

Jobs for Nature 2025 Q4 impact assessment

Final Report

24 October 2025

Disclaimer

This report has been prepared solely for the purposes stated in it. It should not be relied on for any other purpose.

No part of this report should be reproduced, distributed, or communicated to any third party, unless we explicitly consent to this in advance. We do not accept any liability if this report is used for some other purpose for which it was not intended, nor any liability to any third party in respect of this report.

Information provided by the client or others for this assignment has not been independently verified or audited.

Any financial projections included in this document (including budgets or forecasts) are prospective financial information. Those projections are based on information provided by the client and on assumptions about future events and management action that are outside our control and that may or may not occur.

We have made reasonable efforts to ensure that the information contained in this report was up to date as at the time the report was published. That information may become out of date quickly, including as a result of events that are outside our control.

MartinJenkins, and its directors, officers, employees, agents, consultants, and advisers, will not have any liability arising from or otherwise in connection with this report (or any omissions from it), whether in contract, tort (including for negligence, breach of statutory duty, or otherwise), or any other form of legal liability (except for any liability that by law may not be excluded). The client irrevocably waives all claims against them in connection with any such liability.

This Disclaimer supplements and does not replace the Terms and Conditions of our engagement contained in the Engagement Letter for this assignment.

Contents

Programme economic impacts **1**

2025 Q4 update to the economic impacts 2

Purpose 2

This report updates previous work 2

Update of the CBA results 2

Key assumptions 2

Summary of results 2

Update of the EIA results 5

Summary of results 5

Agency-level results **7**

Ministry for the Environment-only results 7

Update of the CBA (MfE) 7

EIA results (MfE) 8

Department of Conservation-only results 9

Update of the CBA (DOC) 9

EIA results (DOC) 9

Appendices

Appendix 1 : Impact assumptions 11

Appendix 2 : Analysis detail 19

Tables

Table 1: Summary of incremental costs and benefits ($000s) 3

Table 2: Incremental benefits ($000s) 4

Table 3: PV of economic benefits ($000s) 4

Table 4: PV of environmental benefits ($000s) 4

Table 5:	PV of wellbeing and other benefits ($000s)	5
Table 6:	Total economic impact assessment ($000s)	5
Table 7:	Economic impact assessment by region ($000s) – 2025 Q4 results	6
Table 8:	MfE summary of incremental costs and benefits ($000s) – 2025 Q4	7
Table 9:	MfE total economic impact assessment ($000s) –2025 Q4	8
Table 10:	MfE economic impact assessment by region ($000s) – 2025 Q4	8
Table 11:	DOC summary of incremental costs and benefits ($000s) – 2025 Q4	9
Table 12:	DOC total economic impact assessment ($000s) –2025 Q4	9
Table 13:	DOC economic impact assessment by region ($000s) – 2025 Q4	10
Table 14:	J4N project costs with retrospective adjustments ($000s)	19
Table 15:	New project(s) added	19
Table 16:	Removed and withdrawn projects	20
Table 17:	Funding stream changes – amounts	20

Figures

Figure 1:	Incremental costs and benefits over time (real 2020/21 dollars)	3
Figure 2:	MfE incremental costs and benefits over time (real 2020/21 dollars)	7
Figure 3:	DOC incremental costs and benefits over time (real 2020/21 dollars)	9



Preface

This report has been prepared for the Jobs for Nature Secretariat by Chelsea Steen-Jones from MartinJenkins (Martin, Jenkins & Associates Ltd).

For over 30 years MartinJenkins has been a trusted adviser to clients in the government, private, and non-profit sectors in Aotearoa New Zealand and internationally. Our services include organisational performance, employment relations, financial and economic analysis, economic development, research and evaluation, data analytics, engagement, and public policy and regulatory systems.

We are recognised as experts in the business of government. We have worked for a wide range of public-sector organisations from both central and local government, and we also advise business and non-profit clients on engaging with government.

Kei te āwhina mātau ki te whakapai ake i a Aotearoa. We are a values-based organisation, driven by a clear purpose of helping make Aotearoa New Zealand a better place. Our firm is made up of people who are highly motivated to serve the New Zealand public, and to work on projects that make a difference.

Established in 1993, we are a privately owned New Zealand limited liability company, with offices in Wellington and Auckland. Our firm is governed by a Board made up of Executive Partners and Independent Directors. Our Independent Directors are Jenn Bestwick and Chair David Prentice. Our Executive Partners are Sarah Baddeley, Nick Carlaw, Allana Coulon, Nick Davis, and Richard Tait. Michael Mills is also a non-shareholding Partner of our firm.

