NIWA

Taihoro Nukurangi

NATIONAL INSTITUTE OF WATER AND ATMOSPHERIC RESEARCH LIMITED

STATEMENT OF CORPORATE INTENT

1995/1996

THIS STATEMENT IS SUBMITTED BY THE BOARD OF DIRECTORS OF THE NATIONAL INSTITUTE OF WATER & ATMOSPHERIC RESEARCH LIMITED (THE INSTITUTE) IN ACCORDANCE WITH THE CROWN RESEARCH INSTITUTES ACT 1992. IT SETS OUT THE BOARD'S OVERALL INTENTIONS AND OBJECTIVES FOR THE COMPANY TO 30 JUNE 1996, AND THE TWO SUCCEEDING FINANCIAL YEARS.

CONTENTS

PREAMBLE

NIWA is a Crown Research Institute wholly owned by the New Zealand Government and incorporated on 1 July 1992. We are New Zealand's foremost institute in atmospheric and aquatic science. NIWA undertakes a mix of public good research and commercial scientific services which benefit New Zealand by transferring technologies to agencies responsible for the sustainable management of aquatic and atmospheric natural resources.

The restructuring to "One NIWA" in 1994 completed the removal of divisional barriers that had reflected the earlier separate disciplinary origins of our organisation. We now have an appropriate structure for a commercially focussed science business in which science strategies and policies are implemented consistently across the organisation, multidisciplinary research can flourish and there are no organisational constraints to the productivity of scientists and technicians.

Major achievements in the 1994-95 financial year included completion of the restructuring to "One NIWA" by the second quarter, restoration of staff morale to high levels throughout the organisation, establishment of improved control of NIWA's business operations through project management and more rigorous financial management, and completion of a successful FRST bidding round for 1995-96 programmes. We also expect to achieve the institute's financial and science performance targets for 1994-95.

NIWA merged with MAF Fisheries Research on 1 July 1995. This has substantially increased the company's size and assets, e.g., permanent staff numbers have increased by 48% to 544. The merger has extended NIWA's core research areas in atmospheric and aquatic science into marine fisheries biology, fisheries stock assessment and aquaculture production.

Key Challenges

Key, new challenges facing NIWA over the next two years include:

- successfully integrating marine fisheries research with the rest of NIWA
- building a positive relationship with the Ministry of Fisheries, which will be NIWA's second-largest client after the Foundation for Research Science & Technology (FRST)
- operating the research vessels efficiently and profitably through a separate vessel-owning subsidiary to

    ⇒ meet the Minister of Fisheries' requirements for research vessel services, and New Zealand's needs in marine science

⇒ achieve charter rates which reflect the capital value of the vessels and the need for NIWA to replace them at the end of their useful lives

- establishing successful relationships with key fisheries stakeholders
- developing and implementing business plans and science strategies to meet the growth opportunities in PGSF environmental and fisheries output classes (people, physical resources, funding).

These are in addition to key, ongoing issues:

- enhancing NIWA's client relationships
- developing a strong personnel and capital equipment base for our core science areas
- building staff confidence in and commitment to NIWA as a commercial science business
- consolidating the unification of NIWA.

Government Science Priorities

The Government's statement on priorities for the PGSF in response to the report of the Science Priorities Review Panel (June 1995) indicates that PGSF funding for environmental and fisheries research outputs will increase substantially over the period 1996-97 to 2000-01. NIWA is in a strong position to meet these opportunities, as a result of the unification of our science through the restructuring of August 1994, increases in PGSF and non-PGSF revenue which NIWA has achieved during the relatively difficult period of 1993-95, strategic use of funds (capital expenditure and NSOF-funded research, visiting scientists, postdoctoral, sabbatical and technical training), and the merger with MAF Fisheries Research.

Organisational Structure

The Executive of NIWA now comprises the Chief Executive, Research Director, Director of Fisheries Research, Director of Operations, General Manager: Finance, and General Manager: Human Resources. This Executive Team is responsible for the development of policies in science, business development, finance and human resources. Implementation of policies, science delivery and operational management is achieved through Regional Managers based at each major location (Hamilton, Wellington (3), Christchurch) and at other sites (Auckland, Nelson, Lauder, Kainga). Regional Managers report to the Director of Operations and have responsibility for line control of staff and resources and management of projects at each region/site.

