

PROPERTY ECONOMICS

POUARUA WATER STORAGE

PROJECT GISBORNE FAST-TRACK

ECONOMIC IMPACT ASSESSMENT

Client: Wi Pere Trust

Project No: 52590

Date: May 2026



SCHEDULE

Code	Date	Information / Comments	Project Leader
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TABLE OF CONTENTS

1. INTRODUCTION.....	4
2. EXECUTIVE SUMMARY	6
3. GENERAL INFORMATION.....	9
4. ECONOMIC BENEFITS OVERVIEW	12
5. ECONOMIC CONTEXT FOR EIA.....	16
6. TOTAL ECONOMIC ACTIVITY FROM DEVELOPMENT AND CONSTRUCTION	17
6.1. PROJECT'S INJECTION INTO THE GISBORNE ECONOMIC ACTIVITY.....	17
6.2. ASSUMPTIONS, UNDERPINNING DATA AND EXCLUSIONS	18
6.3. SENSITIVITY ANALYSIS	19
6.4. TOTAL GISBORNE DIRECT AND INDIRECT EMPLOYMENT.....	20
7. CONCLUSION.....	22
APPENDIX 1. EXPLANATIONS OF EIA MODELLING PROCESS	23
APPENDIX 2. EXPLANATIONS OF EIA MODELLING OUTCOMES.....	24

1. INTRODUCTION

Property Economics has been commissioned by Wi Pere Trust to assess and quantify the economic benefits that will flow from their application for the proposed development of the Pouarua Water Storage Scheme (the “**Project**”), under the Fast-track Approvals Act 2024 (“**FTAA**”).

Project Overview

The Project involves the development and construction of a zoned earth embankment structure with height ranging from 34 to 39m and crest length between 190 to 230m. The projected Normal Top Water Level (NTWL) ranges from 60 to 65m above sea level, creating a reservoir storage capacity between 25.1 and 38.6 million m³ respectively. For perspective, this could be compared to the recently completed Waimea Dam in Nelson/Tasman which has a live reservoir volume of about 12 million m³. The Pouarua Reservoir would extend up to 5.0km upstream from the dam site, covering a surface area of between 240 to 300ha depending on the selected NTWL.

Given this context, this report evaluates the economic benefits of the proposed development, and where possible, quantifies the gains arising from improved irrigation capacity and expanded irrigated areas for the region's primary industries and wider economy.

Considerations under the Fast-track Approvals Act

The economic impact assessment (“**EIA**”) of this report is designed to provide an economic assessment in terms of the FTAA based around economic injection, employment, and scale of economic impacts / benefits for the economy. Provisions of the FTAA that are directly relevant to this report include:

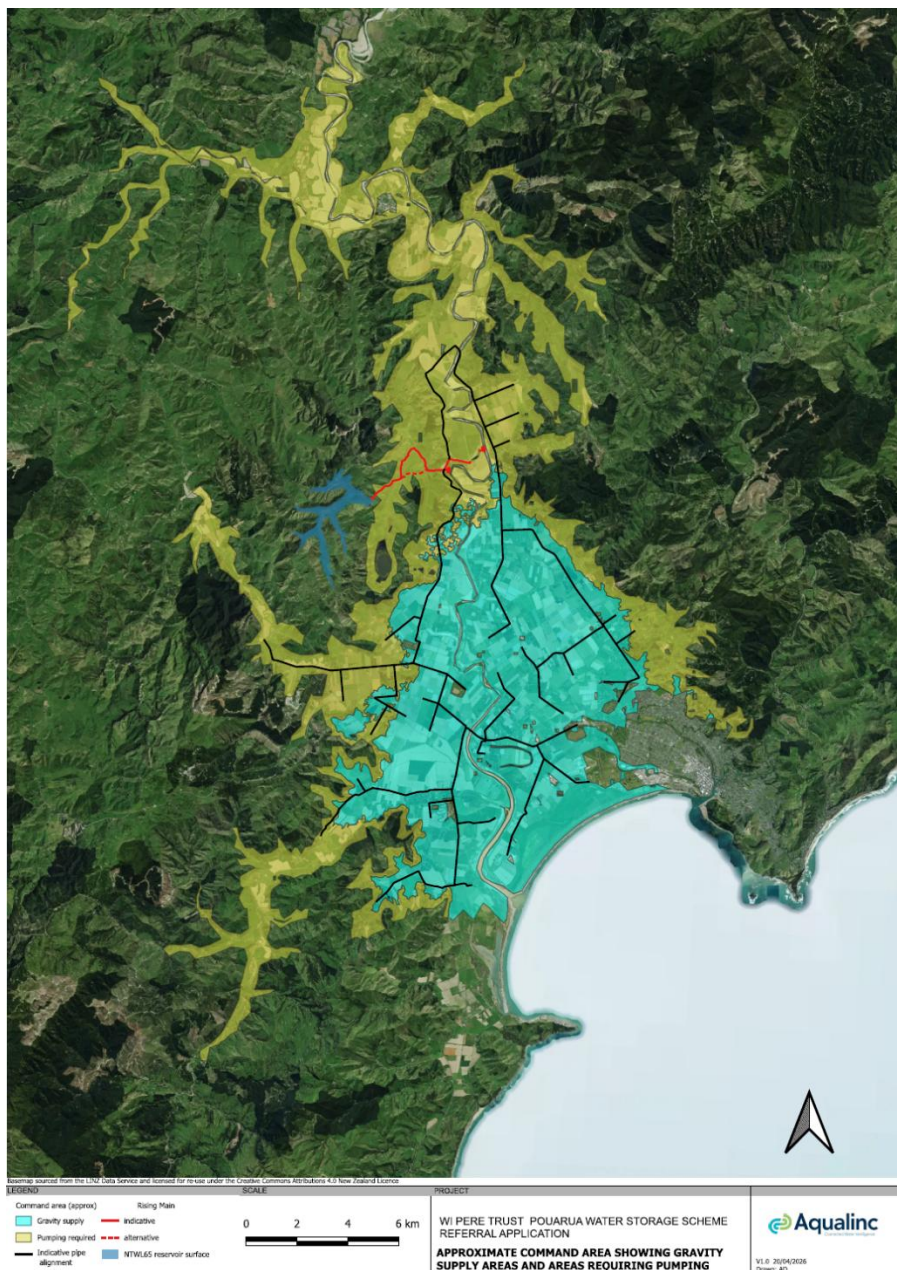
- Section 3 which states that, “*The purpose of this Act is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.*”
- Section 13 which outlines the information requirements for a referral application.
- Section 22 which outlines the criteria for assessing referral application.
- Schedule 5 Clause 2 which outlines information about resource consent or notice of requirement required in referral application.