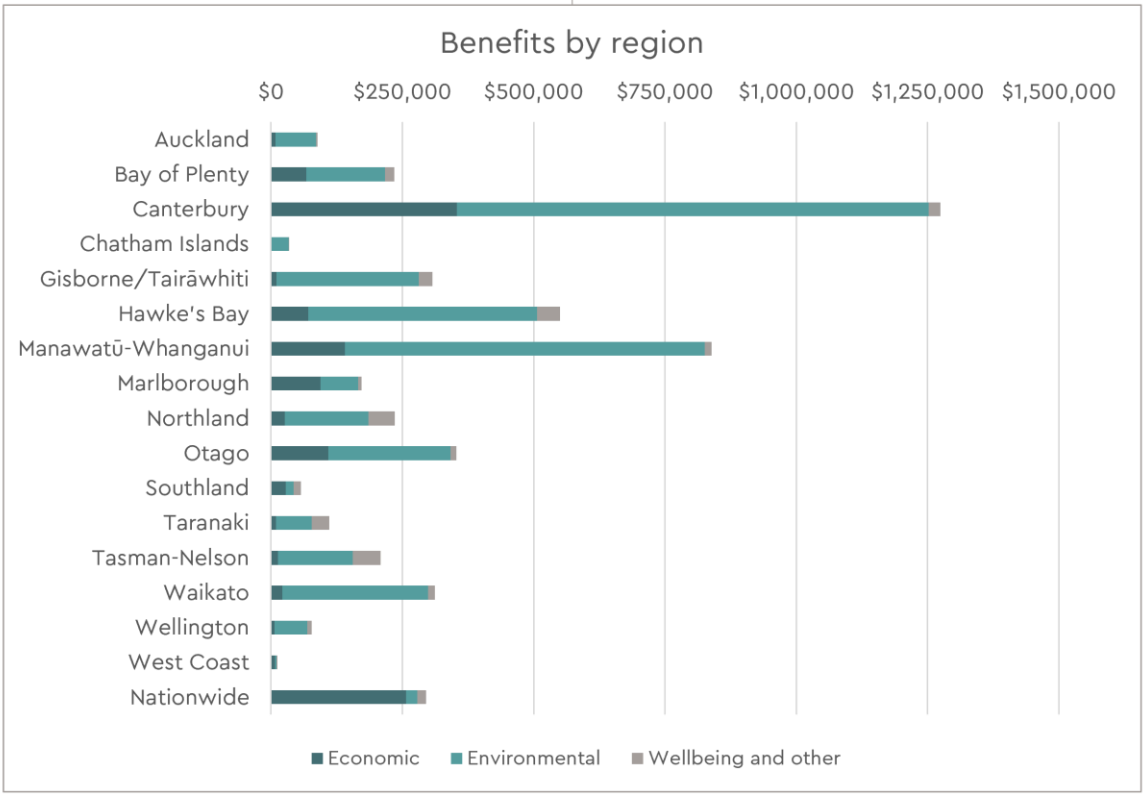


Programme economic impacts

J4N has delivered significant outcomes for the economy, environment and wellbeing

Total costs	Total benefits	Return on Investment
$1.312b	**$4.131b**	**3.15**

J4N funding paid	Payback period
$1.026b	**6.04 years**



Over 14 million plants and trees planted

Nearly 4.5 million hectares treated for animal pests

2.8 million hectares of conifers and weeds cleared

Nearly 16,000 jobs opportunities created

J4N projects will continue to have an impact

353 projects completed	178 projects continuing after 30 June 2025

2025 Q4 update to the economic impacts

Purpose

This report is written for the Ministry for the Environment as an input to its assessment about the impact of the Jobs for Nature programme.

The Ministry's assessment of the programme will provide a knowledge base for government and community organisations to inform future investment and plan responses to biodiversity, freshwater management, and climate change challenges.

This report updates previous work

In 2023, we developed a methodology for a cost-benefit analysis (CBA) and economic impact assessment (EIA) to quantify the impact of the Jobs for Nature programme, and applied the methodology using a combination of historical and forecast information. Our work was summarised in a report to the Ministry in October 2023 'Jobs for Nature – Mahi mō te Taiao: Understanding economic impacts of the programme', with updated CBA and EIA results provided in 2024.

In this report for 2025 Q4, we have updated the results for the CBA and EIA using the most recent information on project spend and output volumes, which was received for 2025 Q4. The EIA is based on 2019/20 regional output multipliers for agriculture, forestry, and fishing support services. Due to a gap in output data, Chatham Islands instead uses the regional repair and maintenance multiplier to reflect the effort that went into fencing across projects in the region.

Update of the CBA results

Key assumptions

Results are based on the inputs used in the initial 2023 model, with updated impact values based on period reporting, plus updated success rates where appropriate. We have taken a conservative approach and assumed 80% of benefits are realised at the end of the programme. Appendix 1 summarises the impact values and success rates that we used in the analysis.

Summary of results

Overall, the updated results show that that estimated payback period and BCR (benefit-cost ratio) have remained reasonably consistent, averaging between 5 and 7 years over the analysis period since 2023, and a BCR of between 2.46 and 3.37 since 2023, demonstrating a significantly positive impact associated with the investment.

In general, measurements of benefits have increased since we reported our initial results in 2023, which has largely come about due to improved data reporting provided by funding recipients since we commenced our analysis in 2023.

The table and graph below summarise the results of the CBA and provides the benefit cost ratio and payback period. The table shows how the results have changed over time as the reporting data has been updated.

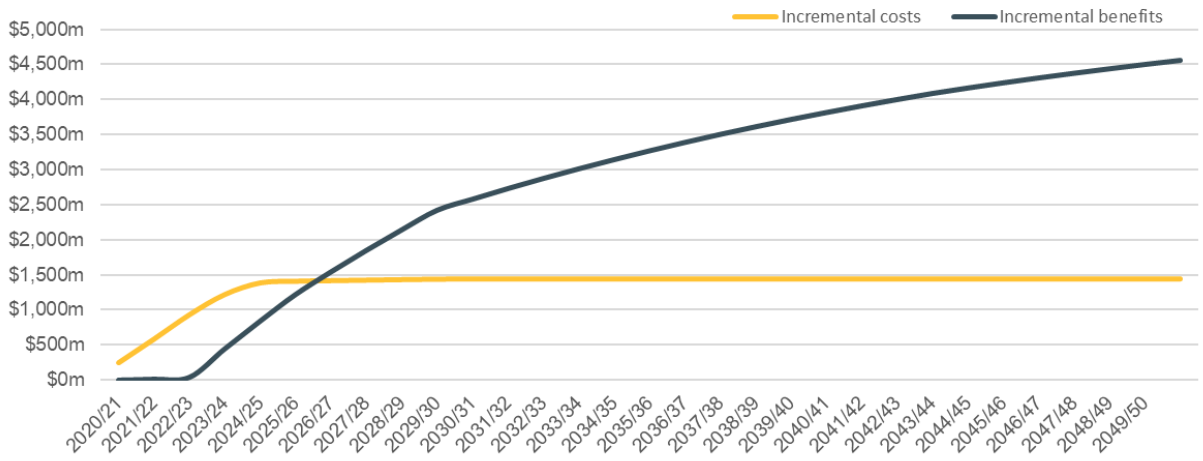


Table 1: Summary of incremental costs and benefits ($000s)

