

**Department of Conservation:
Administration of the
Conservation Services Programme**

December 2002

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Foreword

This is our report of an inquiry conducted under section 18 of the Public Audit Act 2001.

We decided to conduct the inquiry as a result of a complaint from a body that represents the interests of its shareholding fishing companies and associations. The complaint was supported by specific case studies illustrating the body's concerns about the way that the Department of Conservation manages the Conservation Services Programme.

Because of the mechanism for funding the cost of the Programme and for recovering the cost from commercial fishers, our inquiry extended to the Ministry of Fisheries.

Administration of the Programme and the recovery of its costs proved to be a complex subject. I acknowledge the assistance and cooperation of staff of both the Department of Conservation and the Ministry of Fisheries.

Our inquiry has resulted in a number of recommendations which I am sure will (if implemented) bring about improvement in the administration of the Programme and alleviate the concerns of the complainant.

K B Brady
Controller and Auditor-General

19 December 2002

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Summary

Background to Our Inquiry

Since the establishment in 1978 of the New Zealand Exclusive Economic Zone, New Zealand's fishing industry has expanded rapidly. Commercial fishing carries with it the risk of protected marine life – such as albatrosses and other sea birds, sea lions, and dolphins – being endangered by commercial fishing lines and fishing nets.

In order to ensure that the fishing industry pays an appropriate portion of the environmental costs associated with fishing, the Fisheries Act 1996 provides for the imposition of a levy, known as the Conservation Services Levy, on the fishing industry. Funding from the levy assists with research into ways of reducing the impact of fishing operations on protected marine species. The Department of Conservation manages this research programme, which is known as the Conservation Services Programme. The Ministry of Fisheries collects the levy from the fishing industry.

The New Zealand Seafood Industry Council Limited (SeaFIC) represents the interests of its shareholding fishing companies and associations. SeaFIC has complained to this Office that the Department of Conservation does not administer the Programme in an effective manner and is conducting some research that is not appropriately related to the impact of fishing on protected species.

We considered that the matters raised by SeaFIC were sufficiently important for us to undertake an inquiry into a number of aspects relating to conservation services. Our investigations identified issues additional to those originally raised by SeaFIC, which we have also covered in our report.

Our Conclusions and Recommendations

The original complaint from SeaFIC was expressed in general terms. At our suggestion, SeaFIC then presented its concerns in the form of several case studies, as illustrative of the way in which DOC manages the Conservation Services Programme.

We investigated the complaint in terms of the case studies but found that they dealt with very specialised research projects. For this reason, we have not attempted to generalise our findings from the case studies. However, we expect DOC to satisfy itself that issues that have been identified in relation to the case studies we examined have been appropriately addressed where they arise in other research projects.

In the course of our inquiry we noted the need for effective coordination between DOC and the Ministry of Fisheries. The need for effective coordination applies particularly in relation to work on the over- or under-recovery of levies from the fishing industry. We are aware that DOC and the Ministry are now working together to achieve more effective coordination.

Our conclusions and recommendations are summarised on pages 10-13.

*Justification for Funding Research as a Conservation Service:
Research into the Black Petrel*

We are not sure that, to date, DOC has sufficient evidence to conclude that commercial fishing is having an adverse effect on the black petrel population.

We recommend that DOC:

- provides clear justification of the relationship between a research project and the effects of commercial fishing on the particular protected species, and the levy associated with the research; and
- in the case of the black petrel research project, reconsiders the adequacy of the evidence as to whether commercial fishing has an adverse effect on the black petrel population.

If DOC remains of the view that commercial fishing has an adverse effect on the black petrel population, it should justify that view.

The Minister of Conservation and DOC have the primary responsibility for ensuring that the fishing industry is being levied only for “conservation services” as defined in the Fisheries Act and in accordance with the cost recovery rules and principles. To avoid the risk of a challenge, in our view the Minister of Fisheries – who has the responsibility for levying industry – should receive explicit assurance from the Minister of Conservation that each proposed project in the annual Programme is a “conservation service” as defined in the Act.

*Application of Cost Recovery Rules:
Research Into the New Zealand Sea Lion*

In the case of research into the New Zealand sea lion – which breeds in the Auckland Islands among the sub-Antarctic islands surrounded by a squid trawl fishery area – DOC has used a method of risk estimation based on an “event history” of mortality. Using this approach, it has assessed the fishing industry to be liable for all of the costs of the research into the sea lions . In our view, DOC’s approach is appropriate, given the difficulty of assigning value to any risk that may exist from other forms of human intervention, since such intervention has not yet resulted in sea lion deaths.

While we found that in this case DOC had applied the rules appropriately, there is a need for DOC to demonstrate to stakeholders in all cases that:

- the cost recovery framework has been applied; and
- the rationale for the apportionment of costs to the industry is fully justified.

DOC should consider:

- improving the guidance on the methodology for estimating risk to protected species populations from human interventions;
- preparing an approved population management plan under the Marine Mammals Protection Act 1978, which could include a maximum allowable level of fishing-related mortality for the sea lion to allow the species to achieve non-threatened status;
- assessing the desirability of formal incentives to reduce the incidental catch of species; and
- improving the procedures to resolve disputes around risk estimation and assessment of cost recovery.

Under current cost-recovery rules, none of those four tasks could be funded through the Conservation Services Levy.

Consulting on the Conservation Services Plan

DOC has attempted to improve the timeliness of consultation on the Conservation Services Plan that sets out the Conservation Services Programme for the coming year. However, DOC will need confirmation from stakeholders that the time allowed for consultation is now sufficient for interested parties to meet their internal consultation requirements and prepare a response.

In order to increase the understanding by all parties of the issues, we recommend that DOC invites parties to make written submissions on the draft Plan, and then circulates those submissions to all parties before the consultation meeting.

Information on Over- and Under-recovery of Costs

The Fisheries Act 1996 requires the Minister of Fisheries to have regard to the extent to which costs incurred by the Crown in providing fisheries services and conservation services have been over- or under-recovered from the fishing industry. The Minister of Fisheries must consider that information before recommending the making of each year's Order imposing levies.

The Ministry of Fisheries must therefore provide the Minister with details of expenditure on conservation services and fisheries services and advise the Minister whether the expenditure has been recovered (or is recoverable), so that the Minister can have regard to any over- or under-recovery.

In our view, the Ministry of Fisheries did not give the Minister of Fisheries adequate information about over- or under-recovery of the Crown's costs in providing conservation services, for the previous financial years, before making the levy Orders for the years 1998-99 to 2001-02.

We recommend that:

- DOC provides the Ministry of Fisheries with timely information on expenditure (and, in turn, the Ministry gives DOC timely information on services provided by the Ministry for relevant projects, such as observer days; and
- the Ministry ensures that it provides the Minister of Fisheries with the information that the Minister is required to consider under section 265 of the Fisheries Act 1996.

Management of the Observer Programme

One element of the Conservation Services Programme is the observer programme, which involves placing observers on fishing boats to report on the impact of fishing on protected marine wildlife. We found an apparent “under-use” of programmed observer days and examined the reasons for this.

DOC has subsequently provided us with a reconciliation of the number of observer days levied against observer days used. We recommend that DOC makes this information available to interested parties. DOC should also continue to work with the Ministry and the fishing industry to ensure that all observer days levied take place.

A Strategic Plan for the Conservation Services Programme

As a matter of good practice for the management of a research programme, the Conservation Services Programme should be planned, costed, and carried out within the context of a strategic plan. DOC should prepare a strategic plan that includes the elements set out in paragraph 8.6 on page 66.

Accountability for the Conservation Services Programme

In our view, there is a need to ensure greater accountability and reporting to stakeholders of money spent and progress achieved on the Conservation Services Programme. DOC has made some progress by substantially revising the draft Conservation Services Plan for 2002-03 since its first release in February 2002, to include more detailed information on the status of research projects. DOC should take this further by including more information about research budgets, timetables and progress against research objectives, particularly for multi-year projects.

Implementing the Results of Conservation Services Research

It is important for the effectiveness of the Conservation Services Programme that improved fishing practices indicated by research projects are identified and promoted to the fishing industry. Evaluating and then advocating improved fishing practices to the fishing industry requires cooperation between DOC, the Ministry of Fisheries and fishing industry stakeholder organisations.

Regulation of fishing methods, to ensure any limit on fishing related mortality is not exceeded, is a prerogative of the Minister of Fisheries. However, DOC, working with the Ministry of Fisheries, should take a more active and timely role in ensuring that research findings are translated, where appropriate, into improved fishing practices. DOC should also establish a more transparent process for considering whether research findings indicate any need for changes in the direction and content of the Conservation Services Programme.

Part One

What Is the Conservation Services Programme?

Legislative Provisions

- 1.1 The Crown has been able to levy the fishing industry for the costs of providing “conservation services” since 1 October 1995.¹ The cost-recovery regime is now in Part 14 of the Fisheries Act 1996 (the Fisheries Act).
- 1.2 The Conservation Services Levy (CSL) is imposed on holders of commercial fishing quota, fish farmers, and commercial fishers who catch non-quota stocks for sale, and is intended to enable the Crown to recover its costs incurred in providing “conservation services”. DOC provides these conservation services on behalf of the Crown. The Crown funds the conservation services but some costs are recovered from the fishing industry, in accordance with the cost-recovery regime.
- 1.3 “Conservation services” are defined in the Fisheries Act as –
- outputs² produced in relation to the adverse effects of commercial fishing on protected species, as agreed between the Minister responsible for the administration of the Conservation Act 1987 and the Director-General of the Department of Conservation, including—*
- (a) *Research relating to those effects on protected species:*
- (b) *Research on measures to mitigate the adverse effects of commercial fishing on protected species:*
- (c) *The development of population management plans under the Wildlife Act 1953 and the Marine Mammals Protection Act 1978.³*
- 1.4 Under the Fisheries Act, “protected species” means:
- any marine wildlife as defined in section 2 of the Wildlife Act 1953 that is protected under that Act; or
 - any marine mammal as defined in the Marine Mammals Protection Act 1978.