In short, the FTAA seeks to facilitate infrastructure and development proposals where the proposed development results in significant regional or national benefits. In assessing whether a project has such benefits, the following matters (of particular relevance to the current Project) may be considered:

- Whether the project will enable the continued functioning of existing regionally or nationally significant infrastructure.
- Whether the project will increase the supply of housing, address housing needs, or contribute to a well-functioning urban environment (as per Policy 1 of National Policy Statement on Urban Development 2020 (“NPS-UD”).
- Whether the project will deliver significant economic benefits.

Figure 1 following provides an outline of the indicative command area of the Project.

FIGURE 1: INDICATIVE COMMAND AREA



2. EXECUTIVE SUMMARY

The Project involves the development and construction of a zoned earth embankment structure with height ranging from 34 to 39m and crest length between 190 to 230m. The Normal Top Water Level (NWTL) ranges from 60 to 65m above sea level, creating a reservoir storage capacity between 25.1 and 38.6 million m³ respectively. The Pouarua Reservoir extends up to 5.0km upstream from the dam site, covering a surface area of between 240 to 300ha depending on the selected NWTL.

The construction of a dam and reservoir on the Pouarua Stream will store water collected from two main sources: (1) naturally occurring runoff from the local catchment, and (2) water harvested from high-flow allocation by pumping from the nearby Waipaoa River. Stored water would then be released when demand is high and / or existing supplies are restricted to a downstream water reticulation system for a range of potential uses, including new high-value land-use irrigation, balancing shortfalls in existing water allocations, and to improve supply security for Gisborne's potable water supply.

Based on our understanding, the Waipaoa River A Block is fully allocated and therefore no water from this block is available for storage refill. Water is available for harvesting from the B Block, subject to securing resource consent to take this water. However, this allocation block is generally not considered sufficiently reliable to be a run-of-river source for irrigation and therefore there is currently allocation remaining.

Drawing on the provided cost information, the total quantified impact on business activity within the Gisborne Region resulting from the Project's development and construction is estimated and summarised in the table below:

Snapshot of Economic Benefits from Construction of the Proposed Development:

Estimated Quantitative Economic Impacts on Gisborne Regional Economy:	
Total direct expenditure over a 4-year development period ¹ (excluding land)	\$203.8m
Total NPV ² at 8% over a 4-year development period	\$71.8m
Total NPV at 2% ³ over a 4-year development period	\$82.6m
FTE years ⁴ during the peak development year	271 FTE years
Total FTE years over the 4-year development period	555 FTE years
Total direct employment over the development period	211 FTE years
Total indirect and induced employment over development period	344 FTE years

In Property Economics' view, the Project can be expected to generate significant flow-on / additional benefits for the primary sector, the wider economy, and the community, which are considered significant within a regional economic context.

Based on our assessment, the new irrigated areas and supplementary supply enabled by the proposed development (i.e. totalling approximately 11,000ha) are estimated to generate a net increase of about \$628m in value-added GDP (NPV) to the regional economy over a 30-year period at full capacity applying an 8% discount rate. At a 2% discount rate, this net contribution increases to approximately \$1.25 billion.

In addition to these benefits, there would be additional municipal water supply provided by the proposed development. At a conservative upper estimate of additional 12 million m³, this would equate to approximately 2 years of demand for Gisborne City.

Furthermore, non-monetised economic benefits generated by the Project for the wider regional market and communities, include:

- Food security and potential export growth
- Regional investment and economic growth stimulation
- Opportunities for Māori landowners and community development

¹ Note that 4-year development period assessed in this EIA represents a full 4 years of active economic activity, including pre-construction activities such as planning, design work, procurement and contracting.

² Net Present Value.