High-level summary	2023 Q4 results	2024 Q4 results	2025 Q4 results
Costs (PV)	$1,473,688	$1,170,133	$1,311,669
Benefits (PV)	$3,620,910	$3,943,424	$4,131,909
Net present value at 5%	$2,147,222	$2,773,291	$2,820,240
Benefit Cost Ratio (BCR)	2.46	3.37	3.15
Payback period	7.004 years	5.279 years	6.040 years

Note: Costs include J4N project costs (from actual payments made), non-J4N costs (including other government funding and partner funding), and the deadweight cost of taxation. 2023 Q4 costs were forecast based on the full project budget being spent. 2024 and 2025 Q4 costs are based on actual project spend.

Figure 1: Incremental costs and benefits over time (real 2020/21 dollars)



The programme has come to a close with an ROI of 3.15, having generated over $4 billion of benefits

Jobs for Nature has generated significant outcomes for the environment and economy, including:

- Planting over 14 million plants and trees, restoring native forests and riparian zones
- Treating nearly 4.5 million hectares for animal pests, including rats, wallabies, and possums
- Clearing 2.8 million hectares of wilding conifers and weeds, and
- Creating nearly 16,000 job opportunities.

As at 30 June 2025, final expenditure was $1.026 billion of the $1.183 billion budget, below the 2023 forecast.

Benefits have steadily risen year on year as more outputs have been reported by projects, resulting in a positive return for the programme overall. The main reason for the change in benefit values between 2023 and 2024 was from changes to reported volumes, with some impacts having updated assumptions.

In general, benefits estimated from the investment have increased since our first report produced, which largely reflects improvements in data collection and an improved understanding of the impacts that particular investments have generated.

Table 2: Incremental benefits ($000s)

Benefit summary	2023 Q4 results	2024 Q4 results	2025 Q4 results
Project benefits (10-year NPV)	$2,230,970	$2,221,752	$2,338,324
Economic benefits (30-year NPV)	$1,175,611	$914,535	$981,553
Environmental benefits (30-year NPV)	$2,012,584	$2,772,538	$2,881,577
Wellbeing benefits (30-year NPV)	$432,715	$256,351	$268,779
Total incremental benefits (30-year NPV)	**$3,620,910**	**$3,943,424**	**$4,131,909**

Note: Overall, an 80% benefit scaling was applied to as analysis to be conservative about programme impacts that are likely to be realised.

Table 3: PV of economic benefits ($000s)

Economic benefit	2023 Q4 results	2024 Q4 results	2025 Q4 results
Avoided flood damage	$5,125	$8,277	$8,314
Reduced stock loss in waterways	$1,575	$1,003	$1,078
Improved productivity for farmers due to reduced competition for grazing	$170,615	$242,323	$245,593
Reduced costs to the agricultural sector and government associated with pest control	$203,909	$218,639	$229,424
Avoided irrigation losses	$215,665	$232,980	$233,235
Avoided hydro losses	$268,451	$290,004	$290,321
Improved agricultural productivity	$140,234	$22,869	$23,070
Reduced pasture damage from possums	$1,218	$1,474	$1,626
Reduced youth unemployment	$168,818	$125,599	$178,446

Note: The value used to calculate agricultural productivity was updated in 2024 to a more conservative measure.

Table 4: PV of environmental benefits ($000s)

Environmental benefit	2023 Q4 results	2024 Q4 results	2025 Q4 results
Increased carbon sequestration	$36,177	$42,189	$34,556
Improved water quality	$43,784	$58,674	$59,809
Improved biodiversity	$324,728	$447,928	$456,591
Improved water clarity	$43,784	$39,116	$39,873
Soil retention	$5,212	$7,312	$8,547

Environmental benefit	2023 Q4 results	2024 Q4 results	2025 Q4 results
Reduced water treatment costs	$1,355,994	$2,648,820	$3,218,901
Reduced fire risks	$156,871	$169,466	$169,651
Avoided costs associated with managing biofouling	$46,035	$52,168	$52,168

Table 5: PV of wellbeing and other benefits ($000s)

Wellbeing and other benefits	2023 Q4 results	2024 Q4 results	2025 Q4 results
Improved recreational value	$937	$937	$952
Aesthetic appeal	$8,391	$8,113	$9,195
Reduced human health risks	$161,963	$49,965	$53,446
Improved cultural values	$184,429	$184,429	$184,429
Increase in fish catch	$76,995	$76,995	$78,484

Note: A significant reduction in the reported amount of fencing constructed / maintained in 2024 reduced the calculated value of reduced human health risks.

Update of the EIA results

Summary of results

The following table shows the estimated economic output and employment for direct,[1] indirect,[2] and induced[3] impacts at a national level. 2023 results are calculated using national rates, compared to 2024 and 2025 results which are calculated regionally.

Table 6: Total economic impact assessment ($000s)

National	Direct	Indirect	Induced	Direct + Indirect	Direct + Indirect + Induced
Output ($000s) 2023 Q4	$557,502	$466,882	$411,498	$1,024,385	$1,435,883
Output ($000s) 2024 Q4	$762,580	$434,262	$293,877	$1,196,842	$1,490,719
Output ($000s) 2025 Q4	$870,638	$498,229	$339,549	$1,368,867	$1,708,416
Employment (FTEs) 2023 Q4	6,516	4,258	2,781	10,774	13,555
Employment (FTEs) 2024 Q4	4,857	2,526	1,473	7,383	8,856
Employment (FTEs) 2025 Q4	5,637	2,948	1,726	8,586	10,311

[1] • **Direct impacts:** The J4N projects in the regions receive the direct Crown funding from the J4N programme and use this to hire and maintain staff on projects.

