE in CRA 4

- 252 The CRA 4 fishery extends from the Wairoa River on the east coast, southwards along the Hawkes Bay, Wairarapa and Wellington coasts, through Cook Strait and north to the Manawatu River.
- 253 A CRA 4 TAC was first set in April 1999 and remains at 771 tonnes. In that decision the TACC was increased from 495.3 tonnes to 576 tonnes. Prior to 1999 the TACC remained unchanged since April 1993. Within the TAC a total of 85 tonnes is allowed for amateur catch and 35 tonnes for customary catch.
- 254 The 576 tonnes TACC is distributed amongst 89 quota share owners. The fleet comprised an estimated 70 vessels at the peak of the current (2003-04) commercial season. The majority of vessels in the fleet operate from coastal bases in isolated rural areas. The CRA 4 commercial catch has a landed value in excess of \$18.4 million (based on average port price paid to fishermen) and supports several processing and export operations in Napier and Wellington, Auckland and Canterbury.
- 255 The amateur catch is estimated at 73 tonnes (MFish 1996). Potting and hand gathering are the preferred methods for amateur fishers in this area. As in most CRA areas, the majority of amateur catch is taken in the summer months when commercial lobster vessels are not operating. The region sustains a recreational fishing and dive charter industry during those months.
- 256 Customary harvest estimates for CRA 4 are not available, but the reporting requirements associated with the implementation of the North Island Customary Regulations should enable more informed decision making in future.
- 257 A comprehensive stock monitoring programme has been established in the CRA 4 fishery. There is a long time series of intensive catch sampling data from Napier, Castlepoint, Cape Palliser, and the Wellington South coast. This series was extended in the current season

with a total of 32 sample days completed for the period May to November 2003. Tag recapture data are being routinely reported by commercial fishermen.

- 258 The 2003 CRA 4 stock assessment is reported in detail in this NRLMG Annual Report and is featured in the RLFAWG Report annexed to it.
- 259 The model results suggest that stock abundance in April 2003 was higher than in the 1979-88 reference period. Five year projections to April 2008, assuming catches at levels used in the assessment, show a reduction in stock abundance from 2003 levels.
- 260 In model projections to April 2006, 40% of the model runs resulted in a biomass greater than the reference biomass. 60% of the model runs resulted in a biomass below the reference period. The median of those runs shows an April 2006 biomass at 87% of the target biomass.
- 261 Projections are sensitive to the assumed level of non-commercial catch. An increase in catch levels from 2004 would result in an increased probability of a decrease in biomass and likely future biomass.