³ Sensitivity analysis applying 2% NPV as per Treasury guidelines for commercial development.

⁴ NB These are all jobs created through the direct construction phase including indirect and induced employment through all business sectors (not solely construction jobs) and relate to job years rather than one employee.

- Regional economic resilience against climate variability and extreme events through improved water security

In light of the above economic benefits, the Project would deliver flow-on wider economic benefits to the economy and community that are considered significant in a regional economic context.

Therefore, our assessment supports the proposed development from an economic perspective in the context of the Resource Management Act 1991 (**RMA**) and FTAA.

3. GENERAL INFORMATION

STATEMENT OF EXPERIENCE

Philip Osborne - I am an economic consultant and Director of Property Economics Limited, based in Auckland.

My qualifications include Bachelor of Arts (History / Economics), Masters in Commerce, and Masters in Planning Practice from the University of Auckland.

I have 25 years' experience advising local and regional councils, central government agencies, and private developers throughout New Zealand in respect of a wide range of property issues, including economic impact assessments, commercial and residential market assessments, economic cost benefit analyses and forecasting market growth and land requirements across all property sectors. I have undertaken numerous Economic Impact Assessments for FTAA applications (including under the Covid-19 Recovery Fast Track Consenting Act 2020).

Tim Heath – I am founder and Managing Director of Property Economics Limited with 30 years' experience undertaking strategic property market analyses for major commercial and government clients.

My qualifications include Bachelor of Arts (Geography) and Bachelor of Planning from the University of Auckland.

My areas of specialisation include economic profiling of markets, property sector analysis, market demand / supply assessments, economic impact assessments, capacity modelling, development feasibility assessments, business land assessments, and cost-benefit analysis.

My comprehensive knowledge of property market drivers allows me to deliver research that bridges planning ideology and commercial realities to ensure recommendations have 'real world' practicality and can be successfully implemented.

I have extensive experience and am frequently commissioned to provide expert evidence in the Environment Court. I have also been involved in undertaking economic assessments for dozens of Fast-track applications under the Covid-19 Recovery Fast Track Consenting Act 2020 and the FTAA.

CODE OF CONDUCT

Although this Application is not before the Environment Court, we have approached this EIA on the basis that it is prepared in the same way as it would be for expert evidence in Environment Court proceedings.

We therefore confirm that we have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and confirm that we have complied with it in

preparing this EIA. We confirm that the issues addressed in this EIA are within our area of expertise, except where we have indicated that we are relying on others' opinions. We have not omitted material facts known to us that might alter or detract from this EIA.

INFORMATION AND DATA SOURCES

To support our assessment, information has been obtained from a variety of reliable data sources and publications available to Property Economics, including:

- Assessment of economic potential of irrigation water in Tairāwhiti – The AgriBusiness Group and Aqualinc
- Business Frame Data - Stats NZ
- Cost-benefit analysis for a National Environmental Standard for Water Measuring Devices - Harris Consulting
- Environmental Impacts of Agriculture – Environment Guide
- Gisborne Regional Water Assessment – Aqualinc
- Input / Output Tables – Stats NZ
- Proof of Concept Scoping Study – Tangihanga Water Storage Scheme – Wi Pere Trust, Aqualinc, Damwatch, Mitchell Daysh
- Proposed Development Costings (estimates) – Wi Pere Trust
- Regional Economic Profile – Infometrics
- Unemployment Rate – Infometrics

GLOSSARY OF TERMS

Below is a list of terms relevant to this EIA. Note that the definitions of some terms may differ from those provided in the relevant statutory definitions and are intended solely for the purposes of this economic analysis. This does not affect the economic analysis conducted in this report or our economic position.

TERM	DEFINITION
Agglomeration Benefits	Where businesses and employees cluster together in a geographic area, offering several benefits. These include increased productivity, lower transportation costs, and knowledge spillovers.
ANZSIC	Australia New Zealand Standard Industrial Classification 2006 - a standard method used to classify businesses and organisations based on their primary economic activity.

	It provides a framework for analysing and comparing economic data across industries in Australia and New Zealand. ANZSIC is widely used by government agencies, researchers, and businesses for statistical, policy, and planning purposes.
CAPEX	Capital expenditure.
Direct economic impacts	Derived from the actual spending / expenses incurred through the construction of the anticipated development.
Indirect economic impacts	The increased spending brought about by those firms / households and their employees / occupants, who supply the development.
Induced economic impacts	Measured in terms of the additional income that will be spent in the area due to increased business activity.
Economic benefits	Usually gains that can be expressed in financial terms as the result of an improvement in facilities provided by a government, local authority, etc.
Employment multipliers	The level of indirect and induced employment activity generated through the expenditure on and off site.
FTE years	Full time equivalent years - these are all jobs created through the direct construction phase and ongoing operation of the development including indirect and induced employment through all business sectors (not solely construction jobs) and relate to job years rather than one employee.
GDP	Gross domestic product.
Net Present Value (NPV)	Net present value - the difference between the present value of cash inflows and the present value of cash outflows over a period of time – calculated using an associated discount rate.
Transaction costs	Costs that arise as part of engaging in an economic trade. This can include compliance costs, planning costs, variation costs, etc.