This structure facilitates multidisciplinary science, separates policy from delivery, provides a direct and consistent interface between policy development and implementation, promotes consistent application of strategies and policies, and enables common standards and culture to be developed across NIWA.

Vessel Ownership

From 1 July we expect to take possession of the research vessels, *Tangaroa* and *Kaharoa.* This is on the basis that priority use of the vessels will be given to research required by the Ministry of Fisheries contracts and, after stock assessment becomes contestable on 1 July 1997, NIWA will make any unfunded time for the vessels available to third party research providers at an annually benchmarked charter rate.

NIWA accepts that acquisition of these vessels is in the national interest, in view of the potential for integration of oceanographic and marine fisheries research after the merger with MAF Fisheries. Ownership of the vessels will more than double NIWA's asset loading. We anticipate that the requirements of Ministry of Fisheries contracts and NIWA's FRST programmes will heavily utilise the vessels, e.g., in 1995-96 the *Tangaroa* is likely to be fully booked by these activities.

Because of the need to make the cost of the vessel operation transparent to other interested parties and stakeholders, including the fishing industry and research providers, we intend that the vessels should be placed in a separate vessel owning and operating subsidiary company. This is justified on grounds of both risk management, given the size of the assets, and also the importance of having an ongoing, arm's length relationship between the vessel operations and NIWA science.

1. MISSION

NIWA is an independent research institute that conducts international quality science and provides applied science services. NIWA's science and services assist in understanding natural processes and human influences operating in atmospheric and aquatic systems.

Our mission is:

To provide a scientific basis for the sustainable management of New Zealand's atmospheric, marine and freshwater systems and associated resources.

We are committed to:

- maintaining and enhancing NIWA's position as New Zealand's leading provider of atmospheric and aquatic science
- directing our science principally towards providing the basis for sustainable resource management, with the intention of providing a strong knowledge base to assist in the implementation of New Zealand's Resource Management Act, sustainable management of fisheries and finding solutions to broader global environmental concerns
- producing high quality science, delivering scientific services to high professional standards, and positioning ourselves to exploit new opportunities as they arise
- developing and maintaining the science capabilities needed to achieve the priorities set for the Public Good Science Fund
- operating with financial efficiency to ensure that we generate the surpluses needed to develop our business and provide an adequate return on shareholders' funds to maintain the Institute's financial viability
- developing strong multidisciplinary research and the ability to work in large, integrated teams on difficult environmental problems
- ensuring that the working environment is responsive to our science direction and that all staff are treated in a fair and equitable manner
- securing a diverse client base to broaden our source of revenue, increase our awareness of new commercial opportunities and to minimise the Crown's ownership risk.

2. CORE BUSINESS

Our science is directed principally towards sustainable resource management, with the intention of providing a strong knowledge base to assist in the implementation of New Zealand's Resource Management Act and Fisheries Act, and in finding solutions to broader global concerns.

NIWA prides itself on its strong multidisciplinary nature and on our ability to work in large, integrated teams on difficult environmental problems. We are dedicated to high quality research which underpins the provision of creative solutions for clients. NIWA's resolve is to enhance professional standards, to extend the boundaries of environmental science, and to cover the full spectrum of research and consultancy activities "from science to service".

Key Competencies

NIWA's core business is based on key competencies in the following areas:

- behaviour and composition of the atmosphere, and interaction with oceans
- natural processes of marine, coastal and freshwater ecosystems of New Zealand, together with impacts that human activities have upon them
- measurement of fish abundance and productivity
- marine and freshwater aquaculture
- development of criteria for environmental standards
- population modelling and the assessment of risk
- frequency, magnitude and timing of atmospheric and hydrological phenomena, in particular extreme events and long term changes and variability
- the nature and variability of oceanic water masses, currents and waves
- marine geological processes and swath bathymetry
- identification and evaluation of the biota of marine, estuarine, river and lake ecosystems
- repair and rehabilitation of aquatic ecosystems

- development of marine natural products with chemotherapeutic, industrial and agricultural applications