## 6.6 CRA 5

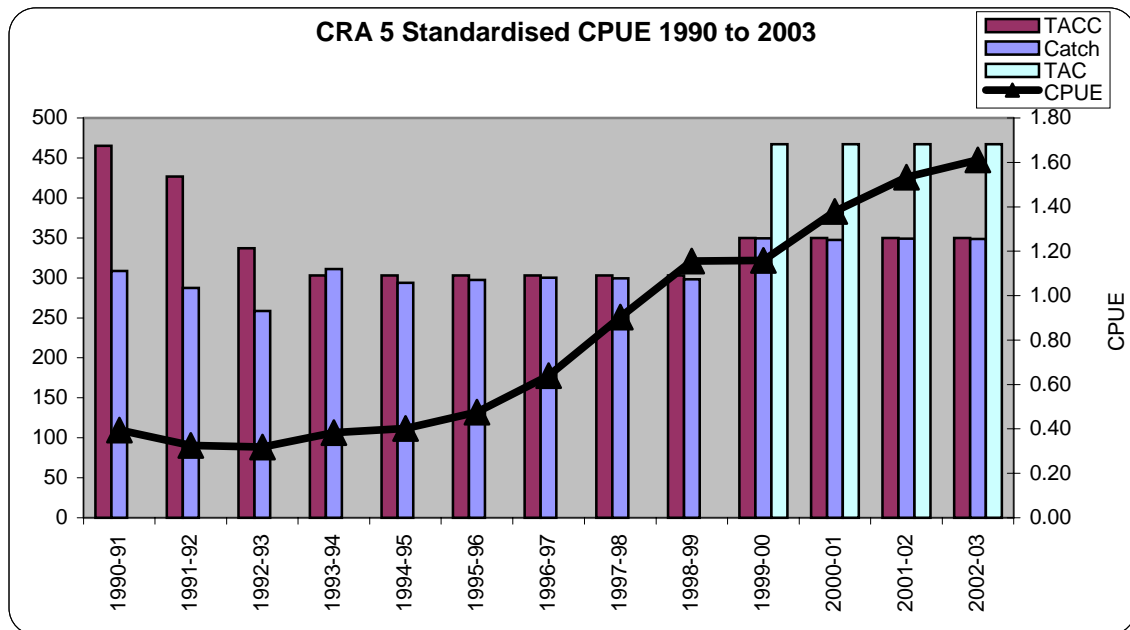


Figure 5: Catch against TACC and CPUE in CRA 5

- 262 The CRA 5 fishery extends from the western side of the Marlborough Sounds across to Cape Jackson and then southwards to Banks Peninsula. There are three distinct regions of commercial fishing—Picton/Port Underwood, Ward, Kaikoura, Motunau, and Banks Peninsula, although some commercial vessels work the area from Nelson through to D’Urville Island. The bulk of the commercial catch is taken from the area bounded by Tory Channel in the north and Motunau in the south.
- 263 The current TAC of 467 tonnes was set in April 1999. In that decision 40 tonnes was allowed for amateur catch and 40 tonnes for customary catch. The TACC was increased from 303.7 tonnes to 350 tonnes.
- 264 There are 55 quota share owners in CRA 5. The fleet comprised an estimated 35 vessels reporting catch in the 2002-03 season. Many commercial vessels work off beaches between Port Underwood and Motunau. The landed value of the commercial catch was estimated at \$11.1 million (based on average port price paid to fishermen) in 2003–04, and the fishery supports processing and export facilities in Nelson, Ward, Kaikoura, and Christchurch
- 265 The CRA 5 industry members, through membership of their commercial stakeholder group CRAMAC 5, have encouraged and facilitated an ongoing dialogue with amateur fishing and dive clubs and with Iwi groups in the region. The responses to the process have been extremely encouraging in terms of future co-operative research and management initiatives.
- 266 Amateur catch is estimated at 35 tonnes (MFish 1996). The preferred methods for amateur fishing are potting and diving with UBA. The recreational fishing and dive charter industry is growing in the region. Dive clubs in the region have actively reported tag recapture information and maintain an ongoing interest in the regional research programme.



- 267 There are no estimates for customary harvest in CRA 5.
- 268 CRA 5 has an intensive stock-monitoring regime in place. Intensive catch sampling and tag and release projects have been done as Fisheries Required Services, and CRAMAC 5 operates an extensive Vessel Logbook programme that provides data to the stock assessment process.
- 269 The 2003 stock assessment results for CRA 5 suggest that current biomass is higher than in the 1979-88 reference period. Five year projections with levels of catch used in the model show a modest decrease in biomass from 2003 levels.