4. ECONOMIC BENEFITS OVERVIEW

From an economic perspective, the Project would create a variety of potential economic benefits beyond construction and development. The following analysis outlines the key economic benefits of the proposed development within the framework of the RMA, and the FTAA Section 22(2)(iii) and (iv).

- + **Contribution to primary production and economy:** Agriculture and related primary industries are a significant driver of the Gisborne economy. In the year ending March 2025, the Agriculture, Forestry, Fishing sector alone contributed around \$507.9m to the region's economy⁵. This accounted for around 17.3% of total regional GDP in 2025, reflecting the strong reliance of the regional economy on primary production, including water-dependent, land-based activities. The proposed development will enhance the availability of reliable water for irrigation, supporting the ongoing growth of both the sector and the wider regional economy.
- + **Expanded irrigated areas (improved land use efficiency):** The proposed dam and water scheme would enable new irrigation across up to 9,600ha⁶ on the Poverty Bay Flats (which represent the primary rural production area of the Gisborne Region) at capacity. This increased water availability would allow farmers to sustain production during low-flow periods and reduce exposure to drought-related losses.

By way of context, there are approximately 86,644ha of irrigable land across Gisborne's seven catchments. However, only around 8,689ha (or 10%) is currently allocated water for irrigation⁷. The additional irrigated areas provided by the Project would therefore more than double the extent of irrigated land in the wider region, representing an increase of approximately +110%.

Based on earlier (2008) research⁸, the net contribution of irrigation to farm-gate GDP in Gisborne was estimated at approximately \$4,530 per ha per annum. Adjusting for

⁵ Source: Infometrics – Regional Economic Profile (<https://regions.infometrics.co.nz/gisborne-district/economy/structure?compare=new-zealand>)

⁶ This is the area that can be reliably supplied under the assumed future allocation rules with storage reserved for municipal supply. The overall command area (maximum extent of potentially irrigable land) is approximately 11,222ha. The 9,600ha of newly created irrigated land is therefore adopted as a conservative input for estimating the operational economic benefits.

⁷ Source: <https://trusttairawhiti.nz/assets/Resources/Assessment-of-economic-potential-of-irrigation-water-in-Tairawhiti-Final.pdf>

⁸ Source: <https://environment.govt.nz/publications/costbenefit-analysis-for-a-national-environmental-standard-for-water-measuring-devices/>

inflation using an average CPI of around 2.6% over the past 18 years, this equates to an estimated value of approximately \$7,150 per ha per annum in 2026 dollars.

On this basis, the additional new irrigation enabled by the proposed development, at capacity, is estimated to generate annual economic activity of approximately \$68.6m per annum. This uplift would increase Gisborne's agricultural GDP by around 14% per annum. Over a 30-year period, this equates to a total net present value (NPV) of approximately \$772m, applying an 8% discount rate.

If a 2% discount rate, as directed by the Treasury for sensitivity analysis purposes, is applied, the total net present value (NPV) of the proposed development increases to approximately \$1.54b over a 30-year period.

In New Zealand, the gross value added generated under irrigation is approximately three times higher than that of an equivalent area under dryland farming⁹. This implies that at least \$515m of the total estimated NPV of \$772m (at 8% discount rate) represents the net increase in value added GDP attributable to the expansion of irrigated areas. At a 2% discount rate, the net increase in value-added GDP rises to approximately \$1b over a 30-year period.

Moreover, IrrigationNZ advises that for every \$1 of wealth generated on irrigated farms, at least a further \$3 is created in the wider rural and urban economy¹⁰.

- + **Improved irrigation reliability on existing irrigated areas:** Currently, irrigation reliability is around 95% in A Block, compared to approximately 81% in B Block. An improvement in irrigation reliability will reduce the likelihood of water shortfalls during the growing season, supporting higher-value land uses and improving income stability.

On an indicative basis, for example, a 14% improvement in reliability (i.e., increasing from 81% to 95% on average) could generate additional benefits of approximately \$1,000 per ha per year.

Importantly, this highlights that a meaningful share of the Project's economic value is derived not only from increasing water availability, but from enhancing the reliability and timing of supply, which is critical for market investment and certainty, improves productive use and supporting higher-value land use outcomes at regional level.

- + **Accommodating existing irrigation demand:** The Waipaoa A Block currently experiences an average unmet irrigation demand of approximately 7.9 million m³ per year, indicating a shortfall in supply relative to irrigation requirements. The proposed

⁹ Source: <https://www.environmentguide.org.nz/activities/agriculture/environmental-impacts-of-agriculture/>

¹⁰ Source: <https://www.environmentguide.org.nz/activities/agriculture/environmental-impacts-of-agriculture/>

scheme would address this deficit by capturing and storing high-flow water for redistribution during periods of peak demand, thereby converting currently underutilised water resources into reliable irrigation supply and unlocking latent productive capacity within the catchment.

Based on the information available, it is estimated that around 1,400ha of supplementary irrigation supply would be enabled when the Waipaoa River is subject to restrictions. This reflects the vulnerability of existing water users to reduced supply reliability, particularly where minimum flow requirements are revised by Council.

