

GNS SCIENCE  
**2022 ANNUAL REPORT**  
PART 2 – REPORTS AND FINANCIAL STATEMENTS







**Our science  
delivers tangible  
benefits to help  
Aotearoa New Zealand  
move towards a  
Cleaner, Safer, More  
Prosperous future.**

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**Cover:** GNS Science videographer, Jeff Brass, Ngauruhoe.

**Inside Cover:** Taurira (students) using refractometers to measure groundwater salinity at Ahipara on Te Oneroa-a-Tōhē / Ninety Mile Beach as part of Tūhura Papatūānuku Geo Noho, a marae-based science wānanga.



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Presented to the House of Representatives pursuant to the Crown Research Institutes Act 1992.

Our Annual Report is presented in two parts - Highlights (Part 1) and Reports and Financial Statements (Part 2). Together, these documents fulfil our annual reporting responsibilities under the Crown Research Institutes Act 1992 for the year ended 30 June 2022.

The Reports and Financial Statements (Part 2) includes performance indicators, the report of the directors, financial statements, and independent auditor's report.

Our Annual Report is also available in digital format at [www.gns.cri.nz](http://www.gns.cri.nz)

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[www.gns.cri.nz](http://www.gns.cri.nz)

# FINANCIAL PERFORMANCE

**GNS Science recorded a sound financial result for the year ended 30 June 2022, as the organisation continued to recover and respond to the impact of COVID disruptions. This recovery was underpinned by the growth in our strategic and contestable research, as well as our commercial work.**

Total revenue of \$108.3 million was up 5% on a like for like basis to the prior year, after excluding the Government's COVID-19 one-time funding received in 2020/21. Despite the ongoing impact of COVID-19 on our projects, research and commercial revenue strengthened by \$6.0m compared to the previous year.

Operating expenditure for the year was \$102.4m, \$8.8m more than the prior year. Overall, expenditure was closely controlled over the past 12 months, however the increased total reflects the continued investment in our people of \$5.2m and the one-time implementation cost of \$3.6m in our new enterprise system. GNS Science is in the process of increasing the complement of scientists in order to deliver the growth in our research and business activities. In addition, we are ensuring that the remuneration framework for our scientists is appropriate.

A major initiative in the past year was the implementation of a much-needed enterprise system to replace our Human Resources, Finance and Project Management systems. This system will deliver improvements to the underlying operations of GNS Science, including enhanced information for decision making, contributing to the delivery of our long-term strategic goals. This required an investment of \$3.6m for phase 1 of the system in the past year. The system is cloud based and is recognised as an expense this year, however it is an investment that will deliver benefits for many years to come. In the year ahead, a smaller investment of \$800k is budgeted for the final phase of the implementation.

GNS Science recorded a \$1.0m loss after tax for the past year, however, excluding the system implementation cost, the underlying profit before tax was \$2.3m, a strong result given the impact of the difficult operating environment caused by the COVID-19 pandemic.

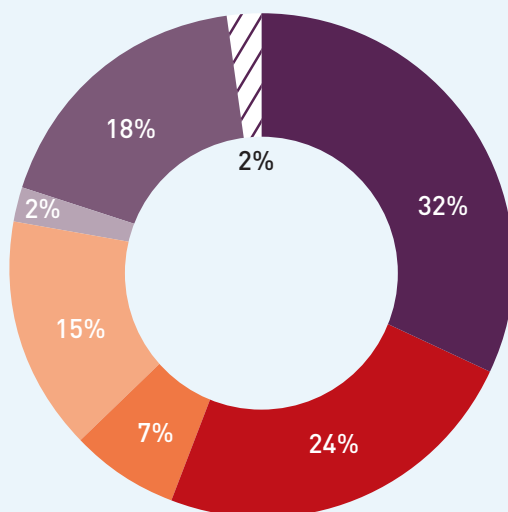
GNS Science continues to invest in the replacement and renewal of our assets, including our facilities, vehicle fleet, and equipment, with \$7.9m capital expenditure in the past 12 months. During the fiscal year, Toka Tū Ake EQC granted GNS Science network assets to the value of \$11.6m for the continued operations of the GeoNet programme. In the year ahead, GNS Science is seeking approval to invest in the replacement of a key facility on the Wairakei campus.

The balance sheet of GNS Science remains strong, with no debt, and liquidity of \$32m.



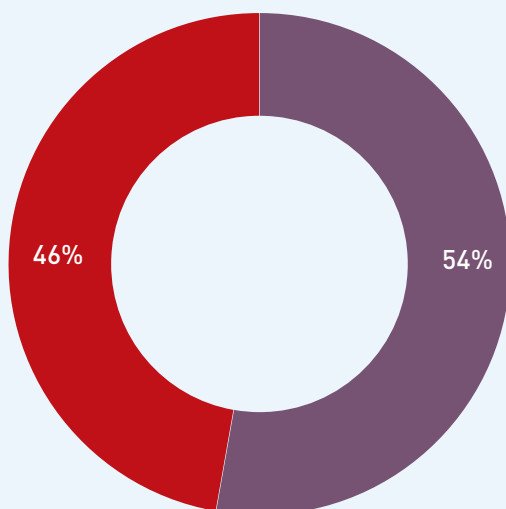
# OUR NUMBERS AT A GLANCE

## Revenue



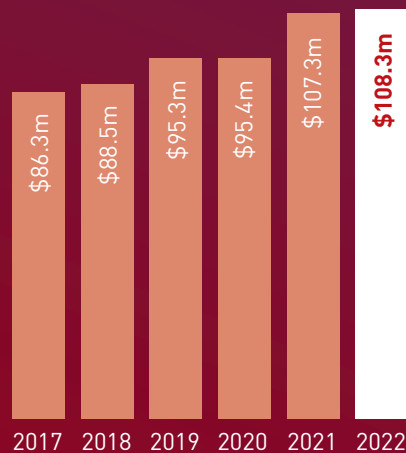
- Strategic Science Investment Fund contracts
- Other income
- Commercial – New Zealand
- Contestable funding contracts
- Commercial – overseas
- Research subcontracts
- GeoNet services

## How we spent our money

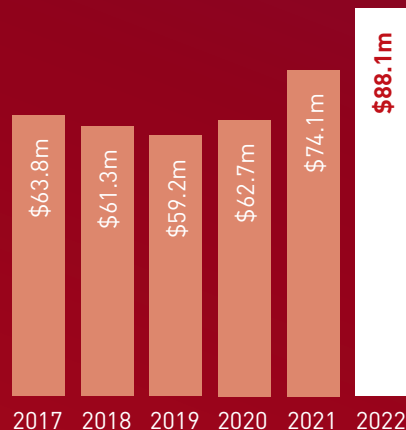


- Employee related expenses
- Other operating expenses

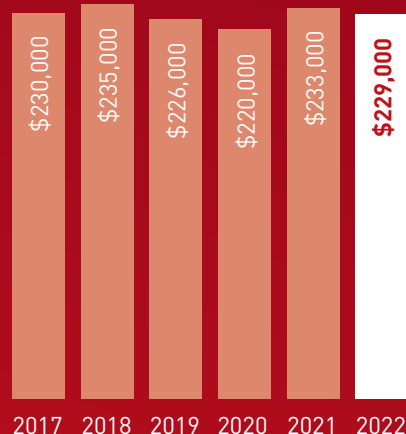
## Revenue (\$m)



## Total assets (\$m)



## Revenue per FTE (\$)



# PERFORMANCE INDICATORS

For the year ended 30 June 2022

The GNS Science suite of performance indicators includes measures that are consistent across the Crown Research Institutes, as well as indicators that allows GNS Science to show performance against our own strategic direction. This year, GNS Science has performed well against many of our indicators, although COVID-19 has had a negative impact on some areas of our work; particularly our capacity to get some of our projects underway within anticipated timeframes, and our ability to connect and work with partners and collaborators in an optimal way. There have been reduced

opportunities for in-person engagement with stakeholders. While online engagement is an effective alternative to a degree, the overall lack of in-person meetings, workshops, conferences and other networking opportunities significantly hindered knowledge exchange and technology development with stakeholders over this period. An increasing number of face-to-face engagements were taking place by the end of the financial year, and we expect this trend to continue in the coming year.