## 6.7 CRA 6

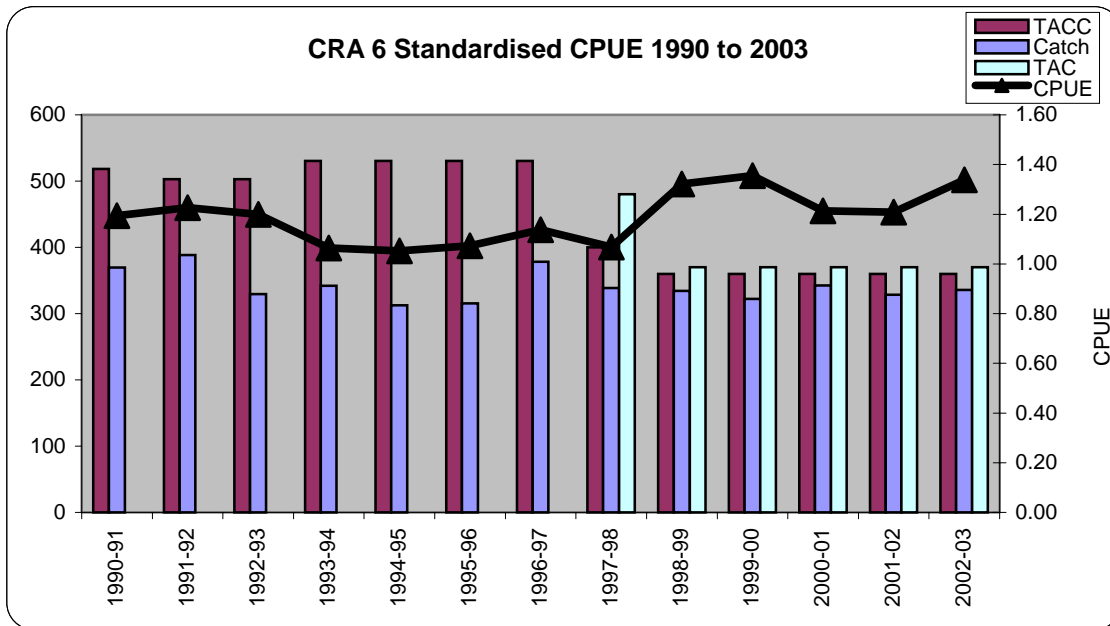


Figure 6: Catch against TACC and CPUE in CRA 6

- 270 The region designated as CRA 6 is geographically very large, being all waters within a 200 nautical mile radius of the Chatham Islands, but the area being fished is restricted to a relatively narrow coastal margin adjacent to the Chatham Islands coastline.
- 271 The fishery is unique in that despite declines in landing and CPUE from historical levels, the lobsters caught generally comprise much larger size classes than are found in mainland fisheries. The reasons for the decline in catch and CPUE are unknown, and length frequencies of the landed catch have changed little since the development of this fishery. Previous RLFAWG reports have noted that the CRA 6 data are consistent with a stock model in which the biomass being fished is much smaller than the biomass of the contributing stock.
- 272 The abundance of the standing stock in CRA 6 is likely to be more dependent on immigration of larger lobsters into the area than it is on recruitment and growth. This reduces the likely effectiveness of management interventions.
- 273 For the 1998–99 fishing year a TAC of 370 tonnes was set. A total of 6 tonnes was set aside for amateur catch and 4 tonnes was provided for customary catch. The TACC was reduced from 400 tonnes to 360 tonnes in response to MFish concerns over declining landings and declining CPUE. The TAC and TACC remain unchanged.
- 274 An analysis of CPUE and catch against TACC was undertaken in 1998. The analysis indicated that when CPUE was standardised (takes into account changes in fishing patterns and numbers of vessels operating etc), as opposed to the use of raw data, catch rates in the fishery had not significantly declined over recent years.
- 275 CRA 6 is unique in that unlike all other CRA management areas, two harvest methods are allowed for commercial fishing. The bulk of the TACC is landed from vessels using pots,

but there are limited numbers of dive permits issued for the fishery and divers take large quantities of lobsters in the summer months.

- 276 There are 49 CRA 6 quota share owners. The majority of quota is owned by mainland New Zealand interests. There are approximately 47 vessels reporting CRA 6 landings and the number of divers is unknown although only 11 of the original dive consents issued to qualifying persons between 1990 and 1993 were current during 2002-03. Additional divers operate under the authority of permits in the name of the consent holders. Tension between divers and pot fishermen has diminished over recent years.
- 277 The landed value of the commercial catch in 2003–2004 was approximately \$10.7 million (based on average port price paid to fishermen). The fishery supplies processing and export facilities on the Chatham Islands and in Auckland, Wellington and Christchurch.
- 278 The CRA 6 Industry Association established a Fishermen’s Office at Waitangi in May 2000 and the NZ RLIC contracted an administrative officer trained by FishServe to co-ordinate the distribution and collation of Catch Effort Landing Returns and Monthly Harvest Reports for delivery to FishServe.
- 279 There is no major research programme currently underway for the fishery because all previous research initiatives — intensive catch sampling, tagging, and juvenile abundance surveys — have delivered similar results. There are also high costs associated with research co-ordinated from the mainland. However, the CRA 6 Industry Association is monitoring a trial of Vessel Logbooks, such as used in CRA 2, CRA 5 and CRA 8, to collect size frequency and abundance information at sea.