- design and servicing of national information bases on atmospheric trace gases, climate, water resources and quality, aquatic biota, bathymetry and sediments

- provision of public information, technology transfer and international liaison in atmosphere and water disciplines

During its first 3 years, NIWA has put substantial effort into bringing together the disparate skills which we inherited from DSIR divisions, Met. Service, MAF Technology and MAF Freshwater Fisheries. Many of the staff from these organisations are now working together in multidisciplinary NIWA teams on major environmental issues, e.g., our research programmes in areas such as nearshore-offshore exchange processes, river ecosystems and ocean fronts depend on the integration of key competencies in chemistry, biology and/or physics. Commencing in 1995-96, a similar effort will be put into integrating the key competencies of MAF Fisheries Research with those already existing in NIWA.

Core Research Areas

NIWA's core research areas are:

- atmospheric research, including urban air quality, greenhouse gases and tropospheric aerosols, atmospheric electromagnetic waves, stratospheric chemistry (including UV and ozone dynamics), Antarctic atmospheric research, climate/weather processes and national climate database network

- freshwater research, including hydraulics, hydrology, aquatic pollution prediction and control, river ecosystems, lake ecosystems, aquatic plant management, freshwater fish biology/ecology, Antarctic ecological research and national freshwater database network

- fisheries research, including fisheries biology and ecology, population dynamics, fisheries modelling and stock assessment, fisheries genetics and pathology, and assessment of impact of fishing activities on non-target species

- coastal research, including coastal and estuarine processes (physical, biological and chemical), aquaculture and aquatic pollution prediction and control

- marine research, including physical and biological oceanography, taxonomy and geology

- aquaculture production research, including life histories, hatchery technology, field technology, disease management and stock enhancement

3. BUSINESS POLICIES

NIWA is committed to the principles of operation as stated in section 5 of the Crown Research Institutes Act:

(a) That research undertaken by NIWA should be undertaken for the benefit of New Zealand.

(b) That NIWA should pursue excellence in all its activities.

(c) That in carrying out its activities, NIWA should comply with any applicable ethical standards.

(d) That NIWA should promote and facilitate the application of: -

* the results of research; and

* technological developments.

(e) That NIWA should be a good employer.

(f) That NIWA should be an organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage those interests when able to do so.

4.0 BUSINESS STRATEGIES

NIWA's business strategies include

- conducting multidisciplinary science which further establishes nationally and internationally recognised expertise in water, atmospheric and fisheries science and consolidates NIWA's position as New Zealand's leading provider of research and related services in these fields

- promoting NIWA's research with a view to its application, leading to outcomes which improve New Zealand's ability to manage fisheries resources and the environment

- consolidating the unification of NIWA as a commercial science business with high staff morale, confidence in senior management, long-term retention of staff and a high level of staff "ownership" of the company

- providing a premium level of innovative and specialised service to clients

- providing for the professional and career development of staff and ensuring that appropriately qualified staff are available where and when required

- recognising the principles of the Treaty of Waitangi in formulating and undertaking research programmes

- achieving strong financial performance and retaining profits by reinvesting in personnel, infrastructure improvement and strategic capital.

5. PERFORMANCE MEASURES AND TARGETS

NIWA is operating as a commercially viable organisation and continues to perform strongly with its return ratios:

- 1994-95 NPAT return on equity 12.9% (1995-96 forecast 10.0%)

- 1994-95 NPAT return on assets employed 13.0% (1995-96 forecast 11.6%)

The decline in these two ratios in 1995-96 reflects NIWA's increased capitalisation following the purchase of the assets of MAF Fisheries Research, of which the vessels are the major component.