Consulting on the Conservation Services Plan

- 1.5 Each year, DOC prepares a Conservation Services Plan (the Plan) setting out the Conservation Services Programme (the Programme) for the coming year that it proposes to submit to the Minister of Conservation. The Programme contains a mix of existing research projects and new projects.

¹ Section 107EA(1), Fisheries Act 1983, as inserted by section 3 of the Fisheries Amendment Act 1994.

² ‘Outputs’ are the goods and services that are produced by a department, Crown entity, Office of Parliament, or any other person or body – section 2, Fisheries Act 1996.

³ This definition was inserted into the Fisheries Act 1996 by the Fisheries Act 1996 Amendment Act 1999, with effect from September 1999. The former definition was slightly different but still referred to “the adverse effects of commercial fishing on protected species”.

- 1.6 The Plan is distributed to interested parties, including those in the fishing industry and environmental groups. In general, the procedure is that DOC first holds an informal meeting with the interested parties, followed by a formal meeting. At all meetings, DOC outlines each research proposal and the parties comment on and discuss the proposals. After the formal meeting, parties can make written submissions to DOC. Officials from the Ministry of Fisheries (the Ministry) attend these meetings.
- 1.7 To assist in considering and making a decision on the conservation services to be provided by DOC, the Minister of Conservation is given:
- summaries of both the formal meeting discussions and written submissions;
 - all written submissions; and
 - departmental advice.

How the Conservation Services Levy Is Determined

- 1.8 After approving the Plan for the coming fishing year⁴, the Minister of Conservation advises the Minister of Fisheries of the conservation services that DOC has been given approval to undertake. The Ministry then advises the Minister of Fisheries of the amount that needs to be recovered from the fishing industry by way of the CSL as the industry's contribution towards the cost of the approved conservation services. The Minister of Fisheries then makes a recommendation to the Governor-General for the Order imposing the levy.
- 1.9 For 2000-01, the levies imposed were intended to recoup to the Crown \$1.6 million for conservation services. For 2002-03, the estimated cost to the fishing industry of the intended Programme is \$2.8 million.
- 1.10 In recommending to the Governor-General the making of rules for the imposition of levies and the Order imposing the levies, the Minister of Fisheries must be satisfied that:
- the rules comply with the cost-recovery principles in section 262 of the Fisheries Act; and
 - the proposed Order imposing levies is consistent with the rules.

⁴ The fishing year runs from 1 October to 30 September.

- 1.11 The fishing industry is not always levied for the full cost of conservation services. Section 262 of the Fisheries Act sets out principles that apply to the Crown in recovering its costs under the Act.⁵ The principles include that:
- costs of conservation services provided in the general public interest may not be recovered from the fishing industry; and
 - costs of conservation services provided to avoid, remedy, or mitigate a risk to, or an adverse effect on, the aquatic environment must, so far as practicable, be attributed to the persons who caused the risk or adverse effect.
- 1.12 The current rules are the Fisheries (Cost Recovery) Rules 2001⁶ and the current Order imposing levies for conservation services is the Fisheries (Cost Recovery Levies for Conservation Services) Order 2002.⁷ Under the Rules:
- where research relating to protected species populations is being carried out, and where the risk to those populations by human intervention has been estimated, there is a formula to determine the proportion of the costs to be borne by the industry;
 - where the risk of human intervention has *not* been estimated, the proportion of costs to be borne by the industry is set at 50%; and
 - where the conservation service is provided to avoid, remedy or mitigate that portion of the risk to, or adverse effect on, the aquatic environment caused by commercial fishing, the fishing industry bears 100% of the costs.

The Conservation Services Funding Regime

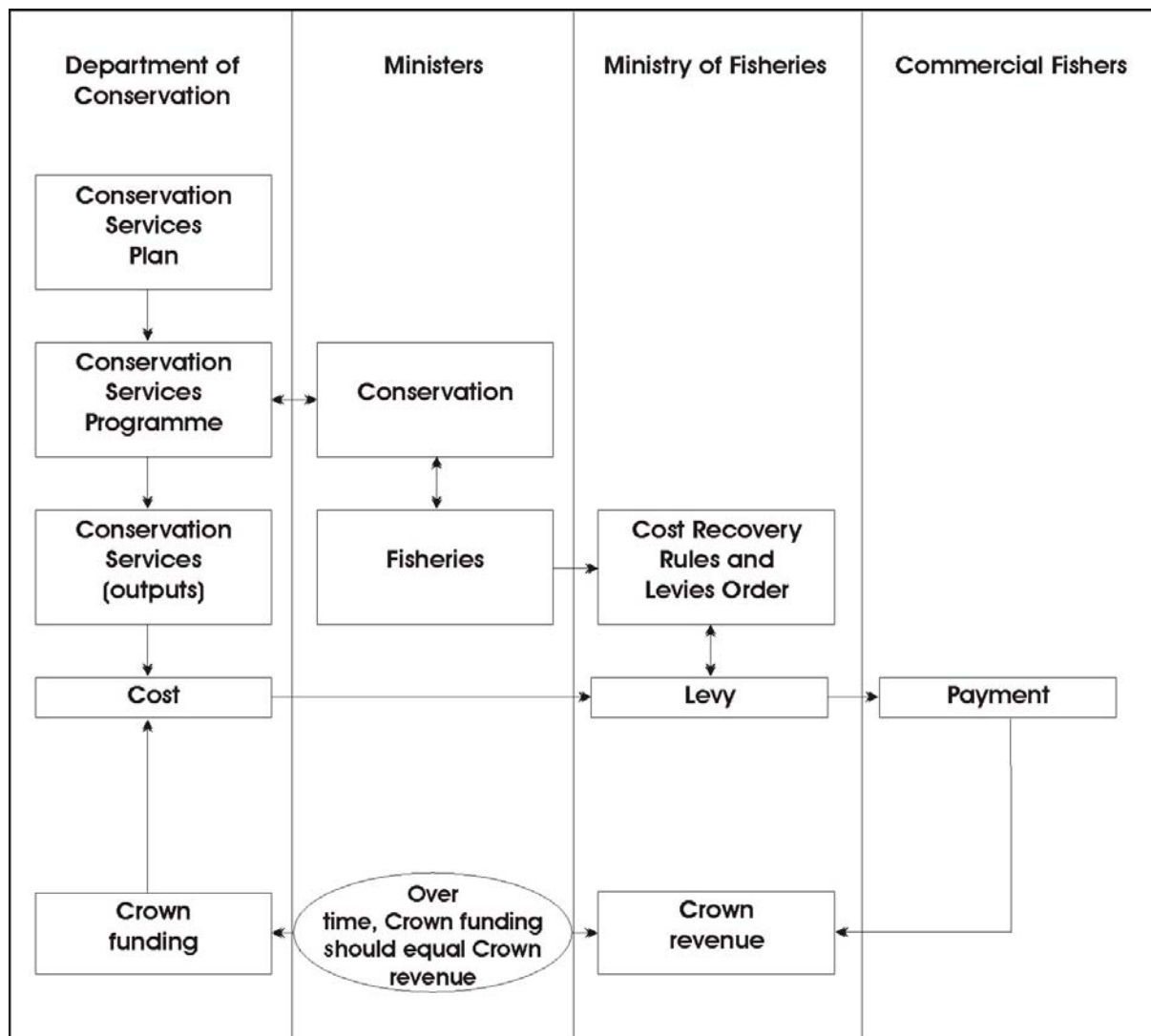
- 1.13 DOC is funded for the costs of the Programme by appropriation through Vote Conservation. The Ministry levies the fishing industry for the industry's share of the costs of conservation services. This involves different financial years – the fishing year (1 October to 30 September) for the levy and the Crown's financial year (1 July to 30 June) for the appropriation process.
- 1.14 The funding regime is illustrated in the diagram on the next page.

⁵ The cost recovery principles were inserted into the Fisheries Act 1996 by the Fisheries Act 1996 Amendment Act 1999, but were not brought into effect until February 2001.

⁶ SR2001/229.

⁷ SR2002/308.

The Conservation Services Funding Regime



Part Two

Matters That We Inquired Into

- 2.1 The New Zealand Seafood Industry Council Limited (SeaFIC) represents the interests of its shareholding fishing companies and associations.
- 2.2 For several years SeaFIC has had concerns about how effectively DOC manages the Conservation Services Programme.
- 2.3 Last year, SeaFIC complained to this Office about DOC's management of the Programme. SeaFIC's concerns were set out in a detailed report that focused on a number of examples that SeaFIC believed illustrated shortcomings in DOC's management of the Programme.
- 2.4 We considered that the matters raised by SeaFIC were sufficiently important for us to undertake an inquiry into a number of aspects relating to conservation services.
- 2.5 The original complaint from SeaFIC was expressed in general terms. At our suggestion, SeaFIC then presented its concerns in the form of several case studies, as illustrative of the way in which DOC manages the Conservation Services Programme.
- 2.6 We investigated the complaint in terms of the case studies but found that they dealt with very specialised research projects. For this reason, we have not attempted to generalise our findings from the case studies. However, we expect DOC to satisfy itself that issues that have been identified in relation to the case studies examined have been appropriately addressed where they arise in other research projects.
- 2.7 Our investigations identified two issues additional to those originally raised by SeaFIC, which we have also covered in this report.
- 2.8 The remainder of our report is divided into eight parts, as follows:

Matters raised by SeaFIC –

- Justification for funding research as a conservation service (Part Three).
- Application of the cost recovery rules (Part Four).
- Consulting on the Conservation Services Plan (Part Five).
- Information on the over- or under-recovery of costs (Part Six).
- Management of the observer programme (Part Seven).
- A strategic plan for the Conservation Services Programme (Part Eight).