## 6.8 CRA 7

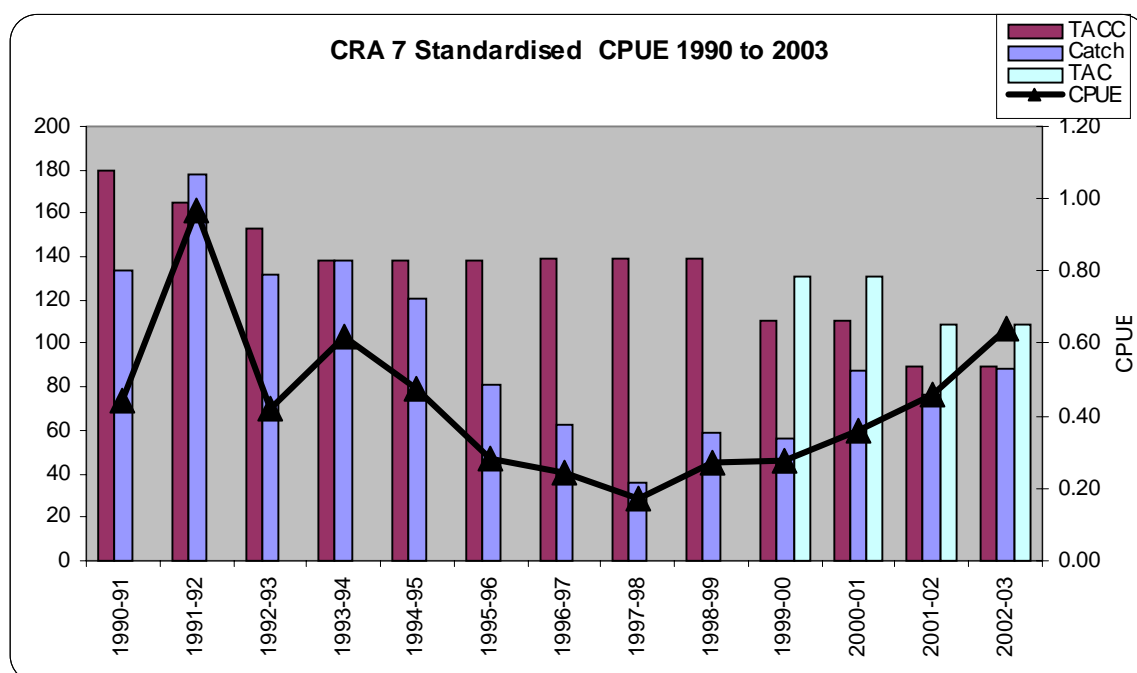


Figure 7: Catch against TACC and CPUE in CRA 7

280 The CRA 7 fishery extends from the Waitaki River south along the Otago coastline to Long Point. In 2002, CRA 7 agreed to accept the new NSS management procedure proposed by the NRLMG and accepted by the Minister of Fisheries. Although the procedure is based only on CRA 8 CPUE and is designed to rebuild the CRA CPUE to target level, CRA 7 has agreed to accept TAC changes generated by this procedure.

281 At some time in the future, CRA 7 may develop and evaluate a management procedure specific to CRA 7. If this procedure is accepted by the NRLMG and the Minister, then CRA 7 may switch to that management procedure, leaving the current NSS management procedure to operate in CRA 8 only.

282 For the 2001–02 fishing year the TAC was set at 109 tonnes. A total of 5 tonnes was set aside for amateur catch and 10 tonnes was provided for customary catch. The TACC was set at 89 tonnes. The TAC/TACC adjustment was undertaken in response to the triggering of the NSS decision rule. The TAC and the TACC remained unchanged for the 2003-04 fishing year. The operation of the NSS management procedure in 2003 generated a recommendation for a 5.4% increase to the CRA 7 TAC as from April 2004.

283 The CRA 7 commercial season runs from 21 June to 19 November inclusive and the MLS is a tail length of 127mm for both male and female lobsters. The fishery is open to amateur fishing all year with a MLS regime of 54mm tail width for males and 60mm tail width for females. The CRA 7 fishery is unique in that a 'buffer zone', closed to commercial rock lobster fishing has been incorporated into the regional harvest initiative agreed by amateur and commercial users in 1993.

- 284 There are 35 CRA 7 quota share owners. In the 2003-04 season 36 commercial vessels reported CRA 7 landings. The landed value of the catch is estimated at \$2.4 million (based on average port price paid to fishermen). The CRA 7 catch is processed and exported by several Dunedin fishing companies.
- 285 CRA 7 commercial interests are represented by the Otago Rock Lobster Industry Association. The association has a paid regional co-ordinator and also funds stock monitoring sequences to supplement work done as Fisheries Required Research Services. Intensive catch sampling is done in three 5 day sequences during the commercial season.
- 286 There is no estimate of amateur catch. The preferred methods for amateur fishing are potting and diving with UBA.
- 287 There are no estimates for customary harvest in CRA 7.
- 288 The NSS management procedure was run in 2003 resulting in the recommendation for a 5.4% increase to the CRA 7 TAC, increasing from 109 tonnes to 114.886 tonnes.