## NON-FINANCIAL INDICATORS

Indicator	Measure	Actual	Target
<b>Strategic intent</b>			
Priority setting	Surveyed end-users have confidence that GNS Science considers their sector's priorities when setting their research priorities	71%	>70%
Team selection	Surveyed end-users have confidence that GNS Science has assembled 'best' teams for research delivery	76%	>85%
<b>Science impact</b>			
Research delivery	Research milestones (critical steps) on track or completed	87.1%	>87%
Impact case studies	Impact case studies published	3	3
Knowledge exchange	Surveyed end-users have adopted knowledge from GNS Science in the past three years	72%	>90%
<b>Science excellence</b>			
Peer review	Programme reviews carried out	3	3
Science quality	Impact of scientific publications (weighted citation index)*	4.8	3.20
Research collaboration	Papers co-authored	89%	92%
<b>Science relevance</b>			
End-user collaboration	Revenue per FTE from commercial sources (\$000)	76	62
Technology and knowledge transfer	Commercial reports per scientist FTE	0.79	1.00
<b>Financial</b>			
Revenue generation	Revenue per FTE (\$000)	229	230
<b>Embedding Vision Mātauranga</b>			
Māori engagement	Projects with Māori stakeholders embedded in the research	12	5
<b>People and culture</b>			
Health and safety	Recordable injuries per 200,000 work hours (rolling 12-month average)	0.7	<2
Staff engagement**	Percentage of staff engaged in working for GNS Science (Biannual climate survey)	71%	>72%

\* Mean 2-year impact factor for SCImago-assessed journals, weighted by the number of GNS Science publications.

\*\* Based on the Qualtrics Survey cluster of questions and definition for staff engagement.



## FINANCIAL PERFORMANCE INDICATORS

	Actual 2022	Budget 2022	Actual 2021
<b>Revenue (\$000)</b>			
Revenue	108,280	111,105	107,252
Revenue growth	1%	3%	12%
<b>Operating results (\$000)</b>			
Operating expenses (including depreciation and amortisation)	109,882	110,290	98,835
EBITDA	5,874	6,685	13,827
EBIT	(1,602)	815	8,417
Profit before tax	(1,352)	965	8,552
Profit after tax	(1,023)	695	6,132
EBITDA per FTE	12	15	30
Total assets	88,114	68,703	74,147
Total equity	40,104	40,090	41,127
Capital expenditure	7,875	8,400	4,936
<b>Liquidity</b>			
Quick ratio	3.3	2.2	3.0
<b>Profitability</b>			
Return on equity	(2.90%)	1.80%	17.50%
Operating margin	5.40%	6.00%	12.90%
<b>Operational risk</b>			
Profit volatility	48.50%	38.90%	46.00%
Forecasting risk	6.80%	5.80%	6.80%
<b>Growth/Investment</b>			
Capital renewal (before impairment adjustments)	2.6	1.4	0.9
Dividend (\$000)	-	-	-
<b>Financial strength</b>			
Equity ratio	45.50%	58.40%	55.50%

# CORPORATE GOVERNANCE

## OVERVIEW

The Board is committed to ensuring that the Company and its subsidiaries maintain the highest standards of corporate governance, ethics, corporate behaviour and accountability. The basis for these is set out in the Board's Charter and in the policies and procedures established and maintained by the Company.

## ROLE OF THE BOARD AND MANAGEMENT

The Board is responsible to the shareholding Ministers (the Minister of Finance and the Minister of Science and Innovation who is also the Responsible Minister) for governing, directing and controlling the activities of the Company. This includes:

- setting the Company's strategic direction and agreeing the goals in line with the Statement of Core Purpose and annual Statement of Corporate Intent
- overseeing the GNS Science operation and monitoring management performance against plans to ensure GNS Science is achieving the agreed goals
- ensuring there is an appropriate policy framework and approving key policies
- setting GNS Science's risk tolerance and ensuring that effective risk management and regulatory compliance policies and procedures are in place
- setting the direction for health and safety management and ensuring that it is achieved.

The Board delegates management of the day-to-day affairs and responsibilities of the Company to the Chief Executive. The Chief Executive leads the Executive Leadership Team whose role is to implement the strategies and plans for achieving the Company's objectives. A formal Delegated and Financial Authorities Policy sets the operational and expenditure delegations within which the Chief Executive and the Executive Leadership Team operate.

## APPOINTMENT OF DIRECTORS AND COMPOSITION OF THE BOARD

Under the Company's Constitution, the Board can comprise up to nine non-executive Directors. The Directors, Chair and Deputy Chair are appointed by Cabinet on the recommendation of the Responsible Minister. The term is generally for three years with reappointment for further terms at the discretion of the shareholders. The GNS Science Board consisted of six Directors until 31 March 2021. Two Board members retired in the 2020/21 financial year. Two new Board members were appointed on 1 February 2022.

The Board considers that it has an appropriate mix of skills, experience and independence to ensure that the Company is governed in a manner that guarantees the interests of shareholders are represented and protected.

On appointment, Directors receive guidelines on the shareholders' expectations, which are in addition to the requirements of the Companies Act 1993. They have access to on-line resources that contain key information and documents about the Company, its subsidiaries and their operations. New Directors also have the benefit of an induction programme to provide them with an understanding of the Company's business and the markets in which it operates.

Each Director has the right, with the prior approval of the Board, to seek independent legal and other professional advice at the Company's expense concerning any aspect of the Company's operations or undertakings to assist in fulfilling their duties and responsibilities as Directors.

## DIRECTORS' MEETINGS

There were 12 formal Board meetings during the year ended 30 June 2022. Five of those meetings were special meetings of the Board. Two of those meetings were to discuss the prosecution of the Company under the Health and Safety at Work Act 2015 in relation to the Whakaari/White Island eruption. One special meeting was held to discuss GNS Science's safety management plan to return to Whakaari/White Island to restore monitoring equipment. One special meeting was held to discuss the Annual Financial Statements and another special meeting was held to discuss GNS Science's budget 2022/23 and Statement of Corporate intent.

There was one additional meeting of the Board dedicated to consideration of the Company's strategic direction.

There was a programme of site visits and presentations to the Board by the Executive Leadership Team, management and science staff, and regular interaction with key stakeholders which enabled Directors to keep abreast of key aspects of the Company's activities.

## OPERATION OF THE BOARD

The Board operates in accordance with the Board Charter. It had four standing committees operating during the year – the Audit and Risk Committee, the People and Culture Committee, the Health, Safety and Environment Committee, and the Science Committee. All committees operate in accordance with a Terms of Reference approved by the Board. Each committee establishes annual work plans and undertakes an annual review of its Terms of Reference and performance. The table opposite shows Director attendance at Board meetings and committee member attendance at committee meetings. In addition, any Director may attend any committee meeting.

Matters discussed by the committees were reported back to the subsequent Board meeting and key items were discussed and resolved by the full Board.

## BOARD EVALUATION

During the year the Board undertook an evaluation of its performance. It was a self-evaluation. The results of the evaluation were provided to the Responsible Minister's representatives.

## AUDIT AND RISK COMMITTEE

The Audit and Risk Committee supports the Board in fulfilling its responsibilities in relation to financial reporting, external audit, risk management, legislative compliance and internal audit.

## PEOPLE AND CULTURE COMMITTEE

The People and Culture Committee supports the Board in fulfilling its responsibilities in relation to remuneration policy and organisational culture, and the recruitment, remuneration and performance of the Chief Executive and senior leadership.



	Board Meetings		Audit and Risk Committee		People and Culture Committee		Health, Safety and Environment Committee		Science Committee	
	No.	No. attended	No.	No. attended	No.	No. attended	No.	No. attended	No.	No. attended
Nicola Crauford	12	12	5	5	5	5	3	3	3	3
Paul White	12	11	2 <sup>b</sup>	1	5	5	3	3	-	-
John Sharpe	12	12	5	5	-	-	1 <sup>b</sup>	1	3	3
Felicity Evans	12	12	2 <sup>b</sup>	2	5	5	1 <sup>b</sup>	1	3	2 <sup>c</sup>
Andrew Cordner	4 <sup>b</sup>	4	3 <sup>b</sup>	3	-	-	2 <sup>b</sup>	2	-	-
Wendy Venter	4 <sup>b</sup>	4	3 <sup>b</sup>	3	-	-	-	-	-	-
Paul Connell <sup>a</sup>	-	-	4 <sup>b</sup>	4	-	-	-	-	-	-

a Paul Connell was appointed Interim Audit and Risk Committee Chair from 1 April 2021 until 18 March 2022

b Shows the number of meetings held during term appointed

c Observer only

## HEALTH, SAFETY AND ENVIRONMENT COMMITTEE

This Committee supports the Board in fulfilling its responsibilities relating to health, safety and environment matters. The Committee reviews and recommends to the Board targets for health, safety and environment performance, assesses performance against those targets, assures that the Company has adequate resources to operate the business safely and reviews serious incidents and audit results, evaluating responses and being satisfied with the adequacy of management actions.

## SCIENCE COMMITTEE

The Science Committee supports the Board in fulfilling its responsibilities on the direction, and effectiveness of research activities undertaken by the Company. Three meetings were held during the year in conjunction with a meeting of the Strategic Scientific and User Advisory Panel (SSUAP), which is a standing advisory panel to the Board.