Other matters identified during our inquiry –

- Accountability for the Conservation Services Programme (Part Nine).
- Implementing the results of conservation services research (Part Ten).

Part Three

Justification for Funding Research as a Conservation Service: Research Into the Black Petrel

Introduction

- 3.1 SeaFIC believes that DOC is funding as conservation services some research projects that will provide no information on the adverse effects of fishing on protected species. The definition of “conservation services” is set out in paragraph 1.3 on page 17.

Research into the Black Petrel

- 3.2 In order to illustrate this point, SeaFIC has presented a case study of the DOC research project into the black petrel. We reviewed that project against the statutory framework for imposing a CSL.
- 3.3 The approved Plan for 2001-02 lists the cost of the black petrel project in that year as \$37,000. The risk to the black petrel from human intervention inside and outside New Zealand’s Exclusive Economic Zone has not been estimated so the industry pays 50% of this cost.
- 3.4 The project is a population study of the black petrel on Great Barrier Island, which involves obtaining data on causes of adult mortality, breeding failure, and breeding success. The black petrel population is estimated at about 5000 birds.
- 3.5 The project began in 1995-96, and was originally intended to cover four breeding seasons before being reviewed. Following the review of the project in 2001⁸, modifications to the study were made and it was extended to a further five breeding seasons. DOC has indicated that such studies can take up to 15 years to complete.

Does Commercial Fishing Have an Adverse Effect on the Black Petrel Population?

- 3.6 Research to date indicates that the breeding success of the black petrel is affected by rat and cat predation. The research also indicates that – despite several hundred visitors each year to the breeding areas – visitors have little or no direct impact on breeding success.
- 3.7 There is currently limited evidence to support DOC’s belief that large numbers of black petrels are caught in long-lines. However, DOC considers it reasonable to assume that there is an adverse effect from long line fishing. A November 2000 report⁹ on the black petrel population study states that because of the low reproduction rates of the black petrel, any change in adult survivorship will have large effects on the population.

⁸ Hunter, Fletcher and Scofield *Preliminary modelling of black petrels (Procellaria parkinsoni) to assess population status* DOC Internal Science Series 2, 2001.

⁹ Bell and Sim *Survey & monitoring of black petrels on Great Barrier Island 1999/2000*.

- 3.8 SeaFIC objects to this project on the basis that it does not concern fisheries by-catch¹⁰ and (hence) it believes the industry should not have to contribute to the costs.
- 3.9 In a report to the Minister of Conservation recommending that she approve its proposed conservation services for 2001-02¹¹ DOC:
- noted the fishing industry’s objection to the project – that the project is unable to estimate the impact of fishing on the black petrel population due to imprecise and incomplete estimates of fishing-related mortality within and outside New Zealand’s Exclusive Economic Zone (EEZ); and
 - commented –
- DOC would not be carrying out this baseline research if these seabirds were not caught incidentally to commercial fisheries within the NZ EEZ. The purpose of this project is to measure the impact of mortality on this population (i.e. magnitude of population change) within the NZ EEZ. It is not intended to develop methods to mitigate that capture. Without baseline population information it is impossible to measure the impact of fisheries interactions on this protected species. The cost recovery rules clearly indicate that the Crown should recover at least some of the costs of this research from the fishing industry.*
- 3.10 DOC believes that population modelling typically requires long-term data sets, and fishing impact assessments need reliable by-catch statistics. DOC does not have accurate data on the extent of the impact on black petrels of by-catch. This particular research project will provide long-term data sets, but not information on the by-catch of black petrels.
- 3.11 As noted in paragraph 1.3, the definition of “conservation services” refers to outputs produced in relation to the “adverse effects” of commercial fishing on protected species. The Minister of Conservation and the Director-General of DOC determine the nature and extent of the conservation services.¹²
- 3.12 The Minister of Fisheries and the Ministry have no direct role in that determination. Nor does the Fisheries Act give the Minister of Fisheries power to veto a decision of the Minister of Conservation on a particular conservation services project. But it is the Minister of Fisheries who recommends the making of the levy Order to recover the costs of both conservation and fisheries services.¹³

¹⁰ “By-catch” refers to sea birds, sea mammals caught incidentally in the course of fishing.

¹¹ DOC submission to Minister of Conservation seeking approval of 2001/02 Conservation Services Plan – 13 July 2001 – summary of approved party submissions on 2001/02 proposals, pages 4-5.

¹² See the definition of “conservation services” (paragraph 1.3), and formerly, section 267(2) of the Fisheries Act 1996.

¹³ For the 2002 fishing year, the Minister of Fisheries recommended separate levy Orders for conservation services and fisheries services and separate Orders were made accordingly.

- 3.13 Therefore, in our view, the Minister of Fisheries should receive explicit assurance from the Minister of Conservation that any conservation services project for which the fishing industry is levied is a “conservation service” as defined in the Fisheries Act. This should reduce the risk of challenge to the validity of the levy Order in relation to any particular conservation service.
- 3.14 In the case of the black petrel, this approach would require evidence that commercial fishing has an adverse effect on the black petrel population. The most accurate means of identifying whether black petrels have been killed as a result of fishing activities is at-sea observation with subsequent seabird autopsies.
- 3.15 Seabird autopsy reports over a recent five-year period identified six black petrels being killed by the activities of commercial fishing. A DOC scientific report¹⁴ considered the adequacy of the data being used to assess the population status of black petrels. While acknowledging that *small changes [in by-catch levels] are likely to go undetected, even though they may still impact on the population*, the report concluded that –
- Small numbers of black petrels have been taken by longline fishing vessels but the extent of interactions between black petrels and longline vessels remains largely unknown. The current monitoring program for black petrels does not address the issues of whether, how and how intensively black petrels interact with longline fisheries.*
- 3.16 The report recommended:
- reviewing the evidence to assess the likelihood of by-catch;
 - establishing a satellite tracking programme to determine the foraging distribution of black petrels; and
 - determining the distribution of longline fishery vessels during the black petrel breeding season.
- 3.17 There are no reliable estimates of the number of black petrels killed as a result of commercial fishing activities but DOC has told us that there has been very low observer coverage (less than 1%) in relation to the two fisheries considered most likely to interact with black petrels – the surface longline fishery for tuna and the demersal longline fishery in North East New Zealand.
- 3.18 DOC has told us that, had there been more observer coverage in relevant fisheries, there would be more evidence of the impact of commercial fishing on the black petrel population. DOC says that it has made extensive efforts to obtain better coverage in the relevant fisheries, but this has been difficult in some cases because the fishing vessels are too small to carry an observer.

¹⁴ “Preliminary modelling of black petrels to assess population status”, DOC science internal series 2, August 2001, Hunter, Fletcher & Scofield.

- 3.19 DOC’s view is that knowledge of the population dynamics is needed in order to determine whether there is an adverse effect and whether any mitigation is effective. To this end, the black petrel study was designed to provide the benchmarks for such an assessment.
- 3.20 DOC has also told us that the black petrel population study is part of a five-pronged approach to assessing and mitigating the adverse effects of fishing on the black petrel population. The other aspects are:
- an observer programme;
 - an advisory officer to educate in safer fishing techniques;
 - mitigation devices (e.g. line sinking studies and underwater bait delivery); and
 - a modelling study to determine whether the extent of population adverse effects could be calculated from early data from the Great Barrier population study.

Our Conclusions

- 3.21 We are not sure that, to date, DOC has sufficient evidence to conclude that commercial fishing is having an adverse effect on the black petrel population. The number of black petrels recovered is very few in terms of the total number of seabirds returned for autopsy. This could be because DOC and the Ministry of Fisheries’ Observer Programme have not been able to obtain observer coverage on small fishing boats, or because very few black petrels are being caught in fishing nets and lines.
- 3.22 The Fisheries Act defines “effect” very broadly¹⁵ – including a direct or indirect effect of fishing, regardless of the scale, intensity, duration, or frequency of the effect. An effect can occur in the past, present or future. In the case of a potential effect, it can be one of high probability or one of low probability but with a high potential impact. In the case of a conservation service, the “effect” must also be adverse.
- 3.23 Even if the adverse effect is only potential, the current population study does not address the issues of whether, how, and how intensively black petrels interact with longline fisheries. DOC told us that it is extending the scope of the project to assess the foraging range of black petrels, which should provide more information about the extent of interaction with commercial fishing.

¹⁵ “Effect” is defined in the Fisheries Act as “the direct or indirect effect of fishing; and includes – (a) Any positive or adverse effect; and (b) Any temporary or permanent effect; and (c) Any past, present, or future effect; and (d) Any cumulative effect which arises over time or in combination with other effects – regardless of the scale, intensity, duration or frequency of the effect; and also includes – (e) Any potential effect of high probability; and (f) Any potential effect of low probability which has a high potential impact”.