## 6.9 CRA 8

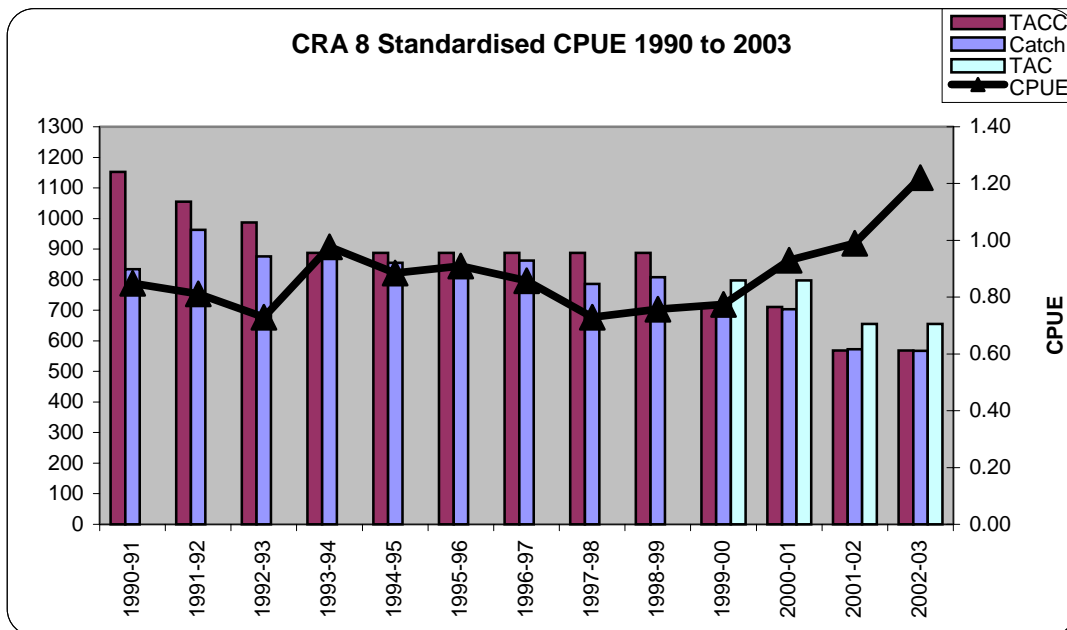


Figure 8: Catch against TACC and CPUE in CRA 8

- 289 The CRA 8 fishery is the largest fishery geographically. The region extends from Long Point south to Stewart Island and the Snares, the islands and coastline of Foveaux Strait, and then northwards along the Fiordland coastline to Bruce Bay. The CRA 8 fishery is included with CRA 7 in the NSS assessment and management procedure analysis.
- 290 The MLS for commercial catch incorporates a 54mm tail width for male lobsters and 57mm tail width for females. The equivalent measures for amateur catch is 54mm tail width for male lobsters and 60mm tail width for females.
- 291 The CRA 8 Management Committee Inc is the commercial stakeholder organisation for the fishery. The Association employs a Chief Executive. The Association has funded an extensive Voluntary Logbook programme until 1998 when the Logbook programme was incorporated as a Fisheries Required Service. The Association also contracts to the NZ RLIC to provide intensive catch sampling and lobster tag and release as part of the Fisheries Research Services contract to the Ministry of Fisheries.
- 292 The CRA 8 Industry has developed and implemented codes of practice in relation to use and disposal of fishing gear and refuse, and as a founding member of the Guardians of Fiordland Fisheries, has contributed to an extensive code of practice for the waters adjacent to the World Heritage area.
- 293 There are 124 CRA 8 quota share owners. In the 2002-03 season there were 82 commercial vessels reporting CRA 8 landings. The CRA 8 fleet operates in the most remote coastal areas of South Westland and Fiordland. The estimated value of the landed catch is \$18.1 million (based on average port price paid to fishermen). The industry supplies processing and export operations in Te Anau, Riverton, Stewart Island, Invercargill, Bluff, Christchurch, and Wellington.

- 294 Amateur catch is estimated at 16 tonnes (MFish 1996). The preferred methods for amateur fishing are potting and diving with UBA.
- 295 There are no estimates for customary harvest in CRA 8.
- 296 A TAC of 655 tonnes was set for the 2001–02 fishing year. A total of 29 tonnes was set aside for amateur catch and 30 tonnes was provided for customary catch. The TACC was set at 568 tonnes. The TAC adjustment was undertaken in response to the triggering of the NSS decision rule. The TAC and TACC have remained unchanged for the 2003-04 fishing year.
- 297 The NSS management procedure was run in 2003, resulting in a 5.4% increase to the CRA 8 TAC, from 655 tonnes to 690.37 tonnes.