[2] **Indirect impacts:** The J4N projects make further purchases (such as additional trapping equipment, or riparian plants) from their suppliers and so on, some of which occurs in the study area.

[3] • **Induced impacts:** Employees of both the J4N projects and supplier firms are paid a wage, and some of these wages are spent on consumption in the study area.

The table below shows the estimated economic impact and employment at a regional level.

Table 7: Economic impact assessment by region ($000s) – 2025 Q4 results

Region	Programme expenditure	Economic output benefits (direct + indirect + induced)	Estimated FTEs (direct +indirect + induced)
Auckland	$25,355	$46,185	210
Bay of Plenty	$101,140	$192,852	935
Canterbury	$134,619	$279,381	1,281
Gisborne/Tairāwhiti	$42,337	$72,999	409
Hawke's Bay	$36,658	$69,428	391
Manawatū-Whanganui	$56,472	$102,361	570
Marlborough	$29,603	$50,917	313
Tasman-Nelson	$33,144	$56,879	404
Northland	$58,553	$102,748	572
Otago	$59,768	$114,756	546
Southland	$33,600	$55,496	259
Taranaki	$21,739	$34,089	122
Waikato	$45,339	$86,627	418
Wellington	$27,974	$45,701	317
West Coast	$25,849	$40,688	196
Chatham Islands	$4,399	$5,124	43
Regional total	**$736,549**	**$1,356,231**	**6,986**
Nationwide	$293,199	$352,185	3,325
Total	**$1,029,748**	**$1,708,416**	**10,311**

Agency-level results

The Jobs for Nature programme includes project funding managed by the Department of Conservation (DOC, 46% of programme costs), Ministry for the Environment (MfE, 29%), Ministry for Primary Industries (MPI, 17%), LINZ (4%), and Kānoa – Regional Economic Development & Investment Unit (4%).

Agency-level results have been calculated for MfE, which hosted the secretariat of the programme, and DOC as the agency with the greatest proportion of programme funding. We note that MPI has done in-house reviews of the impact of their projects, and the amount of funding distributed through LINZ and Kānoa is relatively small.

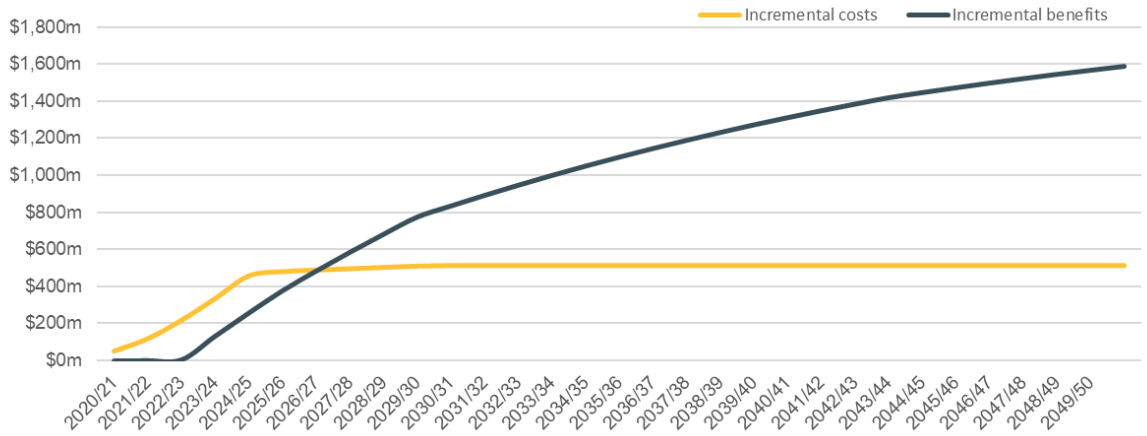
Ministry for the Environment-only results

Update of the CBA (MfE)

Table 8: MfE summary of incremental costs and benefits ($000s) – 2025 Q4

High-level summary	All agencies	MfE only
Costs (PV)	$1,311,669	$465,022
Benefits (PV)	$4,131,909	$1,440,790
Net present value (NPV) at 5%	$2,820,240	$975,767
Benefit Cost Ratio (BCR)	3.15	3.10
Payback period	6.040 years	6.142 years

Figure 2: MfE incremental costs and benefits over time (real 2020/21 dollars)



EIA results (MfE)

Table 9: MfE total economic impact assessment ($000s) –2025 Q4

National	Direct	Indirect	Induced	Direct + Indirect	Direct + Indirect + Induced
Output ($000s) all agencies	$870,638	$498,229	$339,549	$1,368,867	$1,708,416
Output ($000s) MfE only	$220,279	$131,279	$94,732	$351,558	$446,290
Employment (FTEs) all agencies	5,637	2,948	1,726	8,586	10,311
Employment (FTEs) MfE only	1,601	882	531	2,483	3,014

Table 10: MfE economic impact assessment by region ($000s) – 2025 Q4

Region	Programme expenditure	GDP benefits (direct + indirect + induced)	Estimated FTEs (direct +indirect + induced)
Auckland	$8,337	$15,186	69
Bay of Plenty	$19,124	$36,466	177
Canterbury	$9,051	$18,784	86
Gisborne/Tairāwhiti	$9,967	$17,186	96
Hawke's Bay	$11,872	$22,486	127
Manawatū-Whanganui	$18,492	$33,518	187
Marlborough	$7,450	$12,815	79
Tasman-Nelson	$12,322	$15,143	108
Northland	$14,064	$16,558	92
Otago	$15,239	$29,260	139
Southland	$5,511	$9,102	42
Taranaki	$8,392	$13,160	47
Waikato	$13,376	$25,557	123
Wellington	$12,330	$20,144	140
West Coast	$2,326	$3,662	18
Chatham Islands	$0	$0	0
Regional total	**$167,856**	**$289,026**	**1,530**
Nationwide	$130,924	$157,264	1,485
Total	**$298,780**	**$446,290**	**3,014**

National results are based on value added. Regional results are based on outputs, noting regional value-added multipliers overly discount for flows from internal transactions.