Using the same estimation parameters and approach outlined earlier, this additional 1,400ha of irrigation could generate approximately \$112m in value-added GDP (NPV) over a 30-year period, assuming an 8% discount rate. As a result, the total net economic (GDP) contribution from both the new irrigated areas and the supplementary supply enabled by the proposed development (i.e. around 11,000ha in total) would increase from around \$515m to approximately \$628m over a 30-year period. At a lower discount rate of 2%, this total net contribution increases to an estimated \$1.25 billion.

➤ **Job creation across sectors as a result of expanded irrigation and intensive production:**

As quantified and assessed earlier, the construction of the dam and associated water infrastructure provides immediate employment in engineering and construction. In the longer term, the availability of a reliable water supply enables expanded irrigation and intensification of agricultural activities, leading to sustained employment growth across multiple sectors.

For instance, farm labour requirements increase to manage larger or higher-value crops and livestock, while agribusiness services such as equipment supply, seed and feed distribution, and technical advisory services experience increased demand. Transport and logistics sectors would also benefit from increased movement of agricultural produce to markets, and ongoing maintenance and operation of the dam and irrigation networks create stable, skilled roles over decades.

Collectively, these employment effects have the potential to further strengthen local livelihoods, reduce unemployment pressures, and enhance community resilience, contributing to broader regional economic development.

➤ **Increased municipal supply:** In addition to enabling new irrigated areas and supplementary supply, the development also provides for up to 12 million m³ of municipal supply storage, representing a conservative upper estimate. This volume is broadly equivalent to around two years of demand for Gisborne City.

Given this, the proposed development will contribute to improved municipal water supply outcomes and support population growth and urban development by complementing availability of water resources. More broadly, the availability of a more secure municipal water supply can be expected to support population growth and

urban development by increasing confidence in the long-term adequacy of water resources. It has the potential to help reduce the need for alternative and potentially higher-cost water supply augmentation options.

- **Food security and potential export growth:** Reliable irrigation ensures consistent production of crops, supporting regional and national food security. This stability not only strengthens regional food security by ensuring a steady local supply of essential produce, but it also allows farmers to plan production with greater certainty, reducing waste and improving overall farm efficiency.

With increased and more predictable output, farmers are better positioned to access domestic and international markets, including high-value export opportunities. Additionally, stronger export performance could stimulate ancillary industries such as packaging, storage, transport, and logistics, generating broader economic benefits for the region. Over time, this contributes to resilience in the regional agricultural sector, diversification of income streams, and the development of a more sustainable economy.

- **Regional investment and economic growth stimulation:** With secure water availability, the scheme creates greater confidence for investors and businesses to expand or establish water-dependent enterprises and operations. Reliable water supply supports regional growth, enabling agricultural diversification, value-added processing, and industrial development that contribute to long-term economic prosperity.
- **Opportunities for Māori landowners and community development:** Approximately 24% of the command area is Māori-owned land. The scheme therefore has the potential to support Māori agribusiness initiatives, enhance economic participation, and foster community development.

Beyond individual farm-level benefits, the scheme has the potential to foster broader economic participation by creating pathways for Māori involvement in service provision, such as irrigation management, agritech support, etc. These opportunities can be expected to strengthen Māori-owned enterprises and support regional employment.

- **Regional economic resilience against climate variability and extreme events through improved water security:** By providing multiple water sources and stabilising supply, the scheme reduces the economic risks associated with droughts, floods, and climate variability. Reliable water supply strengthens investment confidence, protects employment, and safeguards regional GDP, ensuring that economic growth can continue even under adverse conditions.

5. ECONOMIC CONTEXT FOR EIA

In assessing the potential economic impacts, it is important to first establish the context in which they will be assessed. For the purposes of this assessment the three important parameters are:

- 1) The geospatial extent of the economic impact. While facilitation of additional residential development and spend is likely to have a national economic impact, the majority of impacts are likely to be retained within the Gisborne Region. As identified, for the purposes of this assessment, the extent of economic impacts is focussed on the retention¹¹ of economic activity within this area.
- 2) The economic impacts are those resulting from the proposed residential development over the proposed 4-year development period.
- 3) Regarding statutory considerations, the RMA provides context in terms of the utilisation of resources and the resulting impact on their price and provision. It calls for the “*efficient use and development of natural and physical resources*” (Part 2 section 7 (b) RMA).

This can be considered from the perspective of economic efficiency which can be defined as “*the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs*”¹².

The Project is likely to have economic impacts that are felt beyond the specific benefits within the region.

Additionally, there are likely to be other, non-economic impacts identified in the various environmental assessment reports prepared in support of the application for referral of the Project into the FTAA. These potential additional non-economic impacts are excluded from this analysis to avoid double counting of effects. For the most part, these other, non-economic effects, e.g., environmental effects, have not been addressed in this report but we understand are otherwise addressed in the referral application material.

¹¹ In this context retention relates to the level of direct spend that is attributable to the Region. This is based on a large number of factors e.g. the origin of machines, businesses that service this development.

¹² Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2nd edition), Harper Collins, Page 148

6. TOTAL ECONOMIC ACTIVITY FROM DEVELOPMENT AND CONSTRUCTION

This section assesses the potential economic activity generated within the Gisborne Region specifically attributable to the Project through spending on the construction, design, infrastructure and development works. It anticipates development across a four-year period. There is no indication of any material factors present which might delay progression of the Project and consequently delay the onset of any economic impact.