NIWA is conservatively funded:

- 1994-95 proprietorship rates 92.9% (1995-96 forecast 69.7%)

NIWA will continue to fulfill the institute's financial obligations as specified in section 5 of the Crown Research Act 1992, viz.:

- 2 "...operate in a financially responsible manner so that it generates operating funds sufficiently to maintain its financial viability"
  3a "...providing a reasonable return on the shareholders' funds invested in the Crown Research Institute"
  3b "...operated as a going concern"

We aim to achieve the following specific financial targets (in current 1994-95 dollars):

	Actual 1994/95	Budget 1995/96	Budget 1996/97	Budget 1997/98
Revenue($000)	38,618	58,173	60,140	62,040
Operating expenses ($000)	35,385	53,386	55,083	56,898
Operating net profit pre tax ($000)	3,233	4,787	5,057	5,142
Net Profit after tax ($000)	2,113	3,363	3,388	3,445
Total Assets ($000)	22,211	50,247	54,017	57,562
Shareholders' Funds ($000)	15,277	33,610	36,998	40,443
Productivity				
Revenue per scientist & technician	132	130	127	126
Ratio of revenue to personnel costs	2.00	1.97	1.92	1.92
Scientists & technicians per support staff	4.70	5.5	5.5	5.5
Profitability				
Operating profit margin (%)	8.37	8.23	8.41	8.29
Return on equity (%)	13.83	10.01	9.16	8.52
Return on assets (%) (EBIT/Total assets)	15.05	11.55	11.25	10.70
Liquidity and Efficiency				
Current ratio	1.14	1.37	1.69	2.12
Liquidity ratio	1.10	1.20	1.44	1.96
Creditors' days	54.32	28.07	36.46	37.53
Non-FRST Work in Progress Days	7.03	6.46	6.27	6.13
Non-FRST Debtor Days	140.37	110.27	111.45	111.68
Financial Leverage				
Debt to equity (%)	7.00	30.32	27.54	25.19
Proprietorship (%)	93.00	69.68	72.46	74.81
Diversification				
Non-FRST & Non-MFish/Total Revenue (%)	30.24	21.86	21.78	21.60

Note: Non-FRST debtor days will always be high at year end, because invoicing is substantially higher in June than in other months.

6. POLICY STATEMENTS

6.1 *Accounting Policy*

The Institute will adopt the generally accepted accounting principles and policies prescribed by the NZ Society of Accountants. Further details are given in the Appendix to this Statement.

6.2 *Borrowing Policy*

The Institute will follow a conservative borrowing policy. Investment in new assets or programmes and activities will predominantly be financed from the Institute's own cashflows.

We will undertake an annual independent audit to assure the Crown that no borrowings have been undertaken that imply any guarantee by the Crown.

Any information or documentation produced by the Institute in support of debt raising or credit agency revenues will be provided to our owners.

6.3 *Dividends Policy*

The Institute intends to distribute all funds surplus to its investment and operating requirements to our shareholders. The level of surplus funds will be determined each year by reference to:

* Our medium and long term capital expenditure programmes

* Our working capital requirements

* A sustainable financial structure for the Institute

Any distribution will be paid within four months of financial year end.

However, until the Institute has established itself on a firm financial basis, with secure sources of income from a broad mix of clients, the Institute does not intend to pay dividends. With a legacy of capital underspending in science in recent years, the Institute expects to need significant retained profits to support investment in its capital infrastructure. Free cashflows will be used for reinvestment to avoid the need for further injections of equity or debt. Accordingly no dividends are forecast.

6.4 ***Treasury Policy***

(a) New overseas bank accounts require approval of the Board.

(b) New local bank accounts require approval of the Chief Executive Officer plus Financial Controller, but must be ratified by a subsequent Board meeting.

(c) The Chief Executive, plus the Financial Controller, are authorised to:

- Sign negotiable instruments;
- Borrow funds from Finance Institutions within specific facilities approved by the Board;
- Invest surplus funds with the Financial Institutions approved by the Board.

(Note: refer below for approved Financial Institutions)

(d) Day to day funds management with approved institutions may be further delegated in writing. Such delegations must be in writing to the bank and be signed by the Chief Executive Officer plus Financial Controller.

(e) All investments in shares, patents and copyrights, requires specific Board approval.

(f) Any write-down or write-off of investments requires specific Board approval.

(g) Leased Assets - Financing.

As leasing is in fact a form of financing, delegations for fixed asset purchases/construction apply, i.e, the appropriate approvals for the asset purchase must be obtained.