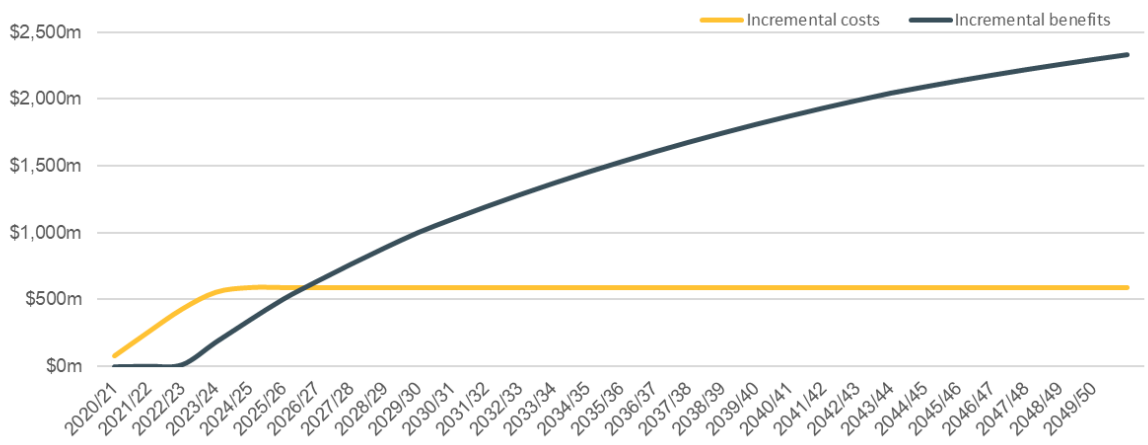
Department of Conservation-only results

Update of the CBA (DOC)

Table 11: DOC summary of incremental costs and benefits ($000s) – 2025 Q4

High-level summary	All agencies	DOC only
Costs (PV)	$1,311,669	$531,690
Benefits (PV)	$4,131,909	$2,116,785
Net present value (NPV) at 5%	$2,820,240	$1,585,096
Benefit Cost Ratio (BCR)	3.15	3.98
Payback period	6.040 years	6.034 years

Figure 3: DOC incremental costs and benefits over time (real 2020/21 dollars)



EIA results (DOC)

Table 12: DOC total economic impact assessment ($000s) –2025 Q4

National	Direct	Indirect	Induced	Direct + Indirect	Direct + Indirect + Induced
Output ($000s) all agencies	$870,638	$498,229	$339,549	$1,368,867	$1,708,416
Output ($000s) DOC only	$394,047	$222,182	$151,510	$616,230	$767,740
Employment (FTEs) all agencies	5,637	2,948	1,726	8,586	10,311
Employment (FTEs) DOC only	2,567	1,329	776	3,897	4,673

Table 13: DOC economic impact assessment by region ($000s) – 2025 Q4

Region	Programme expenditure	GDP benefits (direct + indirect + induced)	Estimated FTEs (direct +indirect + induced)
Auckland	$15,999	$29,142	133
Bay of Plenty	$65,767	$125,404	608
Canterbury	$41,081	$85,257	391
Gisborne/Tairāwhiti	$23,804	$41,044	230
Hawke's Bay	$17,337	$32,835	185
Manawatū-Whanganui	$23,266	$42,172	235
Marlborough	$8,280	$14,242	88
Tasman-Nelson	$13,293	$23,068	164
Northland	$31,722	$50,618	282
Otago	$15,993	$30,708	146
Southland	$13,968	$23,070	108
Taranaki	$11,463	$17,976	64
Waikato	$16,036	$30,640	148
Wellington	$12,807	$20,923	145
West Coast	$19,727	$31,052	150
Chatham Islands	$2,963	$3,451	29
Regional total	**$333,507**	**$601,600**	**3,104**
Nationwide	$138,314	$166,140	1,568
Total	**$471,821**	**$767,740**	**4,673**

National results are based on value added. Regional results are based on outputs, noting regional value-added multipliers overly discount for flows from internal transactions.

Appendix 1: Impact assumptions

The appendix summarises the impacts (or benefits) realised by the Jobs for Nature programme and how they are applied in the CBA. We have assumed that all impacts in the economic, environmental, and wellbeing categories have a 3-year lag before being realised, except for reduced unemployment which has a 1-year lag. All dollar amounts are adjusted to 2021 financial year values (the year the programme started).

Economic benefits

Impact	Value	Success rate	How the impact is applied
Avoided flood damage	The Nature Conservancy found that every dollar invested in floodplain conservation returns at least $5 in savings from avoided flood damages.[4] This is equal to NZ**$7.69 in 2020**, based on a 0.65 average closing price for the year.[5]	**11%** of residential properties in New Zealand are exposed to river flooding.[6] **One third** of at-risk properties are assumed to have avoided flood damage.	**Population growth** is assumed to drive occupancy of at-risk residential properties. 3.83% (one third of 11%) of the annual population growth are assumed to benefit from at least $1 of J4N work on floodplain conservation each.
Reduced stock loss in waterways	Stock is valued according to the National Standard Cost, provided by Inland Revenue, using the Rising 1-year beef cattle rate.[7] This is equal to **$495.30 in 2023**.	**10%** is used, assuming one cattle loss is avoided per year per 10km of fencing work done.	**Fencing (km)** reported is used, including new fencing, fencing maintained, riparian fencing, not riparian fencing, and new fencing constructed or existing fencing maintained.
Improved productivity for farmers due to reduced competition for grazing	The net value of agriculture ecosystems was calculated as $12.421b across 7,714,688 ha in 2012.[8] This is equal to a net value of **$1,610 per ha in 2012**.	**12.73%** is used. This is calculated by a 90% reduction in wallaby numbers for every hectare treated[9], an assumption that 8.125% of area reported is unique, and that a 1.741 production loss	**Area covered by farm environment plans completed (ha)** is used, assuming that environment plans are focused, at least in part, on improving productivity through reducing competition for grazing. It is also assumed that grazing competition responses are at least as effective as wallaby