6.1. PROJECT'S INJECTION INTO THE GISBORNE ECONOMIC ACTIVITY

Table 1 following outlines the resulting impacts on the Gisborne regional economy as a result of the proposed development.

TABLE 1: TOTAL GROSS GDP GISBORNE REGIONAL ECONOMIC INJECTION (\$M)

	2027	2028	2029	2030	Total
Direct Expenditure (\$m)					
Land					
Earthworks / Civil Works	\$15.7	\$78.7	\$55.1	\$7.9	\$157.4
Civil Consultants	\$7.6	\$9.8	\$4.3		\$21.7
Other	\$4.5	\$9.9	\$6.6	\$3.7	\$24.7
Total Direct Expenditure (excl. land)	\$27.8	\$98.4	\$66.0	\$11.6	\$203.8
Level 2 Multiplier Impacts					
Total Gisborne GDP NPV (48 sector multipliers)**	\$11.9	\$36.2	\$20.6	\$3.1	\$71.8
Employment (FTE Years)					
Development Employment	71	244	161	28	
Other Employment	13	27	10	2	
Total Employment (FTE years)	83	271	171	30	555

Source: Property Economics

**The impacts on the Gisborne Region as a result of direct, indirect and induced activities over a 4-year period at 8% discount rate.

Two key values are represented in Table 1. The first is the Economic Activity generated in the Gisborne Region. The Project will generate a direct expenditure of approximately \$203.8m which represents the total cost of the development (excluding land). This capital expenditure then is assessed through the process indicated in Appendix 1 which includes calculating the amount of direct spend that is retained within the Gisborne Region.

Consequently, the Project will result in approximately \$71.8m of total value added (GDP NPV) for the Gisborne Region over the life of the 4-year development timeframe at an 8% discount rate.

An explanation of how the outputs in Table 1 were calculated is provided in Appendix 2.

The second aspect is the generation of employment. The Project will also contribute around 271 FTE jobs¹³ during the peak construction year within the Gisborne Region, with a total estimated 555 FTE years over the development period.

6.2. ASSUMPTIONS, UNDERPINNING DATA AND EXCLUSIONS

The following assumptions have been applied in this impact analysis in order to assess the level of economic injection into the overall economy at this time. This has some (limited) impact on the distributional effects of the costs and benefits but can be quickly adjusted to accommodate more specific construction and on-going costs and injections.

1. For the purposes of this EIA, it has been assumed that the construction costs will fall within the definition of the following categories (based on a standard 'special' commercial ratio): non-residential construction', 'non-building construction', 'other construction services.'
2. Financial or loan costs on capital primarily fall outside of the local catchment and impact the national economy.
3. The origin of labour has been assessed based on regional labour movements furnished by Statistics NZ based on 2023 data. However, employment data has been updated as per the Stats NZ Business Demography Statistics data¹⁴ to March 2025.
4. This report deals with the economic impact of the proposed development on the Gisborne regional economy. These are specifically the direct impacts related to the construction of the proposed development.
5. The economic activity generated is based on the development's gross activity and does not consider redirecting growth opportunities from elsewhere in the catchment. This assessment is not site specific but is development specific.
6. For the purposes of this report an 8% discount rate has been applied, consistent with the default rate for commercial proposals set by the Treasury¹⁵. Additionally, a 2% discount rate has been applied as a sensitivity test, also directed by Treasury.

¹³ NB These are all jobs created through the direct construction phase including indirect and induced employment through all business sectors (not solely construction jobs).

¹⁴ Business Frame Data – provides Statistics NZ measure of employment in an area by ANZSIC sector.

¹⁵ <https://www.treasury.govt.nz/information-and-services/public-sector-leadership/guidance/reporting-financial/discount-rates>

7. Labour movements are based on average retention rates rather than specific company locations.
8. The proportion of materials and labour internalised in direct benefits to Gisborne are based on standardised labour movements as well as employment and production composition within the Region. The amount of each 'flow-on' dollar retained in Gisborne are based on the movement of resources (including labour) between other districts and regions.

This EIA estimates the total additional gross economic output¹⁶ into the Gisborne regional economy that would be facilitated about by the Project. The initial specifications and details have been provided by Wi Pere Trust and represent the development's configuration and costings at this point in time.

Additionally, the assessment has not endeavoured to identify the extent to which particular parts of the Gisborne Region will benefit economically. It assesses the likely economic impacts on aggregate Gisborne business activity given the composition of activities proposed.

The economic impacts likely to be experienced as a result of the Project are broken down by the development phase which includes the construction costs (CAPEX¹⁷) of the facilitated activities and the proportion of those costs that are retained within the Region.

The direct economic impacts are derived from the actual spending / expenses incurred through the operation of the facilitated development.

Indirect economic impacts are the increased spending brought about by those firms / households and their employees / occupants, who supply the development.

The induced economic benefits are measured in terms of the additional income that will be spent in the area due to increased business activity.

6.3. SENSITIVITY ANALYSIS

The Treasury's most recent review (February 2025) sets discount rates for commercial proposals at 8% (applied in the earlier analysis), with a mandatory sensitivity test at 2%¹⁸. In this section, sensitivity testing is undertaken using the 2% discount rate to quantify the scale of the Project's economic contribution to Gisborne regional economy under this scenario.