Our Recommendations

3.24 **We recommend that:**

- **DOC provides clear justification of the relationship between a research project and the effect of commercial fishing on the particular protected species, and the levy associated with the research.**

3.25 **In the case of the black petrel research project, we recommend that:**

- **DOC reconsiders the adequacy of the evidence as to whether commercial fishing has an adverse effect on the black petrel population.**
- **Should DOC remain of the view that commercial fishing has an adverse effect on the black petrel population, it justifies that view by demonstrating:**
 - **the current or potential adverse effect that commercial fishing has on the black petrel population;**
 - **the extent of that effect; and**
 - **how the research relates to that current or potential adverse effect, or concerns measures to mitigate that effect.**

3.26 **In order to reduce the risk of challenge to the validity of the levy Order in relation to any particular conservation service, the Minister of Fisheries should receive explicit assurance from the Minister of Conservation that any conservation services project for which the fishing industry is levied is a “conservation service” as defined in the Fisheries Act.**

Part Four

Application of the Cost Recovery Rules: Research Into the New Zealand Sea Lion

Introduction

- 4.1 SeaFIC is concerned with DOC's application of cost recovery rules for research projects. SeaFIC believes that DOC is not assessing risk on the basis of the fishing industry's relative contribution to risk, as required by the cost recovery rules.

Research Into the New Zealand Sea Lion

- 4.2 To illustrate its concern, SeaFIC refers to a research project on the New Zealand sea lion. The project is intended to study the dynamics of the sea lion population and contribute to managing the contact between the population and the squid trawl fishery that operates in sea lion foraging areas around the Auckland Islands. The research includes tagging adult sea lions, measuring pup production, and evaluating the efficacy of flipper tagging. DOC says that the research will investigate the behaviour of sea lions to determine whether they are now feeding in those areas where squid trawlers are operating.
- 4.3 The project is fully funded by the fishing industry because DOC, on the basis of known sea lion deaths, has assessed fishing as being the only risk to the sea lions from human intervention. However, in SeaFIC's view, there are other human sources of risk – though no sea lion deaths may yet have resulted from them. Its argument is that event history (mortality rates) may be an aspect of, but does not constitute, a proper risk assessment. Further, it challenges DOC's assertion that the sea lion population is actually at risk.

The Cost Recovery Rules

- 4.4 The Fisheries (Cost Recovery) Rules 2001 prescribe the proportion of costs of conservation services and fisheries services to be recovered as levies and how the costs are to be apportioned between the persons who must pay the levies. The relevant part of the Schedule to these rules apportions the costs of fisheries and conservation services between the fishing industry and the Crown as shown in the table on the next page.

Services	Percentage of costs to be borne by Fishing Industry
Research relating to protected species populations* where risk to those populations by human intervention has been estimated.	A over B , expressed as a percentage, where – <ul style="list-style-type: none"> • A is the risk to the populations posed by commercial fishing in the EEZ of New Zealand; and • B is the total risk of human intervention on the populations.
Research relating to protected populations where risk to those populations by human interventions has not been estimated.	50%
Services (including research) provided to avoid, remedy or mitigate that portion of the risk to, or adverse effect on, the aquatic environment or biological diversity of the aquatic environment caused by commercial fishing.	100%

* The Fisheries (Cost Recovery) Rules 2001 define “research relating to protected species population” as meaning “research required or carried out in the interests of the effective management of any species that is –

(a) protected under the Wildlife Act 1953 or the Marine Mammals Protection Act 1978; and

(b) taken as non-targeted species by commercial fishers.”

- 4.5 In the case of conservation (or fisheries) services relating to protected species populations, the Schedule apportions the costs based on whether the risk to the populations from human intervention has been estimated. Where the risk has been estimated, the A over B formula should be applied to calculate the fishing industry’s share of the costs of the research. Where the risk has not been estimated, the fishing industry is liable for half of the costs of the research.
- 4.6 In the case of services or research relating to *that portion* of the risk to, or adverse effect on, the aquatic environment¹⁶ *caused by commercial fishing*, the Schedule allocates 100% of the costs to the fishing industry.
- 4.7 In relation to the sea lion research, DOC has used the event history of sea lion deaths to estimate risk, and has assessed that all of the risk from human intervention on the sea lion population is from commercial fishing. It has therefore judged that the fishing industry to be liable for all of the costs of the research into sea lions. For the 2002-03 year, DOC recommended that the industry be levied \$346,976 for this work.

¹⁶ The definition of “aquatic environment” in the Fisheries Act includes all “aquatic life” which includes any species of animal that must inhabit water during its life cycle.

Our Expectations

- 4.8 In reviewing how DOC arrived at its assessment that the entire risk to the sea lion population from human intervention is caused by commercial fishing, we expected that DOC would have:
- gathered information on the sea lion population in the Auckland Islands;
 - provided evidence that fishing poses a risk to the sea lion population;
 - estimated the risks to the sea lion population from human intervention; and
 - considered the risks to the sea lion population from commercial fishing against the total risk of human intervention.

What Is the Evidence That the Sea Lion Population Is At Risk?

- 4.9 The New Zealand sea lion is regarded as one of the world's rarest species of sea lion. It was once more abundant and widespread, but commercial hunting during the 19th century greatly reduced their numbers. It now lives mainly on two small islands in the Auckland Islands. Critical endangerment or extinction is regarded as a possibility – given that it exists in fewer than five locations, and in limited numbers.
- 4.10 The sea lion was declared a threatened species for the purposes of the Marine Mammals Protection Act 1978 in 1997.¹⁷ A 12 nautical mile fishing exclusion zone was established around the Auckland Islands in 1982.
- 4.11 There is a considerable amount of scientific information available about the sea lion population. Systematic research into the population in the Auckland Islands has been undertaken almost every year since 1972. A number of research papers have been published on the New Zealand sea-lion population and the by-catch of sea lions from fishing:
- Doonan & Cawthorn¹⁸ (1984) modelled the impact of by-catch on the population using the reported by-catch figure of 123 sea lions in a single season, and concluded that if by-catch continued at that rate, the population would have declined by a half after 64 years.

¹⁷ However, as a population management plan is not yet in force under that Act that declaration does not appear to have any legal effect.

¹⁸ Doonan & Cawthorn *Impact of Incidental Mortality on the Hooker Sea Lions*.

- Woodley & Lavigne¹⁹ (1993) constructed two models to investigate the impact of the by-catch on the sea lion population using life history parameters derived from two species with a similar life span – the northern fur seal and the Himalayan thar. Their models assumed a constant level of by-catch. The results of their work, as summarised by Childerhouse and Gales (1998) were that the New Zealand sea lion would have a limited capacity for population recovery.
- Gales & Fletcher²⁰ (1999) noted that the trawl fishery had an annual estimated by-catch of between 17 and 140 sea lions for the years 1988 to 1995.

4.12 SeaFIC has pointed to other research showing that, over time, the sea lion population is in fact not under threat from a by-catch of sea lions. These findings are at odds with the research findings to which DOC subscribes.

4.13 It is estimated that there are between 11,600 and 15,200 sea lions. What is not known is whether the sea lion population has reached “carrying capacity” – that is, the ability of the population to be sustained into the future (regardless of any other interventions, such as disease outbreaks). This is an important consideration, because if carrying capacity has not been reached, lifting restrictions on fishing could have serious consequences for the sea lion population.

What Is the Total Risk from Human Intervention?

4.14 Alternative models on the impact of the sea lion by-catch differ as to the estimated impact, and there is disagreement on this between DOC and SeaFIC.

4.15 DOC has considered the total risk from human intervention to the sea lion population using “event history” – that is, evidence of mortality caused by humans as the basis for estimating risk. SeaFIC believes that this approach to risk analysis is inappropriate, in that it does not analyse the risk of other human interventions – which have not yet caused deaths – having an adverse effect in the future.

4.16 For the purpose of assessing the level of risk to the sea lion population, DOC has assumed that the event history of sea lion mortality is an appropriate basis for risk analysis. We believe this is valid. It provides a practical basis for estimating the probabilities of future events by having regard to the actual incidence of those events in the past. The “true” probability may differ from the estimate made on that basis, but the size of that difference is indeterminable.

¹⁹ Woodley & Lavigne *Potential Effects of Incidental Mortalities on the Hooker Sea Lion*.
²⁰ Gales & Fletcher *Abundance, Distribution and Status of the New Zealand Sea Lion*.

- 4.17 Where there have been no known actual adverse effects from an intervention, the probability of some such effect occurring is consequently lower (possibly infinitesimal) compared to the intervention which is known to have adverse effects, and for which there is an event history.²¹

What Is the By-catch of Sea Lions and How Is It Dealt with?

- 4.18 DOC data on by-catch suggests that the annual incidental catch of sea lions can vary between 14 and 140. DOC regards the fisheries by-catch as significant, because of the rarity factors outlined above.
- 4.19 To date it has been accepted by all parties involved – the industry, DOC and the Ministry – that by-catch above a specific level endangers the sea lion population. Since 1995, the fishing industry, DOC and the Ministry of Fisheries have endeavoured to manage the sea lion by-catch by having an allowable by-catch of sea lions (the MALFIRM) – calculated by DOC on the basis of the estimated size of the adult population. The allowable level of by-catch is intended to allow the sea lion population to recover to at least 90% of its carrying capacity and to take no longer than ten years to do so.
- 4.20 There is a voluntary agreement between the fishing industry and the Ministry that once the allowable sea lion by-catch limit is reached, the fishery will be closed. DOC is consulted about the closure. The Minister of Fisheries effects the fishery closure through issue of a *Gazette* notice. The fishery was closed in 1995, 1996, 1997, 1998, and 2000.