4 https://www.nature.org/en-us/what-we-do/our-priorities/tackle-climate-change/climate-change-stories/natures-potential-reduce-flood-risks/

5 https://www.macrotrends.net/2557/new-zealand-us-dollar-exchange-rate-historical-chart

6 https://www.rnz.co.nz/news/national/473366/river-flooding-costs-upwards-of-100m-a-year-and-rising-report

7 https://www.taxtechnical.ird.govt.nz/determinations/livestock/standard-costs/nsc-2023

8 https://www.landcareresearch.co.nz/assets/Publications/Ecosystem-services-in-New-Zealand/3_2_Patterson.pdf

9 https://www.mpi.govt.nz/dmsdocument/11764-Review-of-current-and-future-predicted-distributions-and-impacts-of-Bennetts-and-dama-wallabies-in-mainland-New-Zealand

Impact	Value	Success rate	How the impact is applied
		multiplier[10] is avoided.	treatment, noting different regions will be responding to different issues.
Reduced costs to the agricultural sector and government associated with pest control	In 2019-20 the total defensive expenditure (cost of pest management in the primary sector) was $1.46b (ex GST).[11] Based on the reported costs by pest type, 20% of this is the cost of vertebrates. Based on size of the agricultural ecosystem[12] this equals to **$38 per ha in 2020**.	**25%** is assumed to reflect the avoided expenditure for pest management going forward as a result of the pest population management projects.	**Pest control – animals (ha)** reported is used, including area treated for possums, rats and/or mustelids, goats, deer, wallabies, other animal pests, and animal pest control completed.
Avoided irrigation losses	In research that estimated the impact of wilding conifers on irrigation in Otago, this was assumed to be worth **$19.08 per ha infested by wildings in 2018**.[13] This rate is used as a proxy for all regions.	**100%** is assumed as the success rates have been considered in the value of the impact in the research, and the only the areas treated for wildings are considered.	**Area treated for wilding conifers (ha)** is used. This impact will be significant in Canterbury and Otago which make up 64% and 13.5% of New Zealand's total irrigated land area (735,000 ha).
Avoided hydro losses	In research that also estimated the hydro impact of wilding conifers in Otago, this was assumed to be worth **$23.75 per ha infested by wildings in 2018**.[14] This rate is used as a proxy for all regions.	**100%** is assumed as the success rates have been considered in the value of the impact in the research, and the only the areas treated for wilding conifers are considered.	**Area treated for wilding conifers (ha)** is used. Hydro impacts are significant for areas of major hydro resource which are vulnerable to impacts from wilding invasion.
Improved agricultural productivity	Pest plants including giant buttercup, Californian thistle, gorse, blackberry, and powdery mildew in 2020 each costed from $8m to $722m annually in production losses.[15] Across the 7.7m ha of agricultural ecosystems,	**14.15%** is used. This assumes that 8.125% of area reported is unique and that a 1.741 production loss multiplier[16] is avoided.	**Area treated for weeds (ha)** is used. The value assumes an average of the cost for a range of species, noting there is no detail on what weeds have been treated.

10 https://www.mpi.govt.nz/dmsdocument/48496-Economic-costs-of-pests-to-New-Zealand-Technical-report

11 See 10

12 See 8

13 https://landwaterpeople.co.nz/wp-content/uploads/2020/01/Otago-RPMP-cost-benefit-analysis-1-november-2018.pdf

14 See 13

15 See 10

16 See 10



Impact	Value	Success rate	How the impact is applied
	this on average equals to **$30 per ha in 2020**.		
Reduced pasture damage from possums	Possums in 2020 were calculated as costing $29m annually in production losses.[17] Across the 7.7m ha of agricultural ecosystems, this on average equals to **$4 per ha in 2020**.	**14.15%** is used. This assumes that 8.125% of area reported is unique and that a 1.741 production loss multiplier[18] is avoided.	**Area treated for possums (ha)** is used to consider the avoided production losses from damage caused by possums. This measure is distinct from reduced costs for pest control, which considers the pest management costs saved for farmers and landowners from efforts through the programme to control pest populations.
Reduced youth unemployment	The cost of youth unemployment is based on the Youth payment in Treasury's CBAx[19] calculated on the basis of a proportion of jobs going to youth who otherwise would have been unemployed. This equals **$16,009 per year in 2024**.	**25%** of employment starts are assumed to be taken up by youth.	Cumulative **employment starts** each year is used to approximate the total incremental FTEs opportunities created with programme expenditure. These are included for the duration of the programme with a 1-year lag.