## STRATEGIC SCIENTIFIC AND USER ADVISORY PANEL

The Board receives advice from the Strategic Scientific and User Advisory Panel. The purpose of the Panel is to ensure our science continues to have a focus on excellence and that we are well tuned in to national and international trends and associated opportunities. Panel members have broad experience and insight across all our science themes and provide strong end-user perspectives. Profiles of the Panel members can be found on page 72 of Part 1 of this Annual Report.

## INTERNAL AUDIT AND RISK MANAGEMENT

The GNS Science internal audit plan is developed by the Risk and Assurance Manager and outsourced Internal Auditor (KPMG) in consultation with the Audit and Risk Committee and approved by the Board. Quarterly reporting on progress with the internal audit plan and progress with internal and external audit recommendations are presented to the Audit and Risk Committee. The Internal Auditor has access to management and the right to seek information and explanation. The Audit and Risk Committee meets quarterly with the Internal Auditor without management present.

GNS Science has an established framework for managing risk to inform strategic and business planning processes, optimise allocation of resources and allow the Company to effectively recognise, prioritise and respond to risks. Risks are monitored and assessed and reported quarterly to the Audit and Risk Committee and the Board.

## EXTERNAL AUDITORS

GNS Science is committed to ensuring that the external audit provider is able to carry out its functions independently. Our Auditor Independence Policy sets out the framework under which we ensure the independence of the External Auditor is maintained at all times both in fact and appearance, such that the audit opinion is highly reliable and credible. The Office of the Auditor-General appointed Deloitte to perform the statutory audit during the year ended 30 June 2022. Deloitte personnel attended four Audit and Risk Committee meetings during the year.

The External Auditor may provide non-audit services where these are approved in advance by the Board as being appropriate. No such services were provided by the External Auditor for the year ended 30 June 2022.

## CONFLICTS OF INTEREST

All Directors are required to disclose any conflicts of interest or if they have an interest in any transaction, in which case they may not be entitled to partake in discussions (at the Board's discretion) and will not be entitled to vote in relation to the transaction. To facilitate the disclosure of interests and identification of any actual or perceived conflicts of interest, the Company's Disclosure of Interests Register is reviewed and updated at the start of each Board meeting.

## PROVISION OF PROFESSIONAL SERVICES

Except in exceptional circumstances, Directors will not provide professional services to the Company and will only do so with the prior approval of the Responsible Minister. This is to avoid a conflict of interest – actual or perceived. No such services were provided by Directors during the year.

# REPORT OF THE DIRECTORS

For the year ended 30 June 2022

The Directors are pleased to present the audited financial statements of GNS Science for the year ended 30 June 2022. The financial statements have been prepared in accordance with generally accepted accounting practice in New Zealand and the Financial Reporting Act 1993.

The Controller and Auditor-General is the statutory auditor pursuant to section 21 of the Crown Research Institutes Act 1992. The Office of the Auditor-General, pursuant to section 29 of the Public Finance Act 1977, has appointed Deloitte to undertake the audit on its behalf.

## PRINCIPAL ACTIVITY

GNS Science's principal activity is to conduct scientific research, consultancy services, and product development in Earth sciences and isotope technologies in accordance with the principles for the operation of Crown Research Institutes set out in sections 4 and 5 of the Crown Research Institutes Act 1992.

## BOARD CHANGES DURING THE YEAR

The following changes affected the membership of the Board for the year ended 30 June 2022:

Director	Date commenced
Andrew Cordner	1 February 2022
Wendy Venter	1 February 2022

## REMUNERATION OF DIRECTORS

Directors' fees are set by the shareholding Ministers annually. Fees paid to Directors for services as a Director, including membership of Board Committees and other expenses, during the year were as follows:

Director	Date commenced	FY 2022 \$	FY 2021 \$
Nicola Crauford	1 July 2015	47,356	47,356
Paul White	14 August 2017	23,678	23,678
John Sharpe	1 September 2016	23,678	23,678
Felicity Evans	1 July 2018	23,678	23,678
Andrew Cordner	1 February 2022	9,866	-
Wendy Venter	1 February 2022	9,866	-
Sarah Haydon	1 July 2014	-	22,199
Chris Bush	1 January 2016	-	23,678

No Director during the year either received (or became entitled to receive) any benefit other than the disclosed Directors' fees.

## CHIEF EXECUTIVE REMUNERATION

The Chief Executive's remuneration is approved by the Board, on the recommendation of the People and Culture Committee. External advice is incorporated as needed, and recommendations are made to the Board in regard to the Chief Executive's contractual arrangements, including remuneration.

The overarching elements of the approach to remuneration for the Chief Executive (consistent with all GNS Science staff) include: simplicity, clarity, fairness and consistency of application, along with:

1. A holistic view of reward;
2. An appropriate link between reward and business performance;
3. A rewards programme that helps to drive a positive and enabling culture;
4. People being rewarded competitively in a context of affordability;
5. Regular review and analysis of the effectiveness and fairness of the remuneration and rewards framework to ensure it continues to meet both GNS Science and employee needs.

Ian Simpson was appointed Chief Executive in January 2017. His remuneration comprises salary and KiwiSaver benefits, and does not include any separate component conditional on performance. His annual remuneration has been as follows:

	FY 2018 \$	FY 2019 \$	FY 2020 \$	FY 2021 \$	FY 2022 \$
Salary	461,165	468,932	468,932	468,932	469,834
KiwiSaver	13,835	14,068	14,068	14,068	14,095
<b>Total</b>	<b>475,000</b>	<b>483,000</b>	<b>483,000</b>	<b>483,000</b>	<b>483,929</b>



## EMPLOYEE REMUNERATION

In accordance with section 211(1)(g) of the Companies Act 1993, the numbers of employees who received remuneration and other benefits totalling \$100,000 or more, in \$10,000 bands, during the year were:

\$000	2022	2021
100-110	43	41
110-120	48	28
120-130	21	39
130-140	36	20
140-150	22	15
150-160	10	10
160-170	14	11
170-180	4	8
180-190	8	6
190-200	2	6
200-210	6	4
210-220	1	-
220-230	2	2
230-240	1	-
240-250	-	-
250-260	1	1
260-270	-	-
270-280	-	-
280-290	1	1
300-310	1	-
330-340	1	1
480-490	1	1
<b>Total</b>	<b>223</b>	<b>194</b>

## SUBSIDIARIES

The Company has five subsidiary companies:

- Isoscan Limited
- Geological Surveys (New Zealand) Limited
- Isoscan Food Limited
- Geological Risk Limited
- GNS Science International Limited

Dr Nicola Crauford and Ian Simpson were Directors of each of the subsidiary companies at 30 June 2022.

## DIVIDENDS

No dividend was declared during the year to 30 June 2022 (2021: \$nil).

## DIRECTORS' INDEMNITY AND INTERESTS

The Company has insurance cover for Directors in respect of any act or omission in their capacity as a Director of the Company. Directors have declared their interests in a Deed of Indemnity dated 29 November 2017, whereby the Company indemnifies Directors against any liability for any act or omissions incurred in their capacity as a Director. The indemnity for liabilities incurred does not extend to criminal liability or liability for breach of a fiduciary duty owed to the Company.

Directors' interests disclosed at 30 June 2022 are set out in the table below. These interests have been appropriately recorded in the Company's Disclosure of Interests Register, which is updated at the start of every Board meeting.

Director	Position	Organisation
Nicola Crauford	Director	Watercare Services Limited
	Director and Shareholder	Riposte Consulting Limited
	Director	CentrePort Limited and subsidiaries
	Trustee	Wellington Regional Stadium Trust
	Chair	Electricity Authority
John Sharpe	Director and Shareholder	Weka Labs Limited
	Director	Chronoptics Limited
	Director	STGenetics New Zealand Limited
	Executive Vice President (Flow Cytometry)	Inguran, LLC, dba STgenetics
Paul White	Member	Te Rarawa Iwi
	Director and Shareholder	Torea Tai Consultants Limited
	Executive Member	Te Matapihi (Māori housing body)
	Governance Group Member	Sector Climate Change Commitment; Māori Workstream
Felicity Evans	Member	Defence Employer Support Council (DESC)
	Member	Advisory Board of Dignity Limited
	Trustee	Endometriosis NZ
Andrew Cordner	Director	Fonterra LATAM Brands Limited (New Zealand)
	Director	Fonterra Chile SpA (Chile)
	Director	Inversiones Dairy Enterprises S.A. (Chile)
	Board Trustee	St Andrew's Village Trust (Inc.)
	Member	National Standards Committee, New Zealand Law Society
	Director of Legal	Fonterra Co-operative Group Limited
Wendy Venter	Director and Shareholder	Venter Consulting Ltd
	Director	Plant and Food Research Ltd
	Trustee	Nikau Foundation
	Chair, Risk and Assurance Committee and member, Governance Advisory Board	Stats NZ
	Member, The Treasury's Audit Committee for the Financial Statements of the Government	The Treasury
	Chair, Audit and Risk Committee	Parliamentary Counsel Office
	Member	Ministry of Education, Schools Payroll Governance Board
	Member	New Zealand Auditing and Assurance Standards Board
	Member	Development West Coast – Advisory Body

## EVENTS AFTER BALANCE DATE

The Directors are not aware of any matter or circumstance since the end of the financial year not otherwise dealt with in this report that has, or may have, a significant effect on the operation of the Company.