Is There a Risk to the Sea Lion Population?

- 4.21 As discussed above, DOC has used the event history of known sea lion mortality to establish the risk posed by commercial fishing.
- 4.22 SeaFIC does not accept that fishing poses a risk to the sea lion population. It cites research by *Maunder, Starr and Hilborn* to the effect that commercial fishing will have little effect on the expected size of the sea lion population in 20 years' time. SeaFIC also cites recent, as yet unpublished, research that, assuming that the population has reached its carrying capacity, showing that a by-catch of sea lions is of little risk to the sea lion population. There is considerable friction between SeaFIC and DOC on this issue, as SeaFIC believes that DOC has failed to explain its position.

²¹ The total risk from human intervention (B) can in this circumstance justifiably be taken to be equal to the known occurrence of the effect (B¹), plus the risk of a highly unlikely effect (B²) occurring. The less likely and the smaller B², the closer B will equate to B¹. In the case of the sea lion, B¹ is the known mortality due to commercial fishing. Other human factors are not known to have had an adverse effect so that B² has been assumed to approach zero. Therefore, $B = B^1 + 0 = B^1$.

- 4.23 On the other hand, DOC has a working party on marine mammals that makes recommendations on measures relating to the management of the sea lion population. Our understanding is that scientific opinion is still divided on whether there is sufficient evidence to say conclusively that lifting restrictions on allowable fishing by-catch will not have an adverse effect on the future sea lion population.

Equating Risk with Mortality

- 4.24 SeaFIC argues that if risk were equated with mortality then, even if one sea lion were killed each year from fishing (and none from other sources of human activity), the fishing industry would still be liable for 100% of the DOC research costs. Such a situation could be seen as providing little incentive for the industry to minimise the sea lion by-catch.
- 4.25 Given the present scale of fishing operation, it is difficult to see that the sea lion by-catch could be reduced to a single animal in the immediate future. Fourteen deaths were recorded in 1999, but there have been considerably more since then. In 2000 there were 71 deaths, 67 in 2001, and 84 in 2002. Low by-catches are therefore unlikely.
- 4.26 Nevertheless, we agree that if a situation of declining and insignificant level of sea lion by-catch were to occur in future, DOC would need to review whether the industry should continue to be levied for all the costs of the research even if fishing were still the only human-related cause of sea lion mortality. But currently there is little need for such a review to be contemplated, as in most years the fishery has to be closed early because the sea lion by-catch limit has been reached.
- 4.27 Even if the by-catch were consistently below some pre-agreed level, ongoing monitoring of the by-catch would still be required. The observer programme (see Part 7) carries out on-going monitoring of the by-catch. This is fully funded by levies on the industry as set out in the Fisheries (Cost Recovery) Rules 2001.
- 4.28 Incentives to reduce the by-catch are important. Closing the fishery when by-catch is exceeded is a strong incentive to keep the by-catch down. The current Rules do not include such an incentive – though voluntary arrangements have been agreed and have been operating (see paragraph 4.19).
- 4.29 The industry has also recognised that there is a problem with the by-catch of sea lions and is endeavouring to reduce the number drowned in nets. For example, it has further developed and tested a sea lion excluder device that allows sea lions caught in trawl nets to escape.²² The industry has also written a Code of Practice to try and minimise sea lion deaths from fishing.

²² DOC told us that this device was initially conceived by Crown scientists and developed and tested under the Conservation Services Programme.

Reaching Agreement on the Risk Posed by Commercial Fishing

- 4.30 The cost recovery rules do not constitute a good basis for reaching agreement. There is an apparent assumption that risks to populations can be estimated without undue uncertainty and (therefore) dispute. That is clearly not the case. We understand there are numerous issues surrounding application of the adaptive rules for threatened species management, which require considerably more technical discussion. Further, there is no mechanism for resolving disputes over the population modelling on which the fundamental assumptions of population vulnerability are based.
- 4.31 SeaFIC has drawn DOC's attention to unpublished research that asserts that 100-year simulations of existing data indicate that the by-catch of sea lions presents little risk to the sea lion population. SeaFIC wrote to DOC in February 2002 seeking explanation of why DOC did not accept this approach and asking about the basis for declaring the sea lion a threatened species.
- 4.32 DOC did not reply to this letter until September 2002. Such delay in replying to a request for information is not helpful, and adds to the level of frustration that exists between SeaFIC and DOC. DOC told us that a DOC-convened technical working group, funded by the Conservation Services Levy, was conducting this research. As manager of this research effort, DOC believes it is premature to draw conclusions from the research, which is still in progress.
- 4.33 In our view, DOC should consider:
- improving the guidance on the methodology for estimating risk to protected species populations from human interventions;
 - preparing an approved population management plan under the Marine Mammals Protection Act 1978, which could include a maximum allowable level of fishing-related mortality for the sea lion intended to allow the species to achieve non-threatened status;
 - assessing the desirability of formal incentives to reduce the by-catch of species; and
 - improving the procedures to resolve disputes about risk estimation and assessment of cost recovery.
- 4.34 DOC notes that, under current cost-recovery rules, the cost of undertaking those tasks could not be funded through the CSL.

Our Conclusion

4.35 DOC has used a method of risk estimation based on an “event history” of mortality of the New Zealand sea lion. This approach is appropriate – given the difficulty of assigning value to the risk from other forms of human intervention that have not yet resulted in deaths of sea lions.

Our Recommendations

4.36 **While we found that, in this case, DOC had applied the rules appropriately, DOC should demonstrate to stakeholders in all cases that the cost recovery framework has been applied, and the rationale for the apportionment of costs to the industry is fully justified.**

4.37 **DOC should consider:**

- **improving the methodology for estimating risk to protected species populations from human interventions;**
- **preparing an approved population management plan for the New Zealand sea lion under the Marine Mammals Protection Act 1978;**
- **assessing the desirability of formal incentives to reduce the by-catch; and**
- **improving the procedures to resolve disputes about risk estimation and assessment of cost recovery.**

Part Five

Consulting on the Conservation Services Plan

Introduction

- 5.1 SeaFIC considers that the consultation process for the Conservation Services Plan is not effective because the timing and limited extent of consultation mean that there is no shared understanding among parties of the technical justification for some projects.

Timing of Consultation

- 5.2 SeaFIC is also concerned that the lateness of consultation has a negative impact on the business practices of fishing companies, and has said that –

The fishing year for the majority of fishstocks starts on 1 October and if the levy rates have not been gazetted before 1 October, fishers will be catching fish without knowing what levy will be (eventually) due on each kilogram of fish caught. The cost recovery levies are akin to taxation, and not knowing what the mandatory “tax” will be before the start of a business year is not good for running a business.

- 5.3 The Ministry told us that levy Orders have always been in place by 1 October each year.²³ This is correct, although there may only be several days between publication of the order and the start of the fishing year.

- 5.4 For 2002-03, DOC arranged for the consultation process to begin earlier. The draft Plan was circulated in mid-January 2002, with the consultation meeting in late-February. Changes to the Plan have meant that consultation had to be extended but, by starting the process in January, DOC has acknowledged the need to begin consultation earlier.

- 5.5 There may still be problems with limited times within the consultation process. One of the parties consulted noted that, having received the draft Plan on 21 January 2002 –

We had only 8 working days to consider this document before the information consultation and a further 8 working days before the formal plenary on 15 February 2002. To add confusion to this very swift consultation period, we understand, though have not seen nor received officially from DOC, that a revised draft consultation document has been subsequently circulated.

Improving the Process

- 5.6 In terms of ensuring that all parties have a common understanding of the technical justification for projects, the consultation process could be improved.

²³ The levy Order for the 2000/01 fishing year was made on 18 September 2000, and the Order for the 2001/02 fishing year was made on 17 September 2001.

- 5.7 The consultation process could be improved by giving interested parties the opportunity to make written submissions on the draft Plan. The submissions could then be circulated to all parties, at which stage the consultation meeting would be held. These steps would allow for an improved understanding by all parties on the submissions that have been made, and could result in a more effective consultation process.
- 5.8 DOC has told us that it has now established a web site for stakeholders to ensure that interested parties are aware of all documents.

Our Conclusion

- 5.9 DOC has attempted to improve the timeliness of the consultation process. However, DOC will need confirmation from stakeholders that the time allowed for consultation is sufficient for interested parties to meet their internal consultation requirements and prepare a response.

Our Recommendations

- 5.10 **We recommend that:**
- **DOC invites parties to make written submissions on the draft plan, then circulates those submissions to all parties before the consultation meeting.**
 - **DOC continues to ensure that all parties are aware of the documents being circulated.**

Part Six

Information on Over- and Under-recovery of Costs

Introduction

- 6.1 SeaFIC believes that DOC has not supplied the Ministry with details of expenditure on the Conservation Services Programme.
- 6.2 The provision of such information allows the Minister of Fisheries to have regard to any over- and under-recovery of the Crown's expenditure on the Programme through levies – as required by section 265 of the Fisheries Act.
- 6.3 To consider this issue, we examined:
- whether DOC provided information to the Ministry; and
 - the information given by the Ministry to the Minister of Fisheries.
- 6.4 This raised a related issue of whether the Ministry itself had complied with the requirements of section 265 of the Fisheries Act.