Financial Institutions approved for investing and borrowing funds:

- Bank of New Zealand Limited
- ANZ Bank Limited
- National Bank of New Zealand Limited
- Westpac Banking Corporation of New Zealand
- National Australia Bank (NZ) Limited
- ASB Bank Limited
- Countrywide Banking Corporation Limited

6.5 *Purchases and Disposals Policy*

The following activities will only be undertaken following consultation with our owners:

* Subscription for purchase of shares in other organisations.
* Loan to any other organisation.
* Establishment of subsidiary companies.
* Disposal of significant assets, shares or undertakings of the Institute or any of its subsidiaries.
* Disposal of shares in any company in which the Institute holds more than 20% of the total shares.

6.6 *Non Core Activities Policy*

The Institute is engaged primarily in the business of undertaking research and providing related information and advisory services. The nature of our various research programmes means that we undertake activities which have the opportunity to earn additional income. For example, we sell salmon eggs produced from our research hatchery and operate an instrument servicing business. Any and all such activities will be regularly reviewed to ensure that they remain relevant and necessary to our core activities and that they operate on a strictly commercial basis. Where these criteria cease to be met, the activity in question will either be sold or liquidated.

The Institute has no current proposals to diversify beyond its present core business.

6.7 *Control of Subsidiary Companies*

The Institute will ensure at all times that:

* Control of the affairs of every subsidiary of the Institute is exercised by the majority of the directors of that subsidiary.
* A majority of the directors of every subsidiary of the Institute are directors or employees of the Institute or have been approved by our owners for appointment as directors of the subsidiary.

6.8 *Co-operative Activities*

The Institute will prefer its relationship with other CRIs and universities to be co-operative. In particular it will co-operate with the other two resource CRIs, Landcare Research and the Institute of Geological and Nuclear Sciences Ltd, and with the Meteorological Service of New Zealand Ltd. It will also pursue cooperation in marine work with Defence, and has signed Memoranda with Auckland, Otago and Waikato Universities.

NIWA recognises the need to establish an effective relationship with iwi. The merger with MAF Fisheries Research has broadened this need, in view of the fundamental importance of fisheries to Maori. NIWA will identify key areas of its work of specific relevance to Maori in consultation with tribal groups throughout the country, and develop a plan in collaboration with iwi which enables NIWA to provide appropriate and relevant science for different tribes.

The Institute participates in a wide range of international committees or organisations. Generally it is on the basis of the scientific standing of the individual, or on an informal basis as the relevant organisation in New Zealand. The Institute believes that participation in international organisations is an essential part of science, for the informal linkages it offers, and will strongly support its staff's participation.

Organisations on which we are represented include:

* Scientific Committee on Oceanic Research
* WESTPAC National Focal Point
* SCOR Working Group 93 Pelagic
* Biography International Geological Correlation Programme
* World Ocean Circulation Experiment
* International Association of Physics of the Ocean
* Freshwater Fish Specialist Group Indo Pacific Fisheries Council, FAO
* Fish Specialty Group Species Survival Committee, IUCN
* NZ National Committee for International Hydrological Programmes
* International Association of Hydrological Sciences
* SIL Working Group on Biological Monitoring of Freshwater
* WMO Commission for Atmospheric Science
* WMO Commission for Agricultural Meteorology
* WMO Commission for Climatology
* WMO Commission on Hydrology

* WMO Ozone Commission

* International Union of Pure and Applied Chemistry

* UNEP/WHO Global Environmental Monitoring System

* NDSC Steering Committee

* Southern Bluefin Tuna Commission

* Commission for the Conservation of Antarctic Marine Living Resources

6.9 *Databases*

The Institute is responsible for four covenanted national databases or reference collections:

* Biology Collection of Marine Biota
* Geology Collection of Seabed Sediments
* Water Resources Archive
* Climatological Database

Management of these databases and collections will be in accordance with the following principles:

The Institute will provide access to these national databases and reference collections so long as they are substantially paid for from the public purse and in providing this access:

1 the costs of collection, archiving and maintenance will be recovered only to the extent that they have not been paid for from public good funding;

2 the costs of actual retrieval of data from databases and collections will be recovered;

3 the data supplied will be subject to copyright, so that the right to further copy the data and acknowledgement as to source is subject to normal conventions; and

4 in situations where a third party wishes to obtain large portions of data from a database or collection for direct commercial use then the Institute will charge a copyright, royalty or licence fee.