## CERTIFICATIONS

The Directors confirm that the Company has operated in accordance with the Crown Research Institutes Act 1992, Crown Entities Act 2004 and the Companies Act 1993 during the year.

The activities undertaken by the Company in the year are in accordance with GNS Science's Statement of Core Purpose.

No written direction was received from either shareholding Minister in the year.

For and on behalf of the Board



**Dr Nicola Crauford**  
Chair  
16 September 2022

# FINANCIAL STATEMENTS

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 30 June 2022

<i>in thousands of New Zealand dollars</i>	Note	Actual 2022	Actual 2021	Budget 2022
<b>Revenue</b>				
Research contracts		68,386	64,550	73,198
Commercial		18,390	16,233	19,708
GeoNet services		18,919	21,910	18,200
Other income		2,585	4,559	-
<b>Total revenue</b>	2	<b>108,280</b>	107,252	111,105
<b>Operating expenses</b>				
Employee benefit expenses		54,830	49,581	56,006
Other operating expenses	3	47,576	43,844	48,414
<b>Total operating expenses</b>		<b>102,406</b>	93,425	104,420
<b>Profit before interest, tax, depreciation and amortisation</b>		<b>5,874</b>	13,827	6,685
Depreciation	6	7,325	5,185	5,870
Amortisation and impairment	7	151	225	-
<b>Profit/(loss) before interest and tax</b>		<b>(1,602)</b>	8,417	815
Interest income		250	139	150
Finance expense		-	[4]	-
<b>Profit/(loss) before tax</b>		<b>(1,352)</b>	8,552	965
Income tax credit/(expense)	4	329	[2,420]	[270]
<b>Profit/(loss) after tax</b>		<b>(1,023)</b>	6,132	695
Other comprehensive income		-	-	-
<b>Total comprehensive income / (loss) attributable to owners</b>		<b>(1,023)</b>	6,132	695

The accompanying notes form part of these financial statements.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 30 June 2022

<i>in thousands of New Zealand dollars</i>	Share capital	Equity reserves Retained earnings	Total equity
<b>Balance at 30 June 2020</b>	<b>6,167</b>	<b>28,828</b>	<b>34,995</b>
Profit after tax	-	6,132	6,132
<b>Balance at 30 June 2021</b>	<b>6,167</b>	<b>34,960</b>	<b>41,127</b>
Profit after tax	-	[1,023]	[1,023]
<b>Balance at 30 June 2022</b>	<b>6,167</b>	<b>33,937</b>	<b>40,104</b>

The accompanying notes form part of these financial statements.

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

As at 30 June 2022

<i>in thousands of New Zealand dollars</i>	Note	Actual 2022	Actual 2021
<b>Equity</b>			
Share capital	5	6,167	6,167
Equity reserves		33,937	34,960
<b>Total equity</b>		<b>40,104</b>	41,127
<i>Represented by:</i>			
<b>Non-current assets</b>			
Property, plant and equipment	6	39,094	27,339
Intangible assets	7	546	360
Deferred tax	9	2,857	1,907
Investments		30	30
<b>Total non-current assets</b>		<b>42,527</b>	29,636
<b>Current assets</b>			
Cash and cash equivalents		19,277	25,771
Short term investments		13,171	8,079
Trade receivables	8	7,460	5,755
Prepayments		3,853	2,609
Contract assets	2	1,826	2,297
<b>Total current assets</b>		<b>45,587</b>	44,511
<b>Total assets</b>		<b>88,114</b>	74,147
<b>Non-current liabilities</b>			
Non-current provisions	10	1,417	1,279
Capital Grants from Crown (long-term portion)	2	11,390	-
<b>Total non-current liabilities</b>		<b>12,807</b>	1,279
<b>Current liabilities</b>			
Trade and other payables	11	8,103	10,009
Current provisions	10	4,107	3,640
Contract liabilities	2	20,546	15,833
Capital Grants from Crown (current portion)	2	1,991	-
Provision for income tax		456	2,259
Provision for dividend	5	-	-
<b>Total current liabilities</b>		<b>35,203</b>	31,741
<b>Total liabilities</b>		<b>48,010</b>	33,020
<b>Net assets</b>		<b>40,104</b>	41,127

For and on behalf of the Board:



**Dr Nicola Crauford**  
Chair  
16 September 2022



**Dr John Sharpe**  
16 September 2022



**CONSOLIDATED STATEMENT OF CASH FLOWS**

For the year ended 30 June 2022

<i>in thousands of New Zealand dollars</i>	Note	<b>Actual 2022</b>	Actual 2021
<b>Cash flows from operating activities</b>			
<i>Cash was provided from:</i>			
Receipts from customers		<b>112,707</b>	107,228
Government Grant (COVID funding)		-	4,170
Interest received		<b>139</b>	219
		<b>112,846</b>	111,617
<i>Cash was applied to:</i>			
Payments to suppliers and employees		<b>(107,846)</b>	(91,806)
Interest paid		-	(4)
Income tax paid		<b>(2,424)</b>	(713)
		<b>(110,270)</b>	(92,523)
<b>Net cash flows from operating activities</b>	12	<b>2,576</b>	19,094
<b>Cash flows from investing activities</b>			
<i>Cash was provided from:</i>			
Sale of property, plant and equipment		<b>93</b>	29
Receipts of capital funding in advance		<b>3,803</b>	-
Maturity of short term investments		<b>8,079</b>	16,110
		<b>11,975</b>	16,139
<i>Cash was applied to:</i>			
Purchase of property, plant, equipment and intangible assets		<b>(7,875)</b>	(4,935)
Placement of short term investments		<b>(13,170)</b>	(13,116)
		<b>(21,045)</b>	(18,051)
<b>Net cash flows from investing activities</b>		<b>(9,070)</b>	(1,912)
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>(6,494)</b>	17,180
Effects of exchange rate changes on cash balances held in foreign currencies		-	-
<b>Opening cash and cash equivalents</b>		<b>25,771</b>	8,591
<b>Closing cash and cash equivalents</b>		<b>19,277</b>	25,771

*The accompanying notes form part of these financial statements.*

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 30 June 2022

## 1. REPORTING ENTITY AND ACTIVITIES

The Institute of Geological and Nuclear Sciences Limited (trading as GNS Science) is established under the Crown Research Institutes Act 1992 and the Companies Act 1993. Its subsidiary companies are established under the Companies Act 1993. These financial statements have been prepared in accordance with the Crown Research Institutes Act 1992, the Public Finance Act 1989, the Companies Act 1993, the Crown Entities Act 2004 and the Financial Reporting Act 2013.

Consolidated financial statements for the Group comprising the Institute of Geological and Nuclear Sciences Limited (the Parent) and its subsidiaries are presented, and the effects of intra-group transactions are eliminated in the consolidated financial statements. Subsidiaries are those entities controlled by the Parent. Control is achieved where the Parent has the power to govern the financial and operating policies of an entity to obtain benefits from its activities.

The wholly owned subsidiaries of the Parent are:

- Isoscan Limited
- Isoscan Food Limited
- Geological Surveys (New Zealand) Limited
- Geological Risk Limited
- GNS Science International Limited

The principal activities of the Group are to undertake geoscience and isotope science research, development and commercial projects, predominantly in New Zealand. GNS Science International Limited holds a 50% interest in EDDI Project, an unincorporated joint operation formed to undertake a contract for dam hazard management in Vietnam.

## 2. REVENUE

### Strategic Science Investment Fund

The Parent is party to a Strategic Science Investment Fund agreement with the Crown to perform research activities that support the Parent's Statement of Core Purpose. Revenue under this contract is treated as a Government Grant under NZ IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*. All core funded contracts were completed in accordance with the agreement during the year.

### Revenue from other research and commercial contracts

Revenue from other research and commercial contracts is accounted for in accordance with NZ IFRS 15 *Revenue from Contracts with Customers*. Revenue earned from the supply of goods and services is measured at the fair value of consideration received.

The Group recognises revenue based on the consideration to which the Group expects to be entitled in a contract with a customer. Revenue from services is recognised on the stage of completion of the contract. Any amounts received in relation to work not yet commenced are recorded as revenue in advance.