Statutory Requirements

- 6.5 As noted in Part One, the Governor-General makes an Order imposing levies on the fishing industry each year. Before the levy Order is made, an Order making rules for imposing levies must be made. The rules prescribe:
- the portion of the costs of conservation services and fisheries services to be recovered as levies;
 - who must pay the levies; and
 - how the costs are to be apportioned between the persons who must pay the levies.
- 6.6 Both Orders are made on the recommendation of the Minister of Fisheries. Section 265 of the Fisheries Act requires the Minister of Fisheries, in recommending the making of an Order imposing levies, to consider whether the Crown has over- or under-recovered from the fishing industry the costs incurred in providing conservation services or fisheries services in a previous financial year.
- 6.7 The Fisheries Act 1983 did not contain an obligation to consider whether there had been any over- or under-recovery of conservation services or fisheries services levies in a previous financial year. However, there was a requirement to take account of amounts recovered or recoverable under a previous levy Order, as part of the consultation process in making a new levy Order.²⁴

²⁴ Section 107EC, Fisheries Act 1983, applying from 1 October 1994 to 30 September 2001.

6.8 Section 265 of the Fisheries Act states –

Under-recovery and over-recovery of costs

Without limiting anything in section 264, the Minister must, in recommending the making of an Order in Council under that section, have regard to the costs of any conservation services or fisheries services incurred by the Crown in a previous financial year and either

-
- (a) *Not recovered or not recoverable, in whole or in part, by a fee, charge, or levy relating to such services that was previously imposed under this Act or the Fisheries Act 1983; or*
 - (b) *Over-recovered or over-recoverable, in whole or in part, by a fee, charge, or levy relating to such services that was previously imposed under this Act or the Fisheries Act 1983.*²⁵

6.9 We note two preliminary points about section 265:

- It requires the Minister of Fisheries only to *have regard to* information about over- or under-recovery when recommending the making of a new levy Order. It does not require that the Minister take any particular action in relation to the information beyond having regard to it.
- To meet the requirement, the Minister of Fisheries relies on advice from the Ministry, and the Ministry in turn needs to receive timely advice from DOC on expenditure on conservation services.

6.10 Section 265 requires the Minister of Fisheries to have regard to the costs incurred by the Crown in *a previous financial year*.²⁶ We consider this to cover any previous financial year in which there was over- or under-recovery for a particular conservation service or fisheries service.

6.11 To enable the Minister of Fisheries to satisfy the requirements of section 265, the Ministry's advice needs to compare actual expenditure incurred by the Crown for conservation services and fisheries services in a previous financial year against the amount:

- that was actually recovered from the fishing industry for those services – through levies, fees or charges *previously imposed*; and
- that is recoverable from the fishing industry for those services – through levies, fees or charges *previously imposed*.

²⁵ Section 265 has applied since 1 February 2001. A similar requirement applied between 1 October 1996 and 31 January 2001 in section 263 of the Fisheries Act.

²⁶ "Financial year" is defined as the Crown's financial year – being a period of 12 months commencing on 1 July and ending on 30 June.

6.12 The Ministry then needs to advise the Minister of Fisheries of the extent of any:

- under-recovery – the costs of conservation or fisheries services that were not recovered or are not able to be recovered, in whole or in part, by a fee, charge or levy previously imposed; and
- over-recovery – the costs of conservation services or fisheries services that have been over-recovered, or are over-recoverable, in whole or in part, through a fee, charge or levy previously imposed.

6.13 The requirement to consider both recovered and recoverable expenditure makes allowance for accrual accounting for expenditure and revenue, and timing differences between the Crown's financial year and the fishing year. When a new levy Order is made, the previous levy Order is revoked, but any liabilities under that Order continue.²⁷ In reporting to the Minister of Fisheries on whether revenue is recoverable from the industry through a levy *previously imposed*, the Ministry would need to assess whether levies that have been imposed (but are outstanding) are in fact recoverable.

6.14 The following scenario and examples may help to illustrate our view of how the section is intended to operate.

Scenario

6.15 On 1 July 2001, DOC receives \$200 from the Crown for a particular conservation service for the year ending 30 June 2002. The fishing industry share is \$100 and the Ministry levies the relevant fishers on a monthly basis, from 1 October 2001, under the 2001-02 Levy Order. The levy Order is validly made. As at 30 June 2002, fishers have paid \$70, and \$30 is yet to be received.

Example 1 - expenditure meets budget and levy fully recovered/recoverable

- As at 30 June 2002, DOC has expenses of \$200. DOC has delivered the conservation service for which the industry has been levied so the \$30 is recoverable through a levy previously imposed (under the 2001 Order, which is still in force). Provided there are no other circumstances affecting whether the levies are recoverable (such as bad debtors), there is no need to report to the Minister on this output under section 265. The Crown has not incurred costs that are not recovered or not recoverable and has not over-recovered its costs.

²⁷ Clause 12, Fisheries (Cost Recovery Levies) Order 2001.

Example 2 - over-expenditure and under-recovery

- As at 30 June 2002, DOC has expenses of \$250 for the conservation service. The extra \$50 is not recoverable *through a levy previously imposed* as only \$100 has been levied. The Minister should be advised that the extra cost to the Crown of \$50 has not been recovered and is not recoverable through a levy previously imposed.²⁸

Example 3 – under-expenditure and over-recovery

- As at 30 June 2002, DOC has expenses of \$100 only and has delivered the conservation service. The cost to the industry should have been \$50 instead of the \$100 that was levied. The Crown through the Ministry will have over-recovered \$20 (already paid) from fishers and the outstanding \$30 is “over-recoverable”.²⁹

6.16 These examples assume that the Ministry is able to provide the information required by section 265 for the most recent financial year. However, the Ministry told us it is not possible to give the Minister of Fisheries the information required by section 265 for the immediately preceding financial year in time for the Minister to have regard to that information before recommending the making of the next levy Order – i.e. in the period between 1 July and 1 October each year.

6.17 To comply with the timetables for enacting regulations and Cabinet processes, the Ministry told us that it needs to advise the Minister of Fisheries of the content of the proposed levy Order in early July. This does not fit with the timing of the audit of the Ministry’s or DOC’s financial statements, which must be finalised by 30 September. Draft principles drawn up by a joint Ministry/industry working party accept that the Minister of Fisheries will not usually be able to consider incorporating (in accordance with agreed principles) any over- or under-recovery from a financial year until the levy Order made 15 months later.

Requirement to Advise the Minister of Fisheries Whether Expenditure Is Recoverable or Over-recoverable

6.18 In our view, the Ministry does not need to advise the Minister of Fisheries whether any over-expenditure is recoverable *by way of a future levy Order* to meet the requirements of section 265. The financial information required by section 265 concerns expenditure on conservation services or fisheries services that is recoverable by a fee, charge or levy relating to those services that was *previously imposed* under the Fisheries Act or the Fisheries Act 1983.

²⁸ This is not intended to suggest that the Minister of Fisheries cannot consider recovering the over-expenditure by way of a future levy Order.

²⁹ In having regard to this over-recovery, the Minister of Fisheries can, of course, consider remitting it by way of a future levy Order.

- 6.19 We would expect the Ministry to provide narrative information to the Minister of Fisheries to accompany the financial information required by section 265. Such information could explain significant variances between costs incurred by the Crown and revenue recovered from the industry, particularly where the costs incurred by the Crown exceeded the amount budgeted for the service or where revenue exceeded the amount projected in the levy Order.

Information Given

- 6.20 We found that DOC gave information to the Ministry on expenditure on the Conservation Services Programme for the 1995-96 to 1998-99 years inclusive, but not for subsequent years. In some cases, DOC depends on the Ministry for data relevant to the costs of projects – for example, the number of observer days that actually took place in the financial year (see paragraphs 7.4-7.6).
- 6.21 We reviewed the information made available to the Minister of Fisheries in submissions from the Ministry for the five years 1997-98 to 2001-02. None of these submissions provided information to the Minister of Fisheries of the type required by section 265 of the Fisheries Act (or its predecessor section 263).
- 6.22 In some years, information was provided at a macro level (that is, the net cost recovery situation). In other years, the submissions referred to other documents that may have contained more detailed information on over- and under-recovery at output level. However, the Ministry has not been able to locate these documents to make them available to us. The following paragraphs outline the content of submissions to the Minister of Fisheries each year in more detail.
- 6.23 A paper to the Minister in August 1997 concerning the 1997-98 levy Order referred to an attachment providing information on over- and under-recovery of outputs for the years 1994-95, 1995-96 and 1996-97 showing a \$3.4 million under-recovery. The attachment to this paper cannot now be located, but it seems information on over- and under-recovery was given at least on the basis of fishery size/type.
- 6.24 In 1998, the Minister had consulted with the fishing industry on a proposal to incorporate over- and under-recovery from previous years in that year's levy Order. There had been a mixture of over- and under-recovery across various fish-stocks. In June 1998, the Ministry advised the Minister that a significant number of submissions on proposed levies “addressed the adverse impact and/or calculation of under- and over-recovery at fish stock level”. There was a concern that much of the burden of under-recoveries would fall on particular fish stocks. This indicates that the Minister and those consulted were given detailed information about over- and under-recovery in particular fish stocks.
- 6.25 In June 1999, the Minister considered information on over- and under-recovery of expenditure on the Programme. For the previous year, there had been an over-recovery of \$345,629. Information was not provided to the Minister at fishery level.