17 See 10

18 See 10

19 https://www.treasury.govt.nz/publications/guide/cbax-spreadsheet-model

Environmental benefits

Impact	Value	Success rate	How the impact is applied
Increased carbon sequestration	The value of CO2 sequestration per tree is calculated by assuming 10 tCO2 per ha per year is reduced over 50 years, [20] that Treasury's CBAx gives a shadow emissions value central price path per tCO2 up to 2030 of $149 in 2024,[21] and that there are 1,400 trees planted per ha.[22] This gives a value of **$1.06 per tree in 2024**.	**100%** is assumed, noting the value is calculated conservatively with the low end of CO2 sequestration per ha, and high end of planting density.	**Number of trees planted** is used, with a calculated value of carbon sequestration per year applied.
Improved water quality	The value is based on the willingness to pay for a % point increase in water quality in terms of ecological quality (MCI score) per person in Treasury's CBAx.[23] This equal **$6 per person in 2015**.	**10%** is assumed on the basis that it takes 10 years for interventions to realise the full benefits of improved water quality.[24]	**Population growth** is used to drive the number of people benefitting from increased water ecological quality, which is given as a per person value.
Improved biodiversity	This value is based on the willingness to pay to prevent the extinction of up to 10 susceptible native species.[25] This equals **$101 per person in 2017**.	**5%** is assumed. Further data will be needed on at risks species protected to explore the impact.	**Population growth** is used to drive the number of people valuing avoided extinction of native plants and animals, which is given as a per person value.
Improved water clarity	The value is based on the willingness to pay for a % point increase in water quality based on water clarity (visibility between 1.2m and 2.4m) per person in Treasury's CBAx.[26] This equal **$4 per person in 2015**.	**10%** is assumed on the basis that it takes 10 years for interventions to realise the full benefits of improved water quality.[27]	**Population growth** is used to drive the number of people benefitting from increased water clarity, which is given as a per person value.

20 https://climateandnature.org.nz/wp-content/uploads/2022/09/1Carbon-Sequestration-by-Native-Forest%E2%80%93Setting-the-Record-Straight.pdf

21 See 19

22 https://www.forestenterprises.co.nz/wp-content/uploads/2018/02/GuidetoForestry.pdf

23 See 19

24 https://environment.govt.nz/assets/Publications/Files/essential-freshwater-package-benefits-analysis.pdf

25 See 19

26 See 19

27 See 24

Impact	Value	Success rate	How the impact is applied
Soil retention	As topsoil is the main limited resource lost. Topsoil costs $69.56 per m^3 excluding GST.[28] There are 0.67m^3 per tonne of topsoil.[29] This gives topsoil a value of **$417.39 per nine tonnes in 2023**.	**25%** of 9 tonnes of avoided soil loss per ha per year as a result of riparian planting is assumed to be topsoil.[30]	**Freshwater restoration (ha)** reported is used, including area of riparian strip restored by plantings, freshwater area under active restoration, and area of riparian / lake / wetlands planting complete.
Reduced water treatment costs	The value is based on the cost of replacing wetland ecosystem services with physical infrastructure in Treasury's CBAx.[31] This equals **$50,000 per ha per year in 2019**.	**100%** is assumed assuming freshwater restoration is full effective.	**Freshwater restoration (ha)** reported is used, including area of riparian strip restored by plantings, and freshwater area under active restoration.
Reduced fire risks	Research on the Benefits and Costs of Additional Investment in Wilding Conifer Control assumes that wildfire risk is not removed entirely by wilding conifer control but it results in a reduction in future suppression costs and associated damages which is deemed a reasonable assumption.[32] It values the benefit as **$6.24 per ha controlled per year in 2021**.	**100%** is assumed, with the value factoring in the success rate of reduced fire risk.	**Area treated for wilding conifers (ha)** reported is used. This links to the basis used in the research on benefits for controlling wilding conifers.
Avoided costs associated with managing biofouling	The direct economic costs of managing biofouling in the aquaculture industry are estimated to be 5–10% of production costs.[33] Aquaculture production costs were estimated at between $7000-$9000 per ha with a mid-value of $8000 per ha.[34] Cost of managing biofouling therefore ranges from $400 to $800 per ha. Using the low	50% is assumed, based on the rate of biofouling on aquaculture equipment due to invasive species.[35]	**Area where aquatic weeds were controlled (ha)** reported is used.

28 https://www.landscapesupplyco.nz/product/screenedtopsoil1m3/?v=c97b334ffd41

29 https://www.rolawn.co.uk/information-advice/topsoil/choosing-topsoil/calculating-requirements/

30 https://www.mtm.ac.nz/wp-content/uploads/2017/12/FINAL-PUBLISHED-REPORT-WAIWIRI-CBA-cover.pdf

31 See 19

32 https://www.mpi.govt.nz/dmsdocument/58519/direct

33 https://testbiofouling.imo.org/wp-content/uploads/2024/05/Aquaculture-report.pdf

34 See 8

35 https://nzaquaculture.co.nz/old-archives/AC42.pdf

Impact	Value	Success rate	How the impact is applied
	end, it is valued at $400 per ha in 2012.		

Wellbeing benefits

Impact	Value	Success rate	How the impact is applied
Improved recreational value	Recreational value is based on the marginal willingness to pay for campgrounds and huts.[36] This equals **$5.58 per person in 2013**.	**2.5%** is assumed. Studies suggest that the expected annual increase in visitor numbers resulting from maintenance of recreational facilities ranges from 1% to 5% depending on factors such as the type of facility, quality of maintenance, popularity and the local demographics.[37] [38]	**Recreational visitors** are assumed to benefit from improved access to nature.
Aesthetic appeal	The aesthetic benefit of afforestation is estimated £42/ha/year in 2018.[39] This is equal to NZ**$81.01 in 2018**, based on an average exchange rate of 1.9289 for the year.[40]	**100%** is assumed.	**Ecosystem restoration (ha)** reported is used, including area restored by plantings, area of afforestation or other biodiversity planting, area under active restoration, and area of planting for erosion control completed.
Reduced human health risks	Studies show that fencing works especially well reducing of E. coli that can result from animal waste and which in turn poses human health risks. The Essential Freshwater Package Benefit Analysis estimated the reduced risk of infection for swimmers at $138 million per annum for the fencing of 32,000 km of waterways[41] which equates to a reduced human health risk benefit of **$4,313 per kilometre of fencing in 2021**.	62% is the median value of E. coli removal as a result of fencing.[42]	**New fencing constructed or existing fencing maintained (km)** reported is used.