Revenue from the supply of goods is recognised when the significant risks and rewards of ownership of the goods have been transferred to the buyer.

Where any entitlement condition is not yet met, amounts already received are recorded as a contract liability (revenue in advance). Contract assets (work in progress) are recorded for work performed, where funding is expected but has not yet been received.

Any amounts previously recognised as a contract asset are transferred to Trade Receivables at the point the customer is invoiced for the product or service delivered.

There is not considered to be a significant finance component to the valuation of revenue, due to revenue generally being recognised during the period of related services/products delivery, or within one year.

**Revenue for the year was derived as follows:**

<i>in thousands of New Zealand dollars</i>	2022	2021
Strategic Science Investment Fund contracts	34,094	32,599
Contestable funding contracts	25,506	24,070
Marsden funding contracts	912	746
Research subcontracts	7,874	7,135
<b>Research contracts</b>	<b>68,386</b>	<b>64,550</b>
Commercial – New Zealand	15,718	12,997
Commercial – overseas	2,672	3,236
<b>Commercial revenue</b>	<b>18,390</b>	<b>16,233</b>
GeoNet services	18,919	21,910
Additional Government Grant	-	4,170
Other income	2,585	389
<b>Total revenue</b>	<b>108,280</b>	<b>107,252</b>

A total of \$13.7m (2021: \$11.1m) of revenue recognised in 2022 relates to funds that were included in contract liabilities (revenue in advance) at 30 June 2021.

**Movement in contract assets and liabilities**

Contract assets and liabilities vary from year to year, dependent on the delivery terms of contracted work, and the timing of agreed invoicing or funding received between the Group and contracted parties.

The movement in contract assets and liabilities, relating to all sources of revenue is as follows:

<i>in thousands of New Zealand dollars</i>	2022	2021
<b>Contract assets</b>		
Work in Progress at 1 July	2,297	2,340
Decrease during the year	(471)	(43)
<b>Work in Progress at 30 June 2022</b>	<b>1,826</b>	<b>2,297</b>
<b>Contract liabilities</b>		
Revenue in advance at 1 July	15,833	14,200
Increase during the year	4,713	1,633
<b>Revenue in advance at 30 June 2022</b>	<b>20,546</b>	<b>15,833</b>

**Capital grants from Crown in relation to GeoNet**

Government grants received in-specie or in cash for the acquisition of network assets are recognised at their fair value and held on the Statement of Financial position as a deferred credit and recognised as revenue over the periods necessary to match the related depreciation charges, or other expenses of these assets, as they are incurred. Refer to note 6 for the disclosure of these assets.

<i>in thousands of New Zealand dollars</i>	2022	2021
<b>Capital grants from Crown</b>		
Received as in-specie	11,566	-
Cash received in advance	3,803	-
	15,369	-
Recognised as revenue	(1,988)	-
<b>Balance at 30 June 2022</b>	<b>13,381</b>	-
<b>Balance represented by</b>		
Current portion	1,991	-
Non-current portion	11,390	-
<b>Balance at 30 June 2022</b>	<b>13,381</b>	-

**3. EMPLOYEE BENEFIT EXPENSES AND OPERATING EXPENSES**

Employee benefit expenses includes an amount of \$nil (2021: \$5,604) relating to termination benefits payable or at risk salary components at 30 June 2022.

Operating expenses are made up as follows:

<i>in thousands of New Zealand dollars</i>	2022	2021
Services and contracts	17,209	17,005
Research contracts	18,868	14,994
SaaS implementation cost	3,621	-
Site and communication	2,639	2,873
Materials and supplies	2,604	5,534
Travel and vehicle	1,169	1,602
Conferences and training	884	1,079
Rent	336	330
Directors' fees	147	164
Auditor's remuneration – audit services	99	105
Bad debts and credit losses on doubtful debts	(43)	56
Foreign exchange loss/(gain)	3	19
Loss/(gain) on disposal of property, plant and equipment	(93)	29
Other operating expenses	133	54
<b>Total operating expenses</b>	<b>47,576</b>	<b>43,844</b>

**SaaS implementation cost**

The Parent entered into a Software as a Service (SaaS) contract with Workday on 30 June 2021, as well as contracts with third parties for the implementation of a joint enterprise system together with the Institute of Environmental Science and Research (ESR).

Implementation costs of \$6.5m were incurred during the period of which \$2.9m were reimbursed by ESR under the relevant contract terms, reflecting their share of the implementation. These amounts are represented net within operation expenses, reflecting the substance of the contractual arrangements. Additionally, ESR have incurred costs of \$0.2m that were recovered from the Parent as part of the joint implementation.

The implementation costs are expensed when incurred, in accordance with guidance issued by International Financial Reporting Interpretations Committee. Where amounts are due to the SaaS provider these have been recorded in full within trade payables and where amounts are due from ESR these are reflected in accounts receivable as the Parent holds the credit risk associated with collection.



#### 4. INCOME TAX

The income tax expense is determined as follows:

<i>in thousands of New Zealand dollars</i>	2022	2021
<b>Reconciliation of income tax expense</b>		
Profit/(loss) before income tax	(1,352)	8,552
Tax at rate of 28%	(376)	2,395
Non-deductible items in determining assessable income	(15)	18
Prior period adjustment	62	7
<b>Total tax expense/(credit)</b>	<b>(329)</b>	<b>2,420</b>
<b>The taxation charge is represented by</b>		
Current tax	622	2,085
Deferred tax	(951)	335
<b>Total tax expense/(credit)</b>	<b>(329)</b>	<b>2,420</b>

Under Section OB1(2)(d) of the Income Tax Act (2007), the Parent is not required to maintain an imputation credit account.

During the current year, the Parent has spent \$3.6m (net of amounts reimbursed) on establishment costs for its new Workday ERP. This is operated on a Software as a Service model and has been recognised as operating expenditure for financial reporting purposes.

It is understood that Inland Revenue's position on the tax treatment of such costs is still being considered, following the agenda decision published by the International Financial Reporting Interpretations Committee clarifying treatment of such costs in April 2021.

As the tax position on whether this expenditure is fully deductible in the year it is expensed or to be capitalised and deducted over time is not yet reached, the Parent has deducted 50% of the cost in the current year and recognised 50% as a deferred tax asset to be deducted over time.

#### 5. SHARE CAPITAL

<i>in thousands of New Zealand dollars</i>	2022	2021
Authorised and issued capital: 6,167,000 ordinary shares	6,167	6,167

All ordinary shares rank equally with respect to dividends and repayment of capital and each carry the right to one vote at any annual meeting.

No dividend has been declared for the year ended 30 June 2022 (2021: \$nil).

## 6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost less accumulated depreciation and impairment. Cost includes expenditure that is directly attributable to the acquisition of the item. Assets have been depreciated on a straight-line basis at rates calculated to allocate the assets' cost over their estimated remaining useful lives. Freehold land is not depreciated.

The estimated useful lives, residual values and depreciation methods are reviewed annually, with the effect of any changes in estimate accounted for on a prospective basis.

The gain or loss arising on the disposal or retirement of an item of property, plant and equipment is recognised in the Statement of Comprehensive Income.

The following useful lives are used in the calculation of depreciation:

Buildings and improvements	
• wooden construction	40 years
• concrete construction	50 years
• improvements	10 – 20 years
Plant, machinery and laboratory equipment	3 – 15 years
Furniture, fittings and office equipment	3 – 15 years
IT equipment	4 – 8 years
Vehicles	5 years

### Heritage assets – collections, library and databases

The Parent owns various collections, library resources and databases that are an integral part of the research work undertaken by the Parent. These collections are highly specialised and there is no reliable basis for establishing a valuation.