6.26 In August 2000, the Minister was advised to have regard to the cost of any over- or under-recovery in previous years, but no figures on the extent of the over- or under-recovery were provided. The reason for this was explained in the paper to the Minister as follows –

Unders and Overs. You will be aware that the Ministry and industry are involved in a joint working group on under and over recoveries. The group is proceeding well, but it is unlikely that a report can be provided before 31 December 2000. Any recommended changes will be advised to you early in the New Year. This will give sufficient time to incorporate the effects of your decisions in the 1 October 2001 levy order.

6.27 In August 2001, the Minister was again advised to have regard to any over- or under-recovery of levies from previous years. Information on the actual extent of any over- or under-recovery was not available. The working party that was to report by 31 December 2000 had not completed its work.

The Ministry's Views

6.28 The Ministry told us that the Minister was not informed of over- and under-recovery at output level as there was no methodology or process agreed with the fishing industry by which to determine what expenditure or revenue variances were recoverable or not recoverable. The Ministry considers that over- and under-recovery has two components:

- whether there is a variance between expenditure and revenue; and
- whether the variance is recoverable or not recoverable from the fishing industry.

6.29 The Ministry believes that it is not simply an accounting matter as to whether expenditure is “recoverable” from the industry. The Ministry considers that “recoverable” in section 265 can also relate to recovery under a future levy Order of prior expenditure for which the fishing industry should have been liable. The Ministry says that the question of whether Crown over-expenditure is recoverable needs to address two questions:

- Is the variance the responsibility of the Crown or is it possible for the Crown to recover the variance from the industry, or is the variance a mixture of both?
- If the variance can be recovered from the industry, has the Crown followed the correct process to make the variation recoverable?

6.30 The Ministry is working with the industry on agreeing the circumstances in which expenditure in one year will be recoverable from the industry in a future year and in which the Crown can retain revenue over-recovered from the industry.

- 6.31 The Ministry emphasises the context in which it was advising the Minister of Fisheries on over- and under-recovery each year. An independent review of the Fisheries Act in 1998 and a Primary Production Committee report in 1998³⁰ both considered aspects of cost recovery. A new cost recovery framework, including five cost-recovery principles, was inserted into the Fisheries Act 1996 in 1999, but did not take effect until February 2001. In the Ministry's view, the over- and under-recovery of levies could not be resolved until the cost recovery framework and principles had been established.
- 6.32 In 2000, a joint Ministry/industry working group on over- and under-recovery was established. The working party is attempting to determine the circumstances in which an expenditure or revenue variance is either recoverable or not recoverable. The working party is developing principles or rules that the Ministry and industry will follow in determining the circumstances in which the Crown can retain over-recovered revenue and when the Crown can recover from industry over-expenditure or under-recovery of revenue.

Our Views

- 6.33 We note the progress that the Ministry has made in establishing principles or rules for addressing over- and under-recovery of levies. As we see it, this should provide a basis for the Ministry to advise the Minister of Fisheries on the extent to which over- and under-recovery should be addressed *in a future levy Order*. However, we are not convinced that the new rules or principles were required in order for the Ministry to inform the Minister of Fisheries whether and to what extent any over- and under-recovery had occurred in a previous financial year – as section 265 requires.
- 6.34 We note too that the Minister of Fisheries was aware of this work and the issues involved. The Ministry's papers contained advice to the Minister each year about issues concerning over- and under-recovery – including industry views on the matter and progress being made towards agreeing a methodology with industry on how overs and unders should be calculated.
- 6.35 In recent months DOC, in conjunction with the Ministry, has undertaken extensive analysis of the Programme's expenditure based on audited departmental financial statements. We have seen the results of this analysis and note that it appears to indicate a net under-recovery of expenditure in the long run. In future, it should be possible to provide the Minister with the information required.

³⁰ Report of the Primary Production Committee Inquiry into the Government's Fisheries Cost Recovery Regime, 1998.

- 6.36 The Ministry has commented about the difficulties in giving the Minister information required by section 265 – in relation to the immediately preceding financial year – in time for the Minister to have regard to it in recommending the next levy Order. We intend to discuss timing issues further with the Ministry, including whether it would be possible to provide the Minister with provisional information about over- and under-recovery/recoverability in the immediately preceding financial year in time for the Minister to have regard to it in making the next levy Order.
- 6.37 The Fisheries Act provides for a levy Order to be amended at any time.³¹ Therefore, even if it is not possible for the Ministry to provide the section 265 information for the most recent financial year in time for the Minister to have regard to it in making the next levy Order, the Minister could have regard to it at the earliest opportunity after the end of the immediately preceding financial year. The Minister could then consider any need for an amendment Order to be made during the fishing year, should the Minister wish to address any under- or over-recovery.³²
- 6.38 The joint Ministry/industry working party has provisionally agreed that the Minister will not consider incorporating any under- or over-recovery from a financial year until the levy Order made 15 months later.

Our Conclusions

- 6.39 We conclude that:
- DOC gave information to the Ministry on expenditure on the Conservation Services Programme for the 1995-96 to 1998-99 years inclusive, but not for subsequent years.
 - The Minister of Fisheries was advised to have regard to over- and under-recovery, and was given information about progress being made with industry on agreeing rules for when expenditure is or should be recoverable. However, the Minister of Fisheries was not given adequate information about over-and under-recovery of the Crown's costs in providing conservation services for previous financial years before recommending the making of levy Orders for 1998-99, 1999-00, 2000-01 and 2001-02.
 - It therefore appears to us that the requirements of section 265 (previously section 263) of the Fisheries Act have not been met. We consider that it should have been possible for the Ministry and DOC, working together, to meet those requirements.³³

³¹ Section 264(1)(b), Fisheries Act.

³² See for example the Fisheries (Cost Recovery Levies) Amendment Order 2001.

³³ In December 2002, Parliament passed the Subordinate Legislation (Confirmation and Validation) Act 2002, validating Fisheries Cost Recovery Orders made from 1995 – 2001 as if the Minister had complied with section 263 or section 265 of the Fisheries Act, as appropriate. The validation does not apply to any legal proceedings challenging the validity of any of the orders validated, if the proceedings commenced before 2 September 2002.

Our Recommendations

6.40 **We recommend that:**

- **DOC provides the Ministry with timely information on the Programme's expenditure as soon as possible after the end of each financial year. In turn, the Ministry needs to give DOC timely information on services provided by the Ministry for relevant projects (such as observer days).**
- **The Ministry ensures that in future it provides the Minister of Fisheries with the information the Minister is required to consider under section 265 of the Fisheries Act.**

Part Seven

Management of the Observer Programme

Introduction

- 7.1 SeaFIC's complaint is that DOC does not supply information on the coverage obtained by observers, which makes it difficult to comment on DOC proposals to extend the coverage. The industry wants to see a reconciliation of the observer days programmed and paid for with the days actually spent on a particular fishery.

The Observer Programme

- 7.2 DOC arranges with the Ministry for observers to be placed on fishing vessels for a specified number of days. The role of the observers is to collect data on the by-catch of protected species. The Ministry bills DOC for the days on which observers are placed on fishing vessels.
- 7.3 The observer programme is the largest of the projects in the Conservation Services Programme. The cost of the observer programme is fully funded by the CSL. For 2001-02, the observer programme cost \$636,500 (excluding administration and support costs).

Use of Observer Days

- 7.4 For various reasons, not all observer days for which levy is imposed take place. In the draft 2001-02 Conservation Services Plan, DOC noted that a project in a particular fishery had achieved less than 30 of the 150 observer days scheduled in the previous year, and that this was the second year in which monitoring of the particular fishery had been unsatisfactory. There were several reasons for this – including that some boats used in the particular fishery were too small to carry an observer and some of the vessels were based at remote ports (making it difficult for observers to get to them).
- 7.5 At the time of the complaint, a reconciliation of observer days was not readily available. DOC has since provided us with a reconciliation. The table below sets out information from DOC recording the number of observer days that were programmed and took place each year. The Appendix on page 76 sets out the details by fishery for the 1999-2000 and 2000-01 fishing years.

Fishing Year	Observer Days Levied	Actual Observer Days	Days 'Unused'
1995-96	801	728	73
1996-97	831	833	(2)
1997-98	1,161	1,101	60
1998-99	701	666	35
1999-00	1,065	1,015	50
2000-01	1,620	1,448	172

- 7.6 The 172 unused days for 2000-01 all related to inshore fisheries.

Increase in Observer Days

- 7.7 There is to be a substantial increase in the number of programmed observer days. For the 2002-03 fishing year, the total number of observer days has been set at 2650, compared with the 1440 levied for 2001-02. The increase in observer days reflects the Government's concern with the number of seabirds being caught in commercial fishing operations. Greater coverage by observers should help in providing more accurate estimates of the number of seabirds caught and the fisheries in which they are being caught.

Our Conclusions

- 7.8 It is important for a number of reasons – including the effectiveness of the observer programme – to monitor and manage the use of observer days. A complete reconciliation comparing observer days levied with observer days used was not available when we received the complaint but has since been provided.
- 7.9 The under-use of observer days in 2000-01 is related to difficulties in allocating sufficient observers to smaller inshore fishing boats, and DOC will need to work with the Ministry and the fishing industry to overcome problems associated with obtaining observer coverage of small fishing boats.