7. INFORMATION REPORTING

The Institute has established information systems and reporting mechanisms both for its own management use and to fulfil its obligations to its owners, including quarterly, half yearly and yearly annual reports together with audited annual financial results:

* Quarterly Reports - with summary financial statistics indicating:
  - Financial and operating performance versus the same period in the previous year, when applicable.
  - Explanations for divergence from budget.
  - Forecasts for the remainder of the financial year including key financial and performance measures and cashflows.
  - Explanations for significant changes in forecasts from business plan targets.

* Half-Yearly Reports - within two months of the end of the first half of the financial year, indicating:
  - Financial and operating performance for the half year, versus the same period in the previous year where applicable.
  - Major issues during the period.
  - Profit and loss statement, end-of-period balance sheet and cashflow statement.

* Annual Reports - within three months of the end of the financial year, indicating:
  - Full annual report, accounts and proposed dividend for the year.
  - Comparison of performance against targets.
  - Auditors statement.

* Business Plans - at the start of each year, the Institute will submit a summary of its business plans to its shareholders. Any material revision to these plans during the course of the year will be advised to shareholders.

* Any other information reasonably required by shareholders.

* Internal reporting will be monthly.

COMMERICAL VALUE OF THE CROWN'S INVESTMENT

Shareholders funds include issued shares, reserves and retained earnings. The value of the Crown's investment as represented by shareholders funds are:

	June 1994 0000	**June 1995 0000**
Opening Sharehodlers funds	11,680	13,163
Retained Earnings for year	1,483	2,113
Closing Shareholders funds	$13,163	$15,276
Crown Debt	$ 1,070	$ 1,070

Valuation of the Institute agreed at time of asset trasnfer (July 1993) was $12.3m net of provision for restructuring costs.

The directors plan to conduct a review of the commercial value of the Company at the end of 1995/96 year following the first 12 months of the fisheries research merger. Any future reduction in fisheries research revenue over the present planned base level could have a material change in the value of the Crown's investment.

Don Sollitt
Chairman
July 1995

APPENDIX

Accounting Policies

The Institute will adopt general accounting principles as recommended by the New Zealand Society of Accountants for the measurement and reporting of results and financial position under the historical cost and accrual accounting conventions for a going concern.

The following particular accounting policies which materially effect the measurement of profit and financial position are applied.

Shareholder's Funds

Shareholder's funds are defined to be the total of retained earnings, revenue reserves and equity capital at the end of the financial year.

Total Assets

Total assets include all tangible assets.

Revenue Recognition

Revenue is recognised in the month the work is done. Most clients are billed monthly or fortnightly for work done to date either on a contract basis or a time and cost basis.

Debtors

Debtors are valued at net realisable value.

Fixed Assets

Fixed assets are shown in the balance sheet at net book value (i.e. cost less depreciation). The cost of assets at 30 June 1992 is the estimated net book value as advised by the Government departments who currently own those assets.

Depreciation

All assets are written off over their useful life using the straight line method of depreciation, except software, which is the same as IRD rates. Depreciation is provided from the date the assets enter service. The range of average depreciation lines is as follows:

	New Assets
Buildings	40 years
Plant and equipment	10 years
Vehicles	4 years
EDP equipment	3 years
Furniture and fittings	10 years
Office equipment	5 years
Miscellaneous assets	5 years

Income Tax

Income tax is assumed at 33% of operating profits. No allowance for deferred taxation has been made.

GST

Revenue and expenses have been calculated on a GST exclusive basis

Inflation

All forecasts assume a zero inflation rate.

DIRECTORY

BOARD OF DIRECTORS

Donald Sollitt	Chairman
Alexander Laing	Deputy Chairman
Nicholas Jarman	
Dr John Montgomery	
Dr Margaret Mutu	
Dr Brian Rhoades	
Dr Donald Thompson	

CHIEF EXECUTIVE
Paul Hargreaves

COMPANY SECRETARY
Dene Biddlecombe

SOLICITORS
Bell Gully Buddle Weir

AUDITORS
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