The two major collections are:

The National Paleontological Collection
The National Petrological Reference Collection

<i>in thousands of New Zealand dollars</i>	Land	Buildings and improvements	Network assets	Plant and machinery	Laboratory equipment	IT equipment	Furniture, fittings and office equipment	Vehicles	Total
<b>Cost</b>									
Balance at 1 July 2020	2,527	22,356	-	5,019	33,902	9,176	4,124	1,212	<b>78,316</b>
Additions	-	457	-	-	2,577	1,069	439	308	<b>4,850</b>
Disposals	-	-	-	(2)	(3)	(480)	(33)	(88)	<b>(606)</b>
<b>Balance at 30 June 2021</b>	<b>2,527</b>	<b>22,813</b>	<b>-</b>	<b>5,017</b>	<b>36,476</b>	<b>9,765</b>	<b>4,530</b>	<b>1,432</b>	<b>82,560</b>
Additions	-	509	14,742	1,185	1,000	907	355	485	<b>19,183</b>
Disposals	-	-	(126)	(21)	(365)	(200)	(10)	(510)	<b>(1,232)</b>
<b>Balance at 30 June 2022</b>	<b>2,527</b>	<b>23,322</b>	<b>14,616</b>	<b>6,181</b>	<b>37,111</b>	<b>10,472</b>	<b>4,875</b>	<b>1,407</b>	<b>100,511</b>
<b>Accumulated depreciation</b>									
Balance at 1 July 2020	-	12,724	-	3,242	24,139	6,437	2,970	1,110	<b>50,622</b>
Disposals	-	-	-	(1)	(3)	(461)	(33)	(88)	<b>(586)</b>
Depreciation	-	1,213	-	277	1,859	1,563	211	62	<b>5,185</b>
<b>Balance at 30 June 2021</b>	<b>-</b>	<b>13,937</b>	<b>-</b>	<b>3,518</b>	<b>25,995</b>	<b>7,539</b>	<b>3,148</b>	<b>1,084</b>	<b>55,221</b>
Disposals	-	-	(25)	(21)	(365)	(200)	(8)	(510)	<b>(1,129)</b>
Depreciation	-	978	2,013	280	2,066	1,548	265	175	<b>7,325</b>
<b>Balance at 30 June 2022</b>	<b>-</b>	<b>14,915</b>	<b>1,988</b>	<b>3,777</b>	<b>27,696</b>	<b>8,887</b>	<b>3,405</b>	<b>749</b>	<b>61,417</b>
Net book value at 30 June 2021	2,527	8,876	-	1,499	10,481	2,226	1,382	348	<b>27,339</b>
<b>Net book value at 30 June 2022</b>	<b>2,527</b>	<b>8,407</b>	<b>12,628</b>	<b>2,404</b>	<b>9,415</b>	<b>1,585</b>	<b>1,470</b>	<b>658</b>	<b>39,094</b>

On 1 July 2021, the Parent acquired the GeoNet sensor network from the Earthquake Commission at a notional cost by way of grant. A comprehensive exercise was undertaken to assess the fair value of the network on this date, and the assets have been accounted for at a fair value of \$11.6m. The fair value was calculated using the historical cost model. An independent third party reviewed this assessment and endorsed the approach.

In accordance with NZ IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* paragraph 23, the value of the funding grant has also been fair valued, and that value is carried as Capital Grants from the Crown, to be amortised over the remaining life of the network assets.

## 7. INTANGIBLE ASSETS

Software, patents and capitalised development costs have a finite life and are included at cost less accumulated amortisation and impairment. Amortisation is charged on a straight-line basis at rates calculated to allocate the assets' cost over their estimated remaining useful lives.

The estimated useful life and amortisation method are reviewed annually, with the effect of any changes in estimate being accounted for on a prospective basis.

The following useful lives are used in the calculation of amortisation:

Software	4 – 8 years
Capitalised development costs	4 – 8 years
Patents	4 – 20 years

<i>in thousands of New Zealand dollars</i>	Software	Patents	Capitalised development costs	Total
<b>Cost</b>				
Balance at 1 July 2020	5,922	216	515	<b>6,653</b>
Additions	172	-	-	<b>172</b>
Disposals	-	(78)	-	<b>(78)</b>
<b>Balance at 30 June 2021</b>	<b>6,094</b>	<b>138</b>	<b>515</b>	<b>6,747</b>
Additions	(73)	-	410	<b>337</b>
Disposals	(5)	-	-	<b>(5)</b>
<b>Balance at 30 June 2022</b>	<b>6,016</b>	<b>138</b>	<b>925</b>	<b>7,079</b>
<b>Accumulated amortisation</b>				
Balance at 1 July 2020	5,572	117	515	<b>6,204</b>
Amortisation	216	9	-	<b>225</b>
Disposals	-	(42)	-	<b>(42)</b>
Impairment	-	-	-	<b>-</b>
<b>Balance at 30 June 2021</b>	<b>5,788</b>	<b>84</b>	<b>515</b>	<b>6,387</b>
Amortisation	142	9	-	<b>151</b>
Disposals	(5)	-	-	<b>(5)</b>
Impairment	-	-	-	<b>-</b>
<b>Balance at 30 June 2022</b>	<b>5,925</b>	<b>93</b>	<b>515</b>	<b>6,533</b>
Net book value at 30 June 2021	306	54	-	<b>360</b>
<b>Net book value at 30 June 2022</b>	<b>91</b>	<b>45</b>	<b>410</b>	<b>546</b>

**8. TRADE RECEIVABLES***in thousands of New Zealand dollars*

	2022	2021
Trade receivables	7,484	5,828
Allowance for credit losses from doubtful debts	(24)	(73)
<b>Total trade receivables</b>	<b>7,460</b>	<b>5,755</b>

**Ageing profile of past due trade receivables at balance date***in thousands of New Zealand dollars*

	2022	2021
Past due 1-30 days	598	104
Past due 31-60 days	50	1
Past due over 61 days	40	119
<b>Total past due trade receivables</b>	<b>688</b>	<b>224</b>

The Group recognises a loss allowance for expected credit losses on trade receivables. The amount of expected credit losses is updated at each reporting date to reflect changes in the assessed credit risk since initial recognition of the respective receivable. At 30 June 2022 all overdue receivables have been assessed for impairment and appropriate provisions for estimated credit losses applied.

The credit quality of trade receivables that are past due but not impaired is otherwise considered sound.

The carrying value of receivables is considered to approximate their fair value.

**Movement in the allowance for credit losses***in thousands of New Zealand dollars*

	2022	2021
Balance at 1 July	73	29
Accounts written off during the year	(6)	(4)
Increase in credit loss allowance recognised in profit/(loss) before tax	10	64
Reversal of credit loss allowances on receivables subsequently received	(53)	(16)
<b>Total allowance for credit losses at 30 June 2022</b>	<b>24</b>	<b>73</b>



## 9. DEFERRED TAX

Deferred tax is accounted for using the comprehensive Balance Sheet liability method in respect of temporary differences arising from differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax base of those items. In principle, deferred tax assets or liabilities are recognised for taxable temporary differences.

Deferred tax assets are recognised to the extent that it is probable that sufficient taxable amounts will be available against which deductible temporary differences or unused tax losses and tax offsets can be utilised.

The carrying amount of deferred tax assets is reviewed and reduced to the extent that it is no longer probable that sufficient assessable income will be available to allow all or part of the assets to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised.

### Analysis of temporary differences

<i>in thousands of New Zealand dollars</i>	2022	2021
<i>Deferred tax assets/(liabilities) arise from the following:</i>		
Property, plant and equipment	389	213
Intangible assets	15	9
Provisions	1,942	1,664
Allowance for credit losses from doubtful debts	7	19
Capitalised relocation expenses	-	2
Capitalised SaaS expenses	504	-
<b>Deferred tax asset recognised at 30 June 2022</b>	<b>2,857</b>	<b>1,907</b>

### Movements in deferred tax

<i>in thousands of New Zealand dollars</i>	2022	2021
Balance at 1 July 2021	1,907	1,572
Charged to income	950	335
<b>Total deferred tax asset at 30 June 2022</b>	<b>2,857</b>	<b>1,907</b>

The amount charged to income in 2021 included an adjustment in respect of buildings acquired before May 2010, for which a deferred tax liability had been recognised in respect of depreciation, but which may now once again be depreciated for tax purposes.

## 10. EMPLOYEE ENTITLEMENTS

Liabilities for wages and salaries, annual leave, long service leave and retirement leave are recognised when it is probable that settlement will be required and they are capable of being reliably measured.

Employee benefits to be settled within twelve months are reported at the amount expected to be paid and are classified as current liabilities. Employee benefits not expected to be settled within twelve months are reported at the present value of the estimated future cash outflows.

Provisions for long service leave and retirement leave depend on a number of assumptions such as the expected employment period of employees and salary levels. During the course of the year, we have adopted the standard New Zealand Treasury model and assumptions for valuing long service leave provisions, resulting in a reduction in non-current long service leave provisions.

<i>in thousands of New Zealand dollars</i>	Current		Non-current	
	2022	2021	2022	2021
Annual leave	3,659	3,287	807	650
Long service leave	413	332	560	545
Retirement leave	35	21	50	84
<b>Total provision for employee entitlements</b>	<b>4,107</b>	<b>3,640</b>	<b>1,417</b>	<b>1,279</b>

## 11. TRADE AND OTHER PAYABLES

<i>in thousands of New Zealand dollars</i>	2022	2021
Trade payables	418	2,789
Accrued expenses	7,685	7,220
<b>Total trade and other payables</b>	<b>8,103</b>	<b>10,009</b>

Trade and other payables are non-interest bearing. The Parent follows government procurement rules with regard to prompt payment and seeks to make payment to all domestic suppliers within 10 business days. The carrying value of creditors and other payables approximates their fair value.