Our Recommendations

- 7.10 **We recommend that DOC:**
- **makes the reconciled information on observer days available to interested parties;**
 - **works with the Ministry of Fisheries and the fishing industry to ensure that all observer days levied take place.**

Part Eight

A Strategic Plan for the Conservation Services Programme

Introduction

- 8.1 SeaFIC is concerned that CSL projects – such as the black petrel population study and others like it – are “open ended”, in that the same objectives for projects are specified each year with no overall project plan or ongoing assessment of the original objectives. In undertaking this inquiry, we found that there is no strategic plan for the Conservation Services Programme.

Value of a Strategic Plan for the Conservation Services Programme

- 8.2 DOC believes that a strategic plan would be useful. In a submission to the Minister of Conservation of July 2000 under the heading *A strategic 5 year research plan* DOC noted that –

The fishing industry and science contractors are frustrated by the present one-year cycle of CSL planning. The Department will, in consultation with industry, NGO stakeholders and iwi, prepare a five-year indicative strategic plan for research and development to achieve improved sustainable fishing practice, and the effective conservation of protected species by reduction of the adverse effects of fishing on the aquatic environment.

This plan will then become a rolling plan so that each year's conservation services plan has an updated five-year horizon.

- 8.3 DOC also noted in the submission that a strategic plan –

...will provide a vehicle for controlling and anticipating increased levy costs.

Progress in Producing a Strategic Plan

- 8.4 In the following year, in a submission to the Minister of Conservation dated July 2001, DOC again said that it would produce a strategic plan. Unfortunately, DOC has made little further progress in developing such a plan. DOC told us that resourcing and other constraints have meant that it has not been able to give priority to the plan. DOC notes that the cost recovery rules exclude recovery of costs associated with planning, so work on the strategic plan must compete with other priorities for baseline funding.

Our Views and Conclusions

- 8.5 We consider that, as a matter of best practice for the management of a research programme, the Programme should be planned, costed, and carried out within the context of a strategic plan.

8.6 A strategic plan would set out:

- current and potential sources of adverse effects of commercial fishing on protected species;
- a priority order of the protected species most at risk from these adverse effects;
- a priority order for the development of research –
 - relating to those effects on protected species; and
 - on measures to mitigate the adverse effects;
- clear criteria for including other protected species in projects;
- indicative budgets;
- the consultation process and timing of the process; and
- an outline of how the programme will be monitored and evaluated.

Our Recommendation

8.7 **We recommend that DOC prepares a strategic plan for the Conservation Services Programme that includes the elements set out in paragraph 8.6.**

Part Nine

Accountability for the Conservation Services Programme

Introduction

- 9.1 In the course of our inquiry we came to the view that there is a need for greater accountability and reporting to stakeholders of money spent and progress achieved on the Conservation Services Programme.

The Conservation Services Plan

- 9.2 Each year, proposed conservation services research projects are set out in the Conservation Services Plan. At the time we began our inquiry, the current approved plan was the *Approved Conservation Services Plan, 2001-2002*. This document contains details of the annual cost of each research project, and includes a description of the research objectives.

Total Project Costs and Budgets

- 9.3 There are 13 research projects listed in the 2001-2002 Plan. Annual costs are provided. However, many of the projects are expected to take more than a year to complete, and the annual cost is therefore not the total cost of the project.
- 9.4 As a research project progresses, it is reasonable to expect that there should be reporting on the costs to date of the research. However, neither the costs to date nor the total estimated costs of research projects are disclosed.
- 9.5 This failure to track total and estimated expenditure is, in our view, a weakness in accountability – especially since projects can take up to 15 years to complete. The discipline involved in better reporting actual expenditure compared with budgeted expenditure would enhance transparency in the management of the Programme, and provide better information to those being levied.

Project Timetables and Objectives

- 9.6 Projects listed in the Plan contain no timetables for expected completion.
- 9.7 If a research project is expected to take, say, 15 years, this fact ought to be stated in the Plan. There should also be:
- milestone dates that indicate the progress towards completion of the research;
 - reporting against those dates; and
 - clear project objectives that allow assessments to be made as to whether the objectives that the project was intended to achieve are being achieved.

Improvements to the Conservation Services Plan

- 9.8 We are pleased to note that DOC has substantially revised the draft Plan for 2002-03 since its first release in February 2002. The draft Plan now contains more detailed information on the status of projects in comparison to earlier plans. Future plans will be more useful and informative if DOC continues to address fully the matters we have raised.

Our Recommendation

- 9.9 **We recommend that DOC includes in the approved Conservation Services Plan more information about the research budgets, timetables, and progress against research objectives – especially for multi-year projects.**

Part Ten

Implementing the Results of Conservation Services Research

Introduction

- 10.1 Since the inception of the Conservation Services Programme, 115 reports have been published arising from programmed research work. These reports represent a large quantity of valuable research effort.
- 10.2 In the course of our inquiry, we noted that it is not always clear how effectively the research findings are translated into improved fishing practice that will reduce the adverse effects of commercial fishing.

DOC's Role in Translating Research Findings Into Improved Practice

- 10.3 DOC has recognised that it needs to do more to translate some research findings into improved fishing practice, and to ensure that there is a more timely transfer of research results to the fishing industry. Nevertheless, DOC has pointed out that, while it can suggest improved fishing practices, regulation of fishing methods is the prerogative of the Minister of Fisheries.³⁴
- 10.4 In a submission to the Minister of Conservation in July 2000, DOC stated that, while it had overseen the Programme's scientific work, it had given insufficient attention to ensuring that research results were quickly transferred to the industry and in a format that was easily understood. In a submission to the Minister of Conservation in July 2001, DOC again stated that –

... insufficient work had been done to translate some research findings into fishing practice, or to disseminate the results in an industry-friendly way. Specific attention will be given to improved transfer of results to the industry in a timely and effective format.

Views of Conservation Groups

- 10.5 Conservation groups have also noted that there appears to be a gap between reporting research findings and using them to secure improved fishing practices that reduce the adverse impact of fishing. A submission from WWF (WorldWide Fund for Nature) on the Draft Conservation Services Plan for 2001-02 noted that –

there appears to be a gap between the research being done and the development of better conservation and fisheries management policies.

- 10.6 WWF had concerns about the lack of action resulting from reports on the autopsies of sea birds. One responsibility of observers (see Part 7) is to obtain the bodies of seabirds caught in fishing nets. Autopsies carried out on these seabirds enable a record to be compiled of matters such as whether the birds had been feeding on fish bait or offal discharged from fishing boats.

³⁴ See, for example, section 15, Fisheries Act.

Seabird Autopsy Reports

- 10.7 The seabird autopsy report for 1998-99 concluded that –
- There is a strong relationship between fishing practice and bird stomach contents, with a high level of offal or fisheries discards found in the birds. There is a need to investigate the control of this material, which acts as an attractant to seabirds.*
- 10.8 The autopsy report for 1999-2000 also drew attention to the number of seabirds that had been feeding on offal from fishing boats, and noted that –
- Also, between 1996 and 2000 the majority of the returned specimens (82%) was killed by the activities of a limited number of vessels (22) suggesting the need to focus mitigation measure investigations on the differences between fishing vessels and fishing practices.*
- 10.9 These findings suggest that partial answers may already be available on how to reduce the number of seabirds killed by fishing activity. This might involve implementing better controls over the discharge of fish offal at sea and concentrating on the small number of fishing boats responsible for most of the seabird mortality.
- 10.10 DOC convenes the *CSL Seabird Working Group* – comprising representatives from the fishing industry and conservation groups – to discuss the Programme’s research in relation to seabirds. The seabird autopsy reports were discussed at a meeting of this group on 22 November 2001.
- 10.11 The minutes of this meeting do not record DOC indicating how it intended to use the findings from these reports, nor how existing research projects may need to be modified in the light of these findings. Neither do the minutes record how the other parties at the meeting intended to make use of the findings.
- 10.12 DOC explained to us that the meeting in November 2001 considered only drafts of the autopsy reports, as the reports had not been formally published. The reports were not formally published until January 2002. DOC now intends to initiate action on the reports.

Our Conclusions

- 10.13 It is important for the effectiveness of the Programme that improved fishing practices indicated by research projects are identified. DOC needs an improved process for considering the application of research findings. Evaluating them and then promoting them with the fishing industry requires cooperation between DOC and the Ministry.

Our Recommendations

- 10.14 **We recommend that DOC, working with the Ministry, takes a more active and timely role in ensuring that research findings are translated, where appropriate, into improved fishing practices.**
- 10.15 **We recommend that DOC establishes a more transparent process for considering whether research findings indicate any need for changes in the direction and content of the Conservation Services Programme.**

Appendix

Observer Days Levied and Used 1999-2000 and 2000-01

Fishing year	Fishery	Programmed observer days	Observer days charged by Ministry	Days not used
1999-00	HOK	200	200	0
1999-00	SBW	100	100	0
1999-00	HAK	30	30	0
1999-00	SQUID trawl	200	200	0
1999-00	SQUID jig	50	0	50
1999-00	Trawl inshore	50	50	0
1999-00	Set net inshore	150	150	0
1999-00	TUNA	195	195	0
1999-00	LING LL	90	90	0
		1065	1015	50
2000-01	HOK	200	200	0
2000-01	SBW	100	100	0
2000-01	HAK	30	30	0
2000-01	LING LL	490	490	0
2000-01	SQUID trawl	200	200	0
2000-01	TRAWL inshore	50	3	47
2000-01	Set net inshore	150	25	125
2000-01	TUNA joint venture	120	120	0
2000-01	TUNA domestic	250	250	0
2000-01	SNAP	30	30	0
		1620	1448	172