¹⁶ For example, this has not taken into account the short-term loss of operational employment currently on site

¹⁷ CAPEX – Capital Expenditure

¹⁸ Source: <https://www.treasury.govt.nz/information-and-services/public-sector-leadership/guidance/reporting-financial/discount-rates>

The results indicate that, when applying the Treasury's mandatory 2% discount rate, the proposed development at the site is estimated to generate approximately \$82.6m in total business activity across the Gisborne Region over the full development timeframe.

TABLE 2: SENSITIVITY ANALYSIS (2% NPV)

Discount Rate	Total Gisborne Regional GDP NPV (\$m)				
	2027	2028	2029	2030	Total
2%	\$12.7	\$41.0	\$24.9	\$4.0	\$82.6

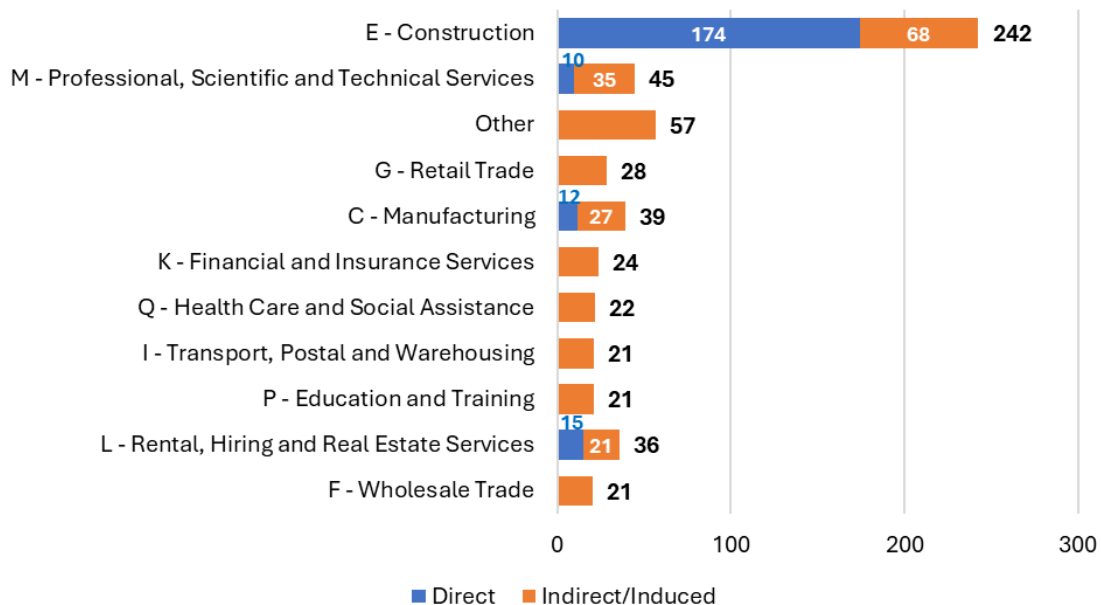
Source: Property Economics

6.4. TOTAL GISBORNE DIRECT AND INDIRECT EMPLOYMENT

Figure 2 below disaggregates employment generated by sector and Direct and Indirect (including induced) FTE employment over the identified period. It illustrates the significant direct impact on the Construction sector (as well as Construction Services).

The figure below illustrates the sectors associated with direct employment measure approximately 211 FTE years with the remaining around 344 FTE years resulting from indirect and induced activity.

FIGURE 2: GISBORNE EMPLOYMENT GENERATION BY SECTOR



Source: Property Economics

For context, according to Infometrics¹⁹, the Gisborne regional unemployment rate increased from 4.4% in 2022 to 5.5% in 2025. This equates to around 1,440 unemployed people within the Gisborne Region in 2025. Against this context, the Project will make a direct contribution to supporting regional employment levels.

In addition, as of September 2025, New Zealand's labour force has an underutilisation rate of approximately 12.9%, the highest in five years and up from 9% in early 2023²⁰. This equates to an estimated 138,000 underemployed²¹ people in the September 2025 quarter. The Project can be expected to support better labour utilisation by expanding employment opportunities and providing work for those who are currently underemployed.

¹⁹ Source: Infometrics - Regional Economic Profile
[<https://regions.infometrics.co.nz/gisborne/employment/unemployment>]

²⁰ Source: <https://www.stats.govt.nz/news/unemployment-rate-at-5-3-percent-in-the-september-2025-quarter/>

²¹ Part-time workers who have both the desire and availability to work more hours.

7. CONCLUSION

Having undertaken the economic analysis outlined earlier, Property Economics considers that enabling the Project under the FTAA would yield significant economic benefits for the regional economy and community.

Based on our assessment, the new irrigated areas and supplementary supply enabled by the proposed development (i.e., totalling approximately 11,000ha) are estimated to generate a net increase of about \$628m in value-added GDP (NPV) to the regional economy over a 30-year period at full capacity, applying an 8% discount rate. At a 2% discount rate, this net contribution increases to approximately \$1.25b.

These estimates exclude the additional municipal water supply provided by the proposed development. At a conservative upper estimate of additional 12 million m³, this would equate to approximately 2 years of demand for Gisborne City.