## 12. CASH AND CASH FLOWS

### Cash and cash equivalents and short term investments

Cash and cash equivalents consist of deposits at call and short term deposits with original maturities of less than three months. Short term deposits consist of investments with original maturity periods of between three and twelve months and are presented as a separate line item in the financial statements.

### Reconciliation of profit after tax to net cash flows from operating activities

*in thousands of New Zealand dollars*

	2022	2021
<b>Profit/(loss) after tax</b>	<b>(1,023)</b>	6,132
<b>Adjust items classified as investing activities:</b>		
Net gain on disposal of property, plant and equipment	(93)	(29)
<b>Adjust non-cash items:</b>		
Depreciation	7,325	5,185
Amortisation and impairment	151	225
Increase/(decrease) in credit allowance for doubtful debts	(49)	48
Increase/(decrease) in provision for income tax	(1,803)	2,042
Increase in deferred tax asset	(950)	(335)
Increase/(decrease) in non-current provisions	138	(34)
	<b>4,812</b>	7,131
<b>Adjust movements in working capital items:</b>		
(Increase)/decrease in accounts receivable and prepayments	(2,900)	2,545
Decrease in payables, current provisions and revenue in advance	1,287	3,305
Change in receivables and payables relating to investing activities	22	(33)
Decrease in work in progress	471	43
	<b>(1,120)</b>	5,860
<b>Net cash flows from operating activities</b>	<b>2,576</b>	19,094

### 13. RELATED PARTY TRANSACTIONS

The Crown is the ultimate shareholder of the Parent. No transactions with New Zealand Government owned entities are considered as related party transactions in terms of NZ IAS 24 *Related Party Disclosures*.

The total remuneration paid to Directors and key management personnel during the year was as follows:

<i>in thousands of New Zealand dollars</i>	2022	2021
<b>Key management personnel remuneration comprised:</b>		
Directors' fees	147	164
Salaries and short term benefits of the Chief Executive and Executive Leadership Team	1,908	2,259
<b>Total key management personnel remuneration at 30 June 2022</b>	<b>2,055</b>	<b>2,423</b>

Key management personnel, considered to be the Directors and Executive Management, are those people with responsibility and authority for planning, directing and controlling the activities of the entity. A number of key management personnel also provide directorship services to other third-party entities that have transacted with the Group during the reporting period.

Two new Directors were appointed to the Board in 2022.

Balances and transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Transactions between entities in the Group and Damwatch Projects Limited are disclosed below. Damwatch Projects Limited is a related party because it was a 50% partner with GNS Science International Limited, of the EDDI Project, an unincorporated joint operation.

<i>in thousands of New Zealand dollars</i>	Revenue/Purchases		Amounts payable/receivable			
	2022	2021	2022	2021		
GNS Science International Limited	Revenue	261	351	Payable by GNSSI	-	-
JV with Damwatch Projects Limited	Purchases	261	351	Receivable by GNSSI	-	229

The amounts owed between the parties are unsecured and have been settled in cash. The debt owed by the joint operation to GNS Science International Limited has been reduced by 50% on consolidation in these accounts: it was paid in full on 1 July 2022. No guarantees have been given or received. No provisions have been made for doubtful debts in respect of any amounts owed between related parties. Distributions owing to GNS Science International Limited at 30 June 2022 total \$0 (2021: \$7,673).

The joint operation has been terminated following completion of the underlying service contract.



## 14. FINANCIAL INSTRUMENTS

### Capital management

The Group manages its capital to ensure that entities in the Group will operate in a financially responsible manner, be financially viable and continue as going concerns.

The Group is not subject to any externally imposed capital requirements.

### Currency risk

The Group undertakes certain transactions denominated in foreign currencies. Exchange rate exposures may be managed within approved policy limits using forward foreign exchange contracts.

These derivative financial instruments are initially recognised at fair value on the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative. The resulting gain or loss is recognised in the Statement of Comprehensive Income immediately.

At balance date the Group had Australian Dollar forward exchange contracts to buy \$1m in respect of future commitments to pay for services denominated in Australian Dollars (2021: \$nil).

At 30 June the carrying amounts of the Group's foreign currency New Zealand denominated assets and liabilities were:

<i>in thousands of New Zealand dollars</i>	Liabilities		Assets	
	2022	2021	2022	2021
Australian Dollar	3	(32)	76	56
Canadian Dollar	-	-	1	-
Euro	-	(26)	9	7
Pounds Sterling	-	-	5	-
Swiss Franc	10	-	-	-
US Dollar	4	(17)	80	90
	17	(75)	171	153

### Interest rate risk

The Group has deposits on call as well as short term deposits on which interest is earned. Where possible, the Group manages exposures to interest rate fluctuations through prudent management of its treasury operations. Interest rates for short term deposits totalling \$13.2m held at 30 June 2022 ranged between of 1.70% and 3.95% (2021: 0.55% and 0.91%).

In managing interest rate risks the Group aims to reduce the impact of short term fluctuations on earnings. Over the longer term permanent changes in interest rates will have an impact on profit.

### Market risk and sensitivity analysis

As at 30 June 2022, if the New Zealand dollar had strengthened by 5% against foreign currencies, with all other variables held constant, the profit before tax for the year would have increased by \$210,000 (2021: increase \$149,000). A 5% weakening of the New Zealand Dollar would have decreased reported profit before tax by \$220,000 (2021: decrease \$157,000).

If interest rates had been 50 basis points higher and all other variables were held constant, reported profit before tax for the year would increase by \$57,000 (2021: \$40,000).

### Credit risk management

The financial instruments which expose the Group to credit risk are principally bank balances, short term investments and accounts receivable. The Group monitors credit risk on an ongoing basis.

Bank balances and short term investments are held with New Zealand registered banks in accordance with the Group's treasury policy.

No collateral is held by the Group in respect of bank balances, short term investments or accounts receivable. The maximum exposure to credit risk is represented by the carrying value of each financial asset in the Balance Sheet.

### Liquidity risk

The Group manages liquidity risk by maintaining adequate reserves, cash deposits and short term investments, by monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities, all of which are of a short term nature. The Group continues to generate sufficient cash flows from operations to meet financial liabilities.

## 15. COMMITMENTS

### Non-cancellable operating lease commitments

The Group has reviewed its lease commitments in light of NZ IFRS 16 *Leases* and has determined that there are none which meet the criteria set out in the standard to be recognised as Right of Use Assets in accordance with that standard.

Leases are classified as finance leases whenever the terms of the lease transfer a significant portion of all of the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group has no leases which would be classified as finance leases.

Operating lease payments are recognised on a systematic basis representing the pattern in which economic benefits from the leased asset are consumed over the lease term.

<i>in thousands of New Zealand dollars</i>	2022	2021
Within one year	159	162
Between one and five years	82	241
Over five years	7	7
<b>Total non-cancellable operating lease commitments</b>	<b>248</b>	<b>410</b>

### Capital commitments

<i>in thousands of New Zealand dollars</i>	2022	2021
Contracted and on order	-	587
Authorised but not yet contracted	3,148	2,061
<b>Total capital commitments</b>	<b>3,148</b>	<b>2,648</b>

## 16. CONTINGENT LIABILITIES

WorkSafe filed two charges against the Institute of Geological and Nuclear Sciences Limited on 30 November 2020 for offences under the Health and Safety at Work Act 2015. These charges relate to the volcanic eruption on Whakaari/White Island on 9 December 2019. The Group is defending the charges and filed a section 147 application to have the primary charge against it dismissed. WorkSafe has consented to the Group's application to have the primary charge dismissed. The Hearing date for the section 147 application is still to be confirmed.

The impact of these proceedings cannot be reliably quantified due to uncertainty around the outcome. However, as of 30 June 2022, if both charges are upheld, the maximum fine the Group may incur in respect of each charge is \$1,500,000. The Court may also order the Group to pay reparation.

(2021: \$nil disclosure).

## 17. EVENTS AFTER THE BALANCE DATE

Continuing uncertainties around the impact of COVID-19, which can cause short term disruptions to service delivery due to staff unavailability, may continue to affect the Group in future.

## 18. PREPARATION DISCLOSURES

### Statement of compliance

The financial statements have been prepared in accordance with New Zealand generally accepted accounting practice. They comply with New Zealand equivalents to International Financial Reporting Standards and other applicable Financial Reporting Standards, as appropriate for profit-oriented entities. The financial statements also comply with International Financial Reporting Standards.

Accounting policies have been applied consistently to all periods presented in the financial statements, as the Group determined that it has no material lease commitments that comply with the criteria set out in the standard.

### Measurement basis

The financial statements of the Group have been prepared on a historical cost basis, except that derivative financial instruments are measured at their fair value.