36 https://ageconsearch.umn.edu/record/152163/?ln=en&v=pdf

37 https://www.doc.govt.nz/globalassets/documents/about-doc/role/visitor-research/visitor-insights-report-2020-2021.pdf

38 https://ageconsearch.umn.edu/record/152163/?ln=en&v=pdf

39 https://onlinelibrary.wiley.com/doi/epdf/10.1111/jfr3.12482

40 https://www.exchangerates.org.uk/GBP-NZD-spot-exchange-rates-history-2018.html

41 https://environment.govt.nz/assets/Publications/Files/action-for-healthy-waterways-information-on-benefits-and-costs.pdf

42 https://www.mcguinnessinstitute.org/wp-content/uploads/2021/12/2017-09-Effectiveness-of-fencing-AgResearch-Report.pdf



Impact	Value	Success rate	How the impact is applied
Improved cultural values	The willingness to pay for Māori cultural attributes is estimated at between $140 and $180 per person,[43] with an average of **$160 per person in 2021**.	**10%** is assumed as a proxy for the reach of projects focused on cultural values in their approach or outcomes.	**Māori population** is used, assuming cultural values, while important to many New Zealanders, we assume that there is a net off between Māori people that do not value cultural attributes and non-Māori that do.
Increase in fish catch	Studies show that improved water quality can increase the availability of fish populations by up to 50%.[44] Research estimates that the WTP for additional fish caught ranges from $1.61 to $19.76/angler/year.[45] The median value was **$5.73 in 2001**.	**7%** is assumed to reflect the percentage of the population that fish. It is estimated that 14% of the population participates in recreational fishing per annum with participation in freshwater fishing estimated at 8%.[46] 348,000 estimated recreational fishers as at 2017/18, for a proportion of 6.94% of the population.[47]	**Population growth** is assumed to reflect the increase in people benefiting from fishing with increased fish populations.

43 https://environment.govt.nz/assets/Resource-Economics-Report.pdf

44 https://docs.niwa.co.nz/library/public/NIWAsts53.pdf

45 https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-8489.00159

46 https://www.mpi.govt.nz/news/media-releases/new-survey-measures-recreational-fishing/

47 https://legasea.co.nz/2015/06/29/important-research-into-recreational-fishing/



Appendix 2: Analysis detail

Adjustments to the data

The programme has made some retrospective adjustments to the quarterly reporting of project spend (shown in the table below). The analysis in this report is based on the costs reported in 2025 Q4.

Table 14: J4N project costs with retrospective adjustments ($000s)

	2020/21	2021/22	2022/23	Total
2023 Q4 results	$170,654	$242,637	$224,605	$637,896
2024 Q4 results	$169,970	$234,820	$257,279	$662,169
2025 Q3 results	*$173,656*	*$239,496*	*$262,378*	*$675,530*
2025 Q4 results	$173,647	$239,134	$262,378	$675,160

Since 2025 Q3, seven projects have been added to the dataset. All of these projects have a contract signed 12 June 2025, and an estimated project completion date of 30 June 2025.

Table 15: New project(s) added

Agency	Project Id	Project Name
MfE	EFF2001	Mid Canterbury Catchment Collective FY26 catchment funding
MfE	EFF2002	South Westland Catchment Group FY26 catchment funding
MfE	EFF2003	Motueka Catchment Collective FY26 catchment funding
MfE	EFF2004	Whanganui Region Catchment Collective FY26 catchment funding
MfE	EFF2005	Piroa Conservation Trust FY26 catchment funding
MfE	EFF2006	Tukituki Land Care FY26 catchment funding
MfE	EFF2007	Taranaki Catchment Communities FY26 catchment funding

Five projects have been removed from reporting. Three of these have had the full amount of allocated funding paid out, and are now being reported as FIF3000 – FIF3 letters of contribution.



Table 16: Removed and withdrawn projects

Agency	Project Id	Project Name	Status	Allocated funding	Total project expenditure
MfE	ARC05	ARC Envelope	Removed	$238,456.60	$0.00
MfE	FIF3113	Matakana and Glen Eden Rivers Restoration Project	Removed	$10,000.00	$10,000.00
MfE	FIF3137	Regenerating Okaruru	Removed	$10,000.00	$10,000.00
MfE	FIF3143	Te Wharau stream catchment restoration	Removed	$10,000.00	$10,000.00
MfE	FIF3058C	Te Hunga Tiaki Wai Kokopu	Removed	$77,000.00	$0.00

There also appears to have been a reallocation of MfE funding across the Freshwater Improvement Fund and Essential Freshwater Fund.

Table 17: Funding stream changes – amounts

Funding Stream ID	Fund Or Programme Name	2025 Q3 funding	2025 Q4 funding
MfE_FIF_T1	Freshwater Improvement Fund	$35,609,627.70	$35,633,381.72
MfE_FIF_T2	Freshwater Improvement Fund	$17,834,962.10	$17,991,962.10
MfE_PW	Essential Freshwater Fund	$132,468,463.81	$132,287,709.79
	Total	**$185,913,053.61**	**$185,913,053.61**

We also applied a consistent spelling of Hawke's Bay in the regional data in order for calculations to work properly in the CBA model.

MARTIN JENKINS

Wellington T +64 4 499 6130
Level 1, City Chambers, Cnr Johnston and Featherston Streets, Wellington 6011, PO Box 5256, Wellington 6140, New Zealand

Auckland T +64 9 915 1360
Level 16, 41 Shortland Street, Auckland 1010, New Zealand

info@martinjenkins.co.nz **martinjenkins.co.nz**