## 6.10 CRA 9

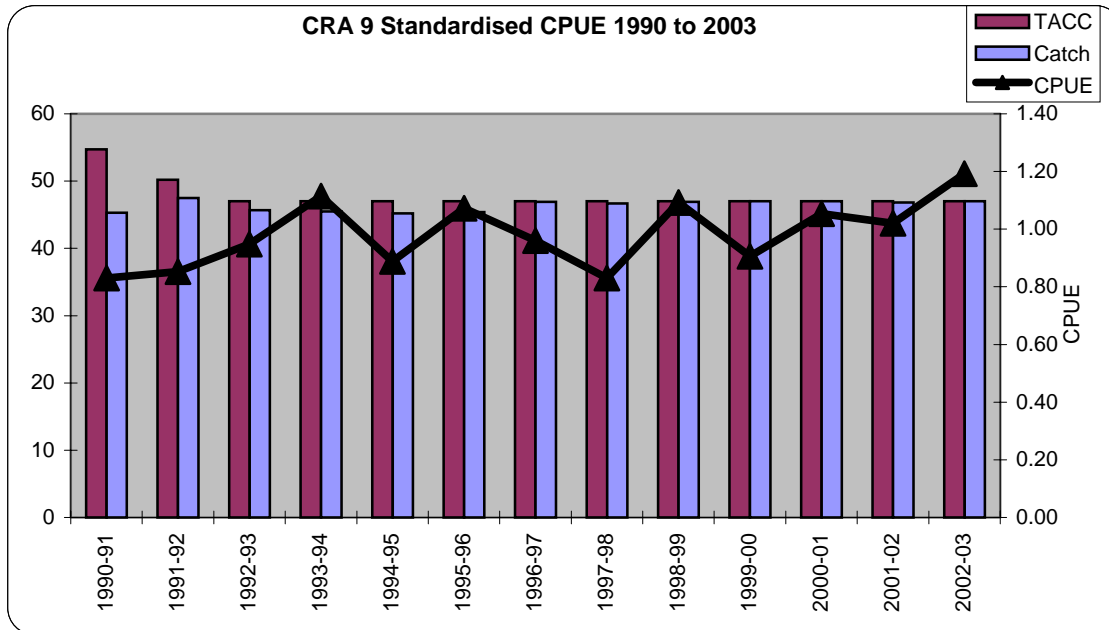


Figure 9: Catch against TACC and CPUE in CRA 9

298 The CRA 9 fishery is geographically large but has the smallest TACC of any region (with the exception of CRA 10). The fishery extends from north of Bruce Bay to the Kaipara Harbour but commercial lobster fishing is constrained to the north-west coast of the South Island and the area between Patea and Kawhia, in particular the Taranaki coastline. No TAC has been set for this fishery and the 47 tonnes TACC has remained unchanged since 1992.

299 There are 20 CRA 9 quota share owners. In the 2003-04 season 16 commercial vessels reported CRA 9 landings. The estimated value of the landed catch is \$1.5 million (based on average port price paid to fishermen). The industry supplies processing and export operations in Marlborough, Nelson, New Plymouth, Wellington and Auckland.

300 The CRA 9 Industry Association Inc. is the representative organisation of the commercial interests in the fishery. The Association has initiated a Voluntary Logbook programme but the project has limited potential because of the relatively short commercial season and the small number of vessels in the fleet. The Association has contracted a regional liaison officer to co-ordinate access to fishing vessels by technicians undertaking a lobster tag and release project and supervising the use of Vessel Logbooks by commercial operators.

301 There are no estimates of amateur or customary catch for the CRA 9 fishery.

302 There are no utilisation or sustainability issues evident in this fishery other than concern by both amateur fishing and commercial sectors over the proposed area closures of reef systems in North Taranaki (Paraninihi) and South Taranaki (Nga Motu) which if established will end historical access to large and productive rock lobster fishing grounds.

303 No stock assessment has been made for the CRA 9 fishery. CPUE has been consistent over many years and the TACC constrains commercial landings, suggesting a stable or increasing stock.



## 6.11 PACKHORSE ROCK LOBSTER – PHC

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- 304 The packhorse rock lobster is a different species (*Sagmariasus verreauxi*<sup>3</sup>). The management area extends to all of New Zealand. Packhorse lobsters grow to a significantly larger size than red rock lobsters (CRA) and have different shell colourations and appearance.
- 305 The TACC for this fishery was set at 30 tonnes in 1990, but was increased to 40 tonnes in 1992 as a result of appeals. Historically the fishery has been primarily an incidental catch for many commercial rock lobster fishermen in the Northland/Auckland and Bay of Plenty regions. However several fishermen did successfully target the species prior to 1990 and dependent on environmental conditions have attempted to do so in several seasons since.
- 306 Due to the different biology and behaviour of this species the MLS is set at 216mm tail length. Prohibitions on the taking of berried female lobsters apply. In addition, a large area of water to the north-east of North Cape was closed to rock lobster fishing on a year round basis in 1977 in an apparent effort to protect what was then thought to be a large concentration of sub-legal PHC rock lobsters.
- 307 Commercial catches have fluctuated since 1990, reaching a peak of 24 tonnes in the 1995–96 season. The reported landings are 16.2 tonnes 1998–99, 12.6 tonnes in 1999–2000, 10.4 tonnes in 2000–01, and 7.8 tonnes in 2001–02, and 8.3 tonnes in 2002–03. It is thought that the shortfall of catch against quota reflects the low levels of target effort being directed at the fishery which is known to have variations in abundance possibly determined by weather and sea temperatures.
- 308 In 2001–02 27 commercial fishers reported PHC catch. Less than five are known to be target fishing the species, all of these operating in either CRA 1 or CRA 2. The value of the landed catch is estimated to be in excess of \$500,000.
- 309 There are no estimates of amateur catch for the species but divers using UBA are known to target PHC in Northland and the Bay of Plenty as “trophy” fish. There are no estimates of customary harvest.

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<sup>3 3</sup> This species used to be known as *Jasus* (*Sagmariasus*) *verreauxi* (Holthuis 1991) but was almost always referred to as *J. verreauxi*. Recently (Booth & Webber 2002), the subgenus *Sagmariasus* was elevated to full generic status because of the many substantial differences between this species and all *Jasus* species, which among themselves vary little.