Transactions in foreign currencies are converted at the New Zealand rate of exchange ruling on the date of the transaction. Monetary assets and liabilities at year end are converted to New Zealand dollars at the exchange rate ruling at balance date.

The financial statements are presented in New Zealand dollars which is the Group's functional currency. All values are rounded to the nearest thousand dollars.

### Interest in joint arrangements

A joint arrangement is an arrangement whereby the Parent or its subsidiaries have joint control over an entity. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities of that entity require the unanimous consent of the parties sharing control. A joint arrangement is either a joint operation or a joint venture. For a joint operation the Group recognises its share of assets, liabilities, revenues and expenses on a line-by-line basis using the proportionate method. For a joint venture the Group recognises its interest in a joint venture as an investment and accounts for that investment using the equity method.

### Classification of financial assets and liabilities

The Group's financial assets consists of cash and cash equivalents, short term investments and trade receivables. These are measured at amortised cost. In the case of trade receivables, cost is reduced by an allowance for credit losses for doubtful debts.

The expected credit losses on Trade Receivables are analysed based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current and forecast direction of conditions at the reporting date.

Changes in the assessed value of doubtful debts are provided for as a credit risk allowance. New allowances are recognised in the Statement of Comprehensive Income. When a Trade Receivable is considered uncollectible, it is written off against the allowance. Subsequent recoveries of amounts previously written off are credited against the allowance.

Financial liabilities, excluding derivative financial instruments, consist of trade and other payables and are initially measured at fair value, net of transaction costs. They are subsequently measured at amortised cost. Derivative financial instruments are measured at fair value.

### Critical accounting estimates and judgements

In applying the accounting policies, there is the requirement for judgements, estimates and assumptions to be made about the carrying amounts of some assets and liabilities. The estimates and assumptions are based on historical experience and other relevant factors. Actual results may differ from these estimates.

Accounting policies where critical estimates have been made include property, plant and equipment, intangible assets, recognition of deferred revenue, impairment of assets and liabilities, and employee benefits. Judgement has been applied in determining not to value heritage assets for financial reporting purposes.

### New accounting standards

There are no standards and interpretations pending which would materially affect the Group Financial Statements.

### Further disclosure for COVID-19

Further COVID-19 disruptions on the scale of those caused by "Level 4" restrictions in August 2021 are not expected, and domestic and international travel is recovering to 2020 levels. Variant outbreaks may affect GNS Science's business into the future, should further restrictions be imposed.

Nevertheless, upon reviewing the current situation, and noting the strong financial performance in the current financial year despite the restrictions, the current level of cash reserves, and being more than 85% crown funded, the Directors are of the opinion the Group is well positioned to remain a going concern for the foreseeable future.

# STATEMENT OF RESPONSIBILITY

The Board is responsible for the preparation of the Group's annual financial statements and statement of performance and for the judgements made in them.

The Board through management is responsible for establishing and maintaining a system of internal control designed to provide reasonable assurances as to the integrity and reliability of the financial reporting.

In the opinion of the Board, the annual financial statements and statement of performance for the financial year ended 30 June 2022 fairly reflect the financial position and operations of GNS Science.

For and on behalf of the Board:



**Dr Nicola Crauford**  
Chair

16 September 2022



**Dr John Sharpe**  
Director

16 September 2022

# INDEPENDENT AUDITOR'S REPORT

## TO THE READERS OF INSTITUTE OF GEOLOGICAL AND NUCLEAR SCIENCES LIMITED'S GROUP FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2022

The Auditor-General is the auditor of Institute of Geological and Nuclear Sciences Limited Group (the Group). The Auditor-General has appointed me, Silvio Bruinsma, using the staff and resources of Deloitte Limited to carry out the audit of the financial statements of the Group on his behalf.

### Opinion

We have audited the financial statements of the Group on pages 13 to 29, that comprise the consolidated statement of financial position as at 30 June 2022, the consolidated statement of comprehensive income, consolidated statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the consolidated financial statements that include accounting policies and other explanatory information.

In our opinion, the financial statements of the Group:

- present fairly, in all material respects:
  - its financial position as at 30 June 2022; and
  - its financial performance and cash flows for the year then ended; and
- comply with generally accepted accounting practice in New Zealand in accordance with New Zealand Equivalents to International Financial Reporting Standards and International Financial Reporting Standards.

Our audit was completed on 29 September 2022. This is the date at which our opinion is expressed.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Board of Directors and our responsibilities relating to the financial statements, we comment on other information, and we explain our independence.

### Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible on behalf of the Group for preparing financial statements that are fairly presented and that comply with generally accepted accounting practice in New Zealand.

The Board of Directors is responsible for such internal control as it determines is necessary to enable it to prepare financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible on behalf of the Group for assessing the Group's ability to continue as a going concern. The Board of Directors is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the Board of Directors has to cease operations, or has no realistic alternative but to do so.

The Board of Directors' responsibilities arise from the Crown Research Institutes Act 1992.

## **Responsibilities of the auditor for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of these financial statements.

For the budget information reported in the financial statements, our procedures were limited to checking that the information agreed to the Group's statement of corporate intent and Board approved budget.

We did not evaluate the security and controls over the electronic publication of the financial statements.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board of Directors and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the financial statements, including the disclosures and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- We obtain sufficient appropriate audit evidence regarding the financial statements of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

## Other Information

The Board of Directors is responsible for the other information. The other information does not include the financial statements, and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## Independence

We are independent of the Group in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1: *International Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board.

Other than the audit, we have no relationship with, or interests in, the Group.



Silvio Bruinsma  
For Deloitte Limited  
On behalf of the Auditor-General  
Wellington, New Zealand



## Photograph acknowledgements

Science NZ Advert

Jess Brass, GNS Science.

Cover

### Principal location and registered office

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Tel: +64 4 570 1444  
Email: [avalon@gns.cri.nz](mailto:avalon@gns.cri.nz)

### Other locations

#### National Isotope Centre

30 Gracefield Road, Lower Hutt 5010, PO Box 31312, Lower Hutt 5040, New Zealand  
Tel: +64 4 570 1444  
Email: [gracefield@gns.cri.nz](mailto:gracefield@gns.cri.nz)

#### Wairakei Research Centre

114 Karetoto Road, RD4, Taupō 3384, Private Bag 2000, Taupō 3352, New Zealand  
Tel: +64 7 374 8211  
Email: [wairakei@gns.cri.nz](mailto:wairakei@gns.cri.nz)

#### Dunedin Research Centre

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Tel: +64 3 477 4050  
Email: [dunedin@gns.cri.nz](mailto:dunedin@gns.cri.nz)

#### Auckland

GridAkl, 12 Madden St, Wynyard Quarter, Auckland 1010, New Zealand  
Tel: +64 4 570 1444  
Email: [auckland@gns.cri.nz](mailto:auckland@gns.cri.nz)

### Our office locations and staffing

#### Auckland

15 staff

#### Wairakei

64 staff

#### Avalon

343 staff

#### Gracefield

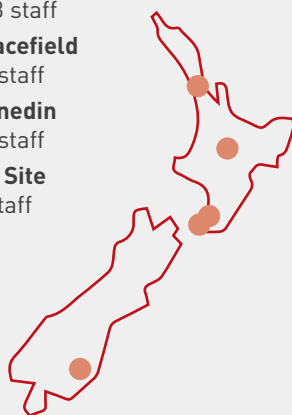
60 staff

#### Dunedin

11 staff

#### Off Site

4 staff



### Directors

**Dr Nicola Crauford**  
Chair

**Dr John Sharpe**

**Felicity Evans**

**Paul White**

**Andrew Cordner**

**Wendy Venter**

### Executive leadership team

**Ian Simpson**

Chief Executive

**Dr Gary Wilson**

General Manager,  
Research Strategy and Partnerships  
& Chief Scientist

**Peter Benfell**

General Manager,  
Science

**Andrew Simpson**

General Manager,  
Business Services

**Rose Macfarlane**

General Manager,  
People and Culture

**Tania Gerrard**

General Manager,  
Māori and Stakeholder Relations

### Bankers

ANZ

### Auditor

Silvio Bruinsma

Deloitte Limited

On behalf of the Auditor-General

### Solicitors

Chapman Tripp

### Websites

[www.gns.cri.nz](http://www.gns.cri.nz)

[www.geonet.org.nz](http://www.geonet.org.nz)

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# Science working for New Zealand

The Crown Research Institutes (CRIs) proudly work, individually and collectively, to create a more prosperous, sustainable and innovative New Zealand

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*āta mātai, mātai whetū*

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Science for Communities



Manaaki Whenua  
Landcare Research



Plant & Food  
Research  
Rangahau Ahumāra Kai



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EACH YEAR

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