In Property Economics' view, these outcomes represent tangible and significant economic benefits of the proposed development for the regional economy and wider community.

In addition, the construction phase of the development is estimated to generate the following economic impacts within the Gisborne regional economy:

• Total direct expenditure over a 4-year development period (excl. land)	\$203.8m
• Total NPV at 8% over a 4-year development period	\$71.8m
• Total NPV at 2% over a 4-year development period	\$82.6m
• FTE years during the peak development year	271 FTE years
• Total FTE years over the 4-year development period	555 FTE years
• Total direct employment over the development period	211 FTE years
• Total indirect and induced employment over development period	344 FTE years

We have not endeavoured to quantify in dollar terms all potential benefits arising from the proposal or to undertake a full assessment of the economic costs, given that this is a referral application. A more detailed analysis will be undertaken at the substantive application stage if the proposal is referred to an Expert Panel.

Considering the economic benefits analysis outlined above as a whole (including the quantitative economic injection into the regional economy and employment benefits), Property Economics considers that advancing the proposed development would contribute significantly to the economic benefits for the regional economy and community, and meet the purpose of the FTAA.

APPENDIX 1. EXPLANATIONS OF EIA MODELLING PROCESS

The EIA assesses the potential economic activity generated within the Gisborne Region specifically attributable to the Project through spending on the general civil works and residential development. This includes construction costs, which have been valued for the overall development.

The impact of this injection on the initial business cycle has been calculated. This 'construction multiplier' was based on the national input-output tables produced by Stats NZ (based on 48 sectors), which were then assessed at a district level based on Gisborne economic activity, composition and productivities.

This estimates the 'leakage' from the regional economy (within specified sectors), and therefore the overall regional production (within a given business cycle) for each \$1 injected.

This was performed for the general and commercial construction sectors. These multipliers are based on 'net' flows by broad sector type and are therefore approximations.

Total output impacts to the Gisborne catchment for the proposed developments include:

- Direct Construction Cost x 'Construction Multiplier' +
- Direct Development Cost x 'Development Multiplier' +
- Direct Increased Commercial Spending x 'Commercial Multiplier' +
- Indirect Business Spend x 'Commercial Multiplier' +
- Induced Retail Spending x 'Retail Multiplier'

Each identified multiplier relates simply to the economic sector from which the activity is generated.

This capital expenditure then is assessed through the process indicated at the beginning of this section which includes calculating the amount of direct spend that is retained within the Gisborne Region.

Then utilising the appropriate economic multipliers for each of the affected sectors the economic model produces both indirect outputs and induced outputs. Given that the development will take place over a proposed period of 4 years, development beyond the first year is discounted to provide a Net Present Value (NPV).

APPENDIX 2. EXPLANATIONS OF EIA MODELLING OUTCOMES

By way of explanation of the items listed in Table 1:

- The reference to “*Levies*” is referring to external land and building costs such as Council costs.
- The reference to “*Development Costs*” includes costs associated with the development of the land, earthworks, etc. Note these costs are separated out from Construction costs due to the high level of capital (machinery) to labour ratio.
- The reference to “*Construction Costs*” includes built form costs (i.e., cost of the physical built structure (the buildings).
- The Direct Expenditure line includes all expenditure on the Project, both in and externally to the region.

The “*Level 2 Multiplier Effects*” section identifies the proportion of the direct expenditure that is experienced in the Gisborne Region only. This incorporates consideration of the economic multipliers described in the following section.

This EIA evaluates the total economic effects of the specific project on the Gisborne regional economy. Multipliers, a key component of EIA, quantify how initial changes in spending lead to larger, ripple effects throughout the Gisborne regional economy²². These effects include direct, indirect, and induced impacts, reflecting changes in output, employment, income, and other economic variables.

Aggregating Impacts:

The following steps form the basis for the value and employment multipliers to quantify the number of FTE years generated by the project.

Step 1: Allocate total project expenditure by ANZSIC category.

Step 2: Apportion the extent of each expenditure category that is likely to be retained within the Region. This is based on business and employment composition, business size, capital

²² Multipliers are coefficients that translate direct changes in economic activity into the total economic impact. For example, a job multiplier shows how many jobs are created in total (directly, indirectly, and induced) for each new job created directly. Similarly, an output multiplier indicates how much total output increases for each dollar increase in output in a specific industry. Relevant key multiplier types include Output Multiplier: Measures the total change in economic output resulting from a change in demand for a specific industry; and Employment Multiplier: Measures the total change in employment resulting from a change in employment in a specific industry.

formation, inflows of GDP (technically GRP), etc. This is direct regional spend and hence smaller than the total generated.

Step 3: Utilising Stats NZ Input / Output tables generate regionally specific Level 1 multipliers (i.e. where each \$1 spent goes through the first cycle). These multipliers are specific for each of the 48 sectors and are proportionally combined to produce the development multiplier: earth works, fees, etc (due to these having a materially different labour to capital breakdown) and the construction multiplier- built form.

Step 4: Utilise a similar process to assess the Level 2 multipliers for indirect and induced activities.

Step 5: These three (direct, indirect and induced impacts) are then aggregated and discounted to get the NPV seen in Table 1.