# ***Part SEVEN***

## ***SUMMARY OF RECOMMENDATIONS***

## **7.1 SUMMARY OF RECOMMENDATIONS**

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### **THE NATIONAL ROCK LOBSTER MANAGEMENT GROUP**

#### **Recommendation**

310 The NRLMG recommends that the Minister:

- a) **note** that whilst supporting and encouraging the development and implementation of Fishery Plans for rock lobster, the NRLMG will continue to operate the current management framework outlined in this document and will work within the roles and responsibilities confirmed in the most recent review.
- b) **confirm** the NRLMG as the primary source of TAC, TACC and management advice for New Zealand rock lobster fisheries; and
- c) **confirm** the NRLMG as an appropriate body to consult on any matters relevant to the management of rock lobster fisheries.

### **STRATEGIC VISION**

#### **Recommendation**

311 The NRLMG recommends that the Minister:

- a) **confirm** the framework for managing rock lobster fisheries contained in this Report.

### **RESEARCH ACTIVITIES**

#### **Recommendation**

312 The NRLMG recommends that the Minister:

- a) **note** the scope of current rock lobster fisheries research;
- b) **note** the level of industry involvement in stock monitoring, including catch sampling, vessel Logbooks, and tag release and recapture, undertaken to MFish agreed standards and specifications; and
- c) **note** the role of the NRLMG in the Rock Lobster Research Planning Process, the results of which form the basis of fisheries research services described in the MFish Business Plan.

### **MANAGEMENT PROCEDURES AND HARVEST CONTROLS**

#### **Recommendation**

313 The NRLMG recommends that the Minister:

- a) **note** that management procedures continue to be evaluated to discover rules that deliver the desired outcomes while being robust to wide varieties of uncertainty.

## **REVISED NSS MANAGEMENT PROCEDURE**

### **Recommendation**

314 The NRLMG recommends that the Minister:

- a) **note** the agreed changes to CPUE standardisation methods which necessitated your agreement in October 2003 to revise the NSS management procedure;
- b) **note** that this Annual report contains recommendations for management actions in response to the NSS management procedure. (See Section 5).

## **STOCK ASSESSMENT OVERVIEW**

### **Recommendation**

315 The NRLMG recommends that the Minister:

#### ***Stock Assessments and Management Procedure***

- a) **note** that assessments were updated in 2003 for CRA 4 and CRA 5, and that a revised management procedure was implemented for CRA 7 and CRA 8;
- b) **note** the detail of the stock assessments in the Mid-Year Fishery Assessment Plenary Report (November 2003) [Annex 1 to this Report];
- c) **note** the discussion in this report related to the use and choice of reference periods, and in particular the distinction between “target” and “limit” reference points.
- d) **agree** the choice of reference periods used for stock assessments, noting that the goals of sustainability and utilisation are encompassed in the reference points used in catch projections.
- e) **agree** that, based on the stock assessments, no sustainability issues for any stock (other than CRA 7 and CRA 8) require action for the 2004–2005 fishing year.

#### ***CRA 4***

- f) **note** that for CRA 4 the model results suggest that the levels of catch used in the assessment appear to be sustainable but that any increase in future catch levels would result in an increased probability of a decrease in biomass.
- g) **note** that in the model projections to April 2006, 40% of the model runs resulted in a biomass greater than the reference biomass. 60% of the model runs resulted in a biomass below the reference period. The median of all model runs shows an April 2006 biomass at 87% of the target biomass. The NRLMG consider these probabilities to be acceptable and to meet your legislative obligations.
- h) **note** that the NRLMG anticipates another full stock assessment for CRA 4 from which the Group could recommend measures to be implemented in 2006.
- i) **agree** that no management action is required for CRA 4 in April 2004.

## **CRA 5**

- j) **note** that for CRA 5 the model results suggest that the levels of catch used in the assessment appear to be sustainable.
- k) **agree** that no management action is required for CRA 5 in April 2004.

## **NSS: CRA 7 and CRA 8**

- l) **note** that the agreed NSS management procedure has invoked a 5.4% increase in the CRA 7 TAC and a 5.4% increase in the CRA 8 TAC.
- m) **agree** to increase the CRA 7 TAC from 109 tonnes to 114.886 tonnes effective 01 April 2004;
- n) **agree** that within the new TAC, the allowances made for customary, amateur, and other sources of fishing related mortality should remain unchanged, and that the CRA 7 TACC should increase to 95.886 tonnes effective 01 April 2004.
- o) **agree** to increase the CRA 8 TAC from 655 tonnes to 690.37 tonnes effective 01 April 2004;
- p) **agree** that within the new TAC, the allowances made for customary, amateur, and other sources of fishing related mortality should remain unchanged, and that the CRA 8 TACC should increase to 603.37 tonnes effective 01 April 2004.

## **UNCERTAINTY IN ESTIMATES OF TOTAL REMOVALS**

### **Recommendation**

316 The NRLMG recommends that the Minister:

- a) **acknowledge** that accurate and reliable data for all sectors are essential to the stock assessment process.
- b) **acknowledge** that accurate and reliable data for all sectors are essential to the fishery management decision making process, particularly in circumstances where catch reductions are considered necessary to maintain or improve stock abundance.
- c) **ensure** that sufficient resources are deployed by MFish to monitor non-commercial removals from rock lobsters fisheries in order to maintain the integrity of the TACs set for stocks, and to maintain the integrity of the allowances made to extractive users within the TACs and the fishing opportunity associated with those allowances.

## **COMPLIANCE AND ENFORCEMENT ISSUES**

### **Recommendation**

317 The NRLMG recommends that the Minister:

- a) **note** the significance of the illegal catch component and its negative effect both on the stock and on legitimate extractive users;

- b) **note** that all user groups recommend that the Minister take steps to ensure that compliance strategies and services (including enforcement and education services) are sufficient to minimise illegal catch;
- c) **ensure** that sufficient resources are deployed by MFish Compliance to constrain illegal unreported removals in the first instance to the levels of the allowances made in setting TACs, and ideally to much lower levels so as to improve the quality of the fishing experience to be enjoyed by legitimate users.

## **CAPTURE METHODS**

### **Recommendation**

318 The NRLMG recommends that the Minister:

- a) **note** that the NRLMG reviewed capture methods for use by non-commercial operators with a view to compiling advice and recommendations during 2004.

## **CATCH IDENTIFICATION**

### **Recommendations**

319 The NRLMG recommends that the Minister:

- a) **note** the establishment of the Catch Identification Sub-Group, the members of which are drawn from NRLMG stakeholder representatives including MFish.
- b) **note** the intention of the NRLMG to review and evaluate catch identification options, including telson clipping, during 2004.

## **ALLOCATION PRINCIPLES**

### **Recommendation**

320 The NRLMG recommends that the Minister:

- a) **note** the positions of the stakeholder group representatives together with their concerns and urgently take steps to define the rights and allocative requirements needed for management of rock lobster and other fisheries resources.

## **AMATEUR ROCK LOBSTER POT LIMIT**

### **Recommendation**

321 The NRLMG recommends that the Minister:

- a) **amend** the Fisheries (Amateur Fishing) Regulations 1996 to specify that:
- i) no individual may use, set, or possess more than three rock lobster pots in any one day. This individual pot limit also applies to an individual who is the only person on a vessel;
  - ii) no vessel carrying two or more people may use, set, or possess more than six rock lobster pots in any one day;
  - iii) using, setting, or possessing more than the daily rock lobster pot limit, but not more than twice the daily rock lobster pot limit, is subject to tiered infringement notice penalties;
  - iv) using, setting, or possessing more than twice the daily rock lobster pot limit is a serious non-commercial offence, liable on summary conviction to a fine not exceeding \$20,000.

### **For individuals**

- b) **amend** the Fisheries (Infringement Offences) Regulations 2001 to create tiered infringement fees for rock lobster pot limit offences. Specifically, the proposed penalty structure for an individual using, setting, or possessing rock lobster pots is:
- i) \$250 infringement notice for an individual using, setting, or possessing four rock lobster pots
  - ii) \$500 infringement notice for an individual using, setting, or possessing more than four rock lobster pots but not more than six rock lobster pots
  - iii) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending where an individual uses, sets, or possesses more than six pots.

### **For two or more people:**

- c) **amend** the Fisheries (Infringement Offences) Regulations 2001 to create tiered infringement fees for two or more people on a vessel using, setting, or possessing rock lobster pots. Specifically:
- i) \$250 infringement notice for using, setting, or possessing more than six rock lobster pots, but not more than nine rock lobster pots from a vessel;
  - ii) \$500 infringement notice for using, setting, or possessing more than nine rock lobster pots but not more than 12 rock lobster pots from a vessel;
  - iii) liable on summary conviction to a fine not exceeding \$20,000 for serious non-commercial offending for using, setting or possessing more than 12 rock lobster pots from a vessel.

### **EITHER**

- d) **amend** the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986; the Fisheries (Southland and Sub-Antarctic areas Amateur Fishing) Regulations 1991; and the Fisheries (Infringement Offences) Regulations 2001 to revise the existing rock lobster pot limits in place for Mimiwhangata Peninsula and Paterson Inlet by **either**:
- i) increasing the rock lobster pot limits and offences and penalties regime to be in line with the national proposal; **or**

- ii) retaining the more restrictive pot limits currently associated with Mimiwhangata Peninsula and Paterson Inlet but bring the offences and penalties associated with breaching those restrictions in line with the national proposal.

**OR**

- e) **retain** the current rock lobster pot limits and offences and penalties regime provisions, specific to those identified regions.
- f) **note** that the NRLMG has a current preference for option **d(ii)**



# ***Annex 1***

## ***Rock Lobster Fishery Assessment Working Group***

### ***2003 PLENARY REPORT***