

The Bay of Plenty region lies in the northeast of the North Island. Its coastline stretches 260 km from the southern end of Homunga Bay in the west to Cape Runaway in the east. Much of the central part of the region is within the active Taupō Volcanic Zone and has geothermal fields. The region has many lakes, including the 12 Rotorua lakes. The region has one of the sunniest climates in the country with warm humid summers and mild winters.

The region includes 6 territorial authorities: Tauranga City, Western Bay of Plenty, Rotorua, Kawerau, Whakatāne and Ōpōtiki.

\$22.6 billion
Regional GDP for year ended March 2023 (6% of National GDP)

\$681 million
GDP in Forestry, fishing and mining for year ended March 2022 (3% of the GDP for the region)

1,504
Number of new dwelling consents for all construction for the year ended August 2024 (-15.1% percentage change from previous year)

350,300
Estimated regional population year ended June 2023 (6% of New Zealand's total)

\$64,462
GDP per capita year ended March 2023

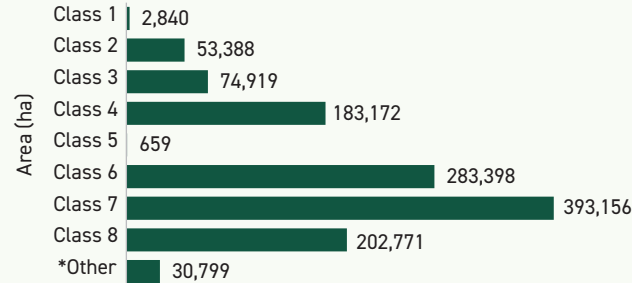
32.9%
Population that identifies as Māori - 2023 Census (17.3% nationally)

Land use capability

The Land Use Capability (LUC) system classifies land into 8 categories based on its ability to support various productive uses over time. The classification considers physical attributes of land such as climate, soil, slope, vegetation and erodibility. Classes 1 to 4 are generally suitable for all ranges of cultivation. Classes 5 to 7 tend to be suitable for pastoral farming and forestry. Class 8 has severe limitations for primary production or forestry use.

Figure 1 shows the LUC classes of land in the Bay of Plenty. LUC 1 – 3 (highly productive land) makes up 10.7% of land in the Bay of Plenty, while LUC 4-6 makes up 38.1% of land area. LUC 7 makes up 32.1% of land while LUC 8 makes up 16.6% land area.

Figure 1. Area in hectares by LUC class. Source: LUC database 2021.



*Other: estuaries, lakes, quarries, rivers, towns.

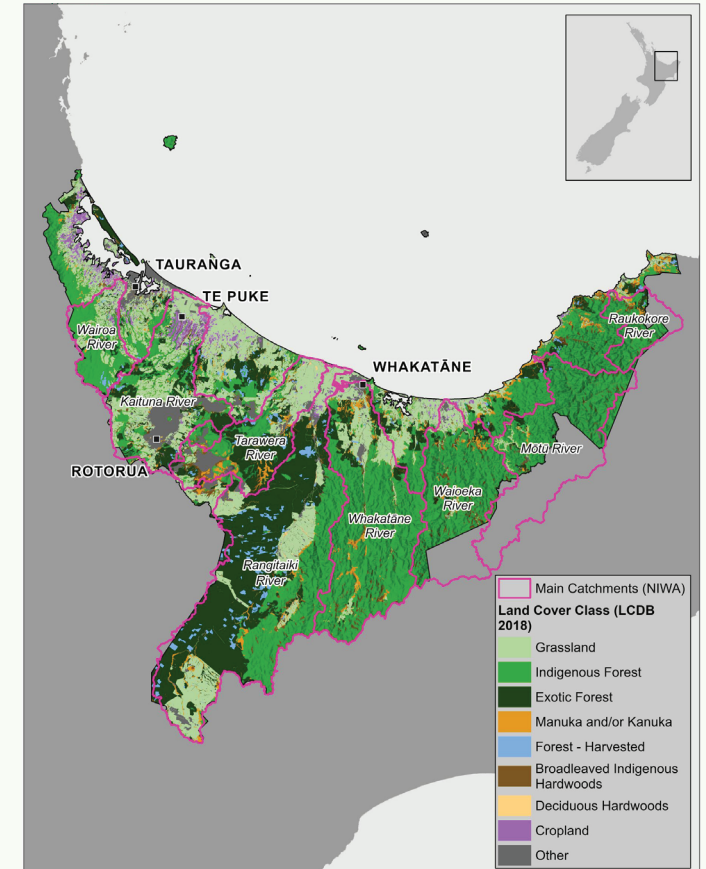
Sources: [Our Environment - Manaaki Whenua Landcare Research](#) and [Target land and land use capability classes - MPI](#)

Existing land cover

Bay of Plenty's total land area is 1,227,693 hectares, making up 5% of the total area of New Zealand. The largest share of land cover is indigenous forest, covering 43.7% of the region. This is followed by exotic forest, covering 20.9% of the region, and exotic grassland covering 20.4%.

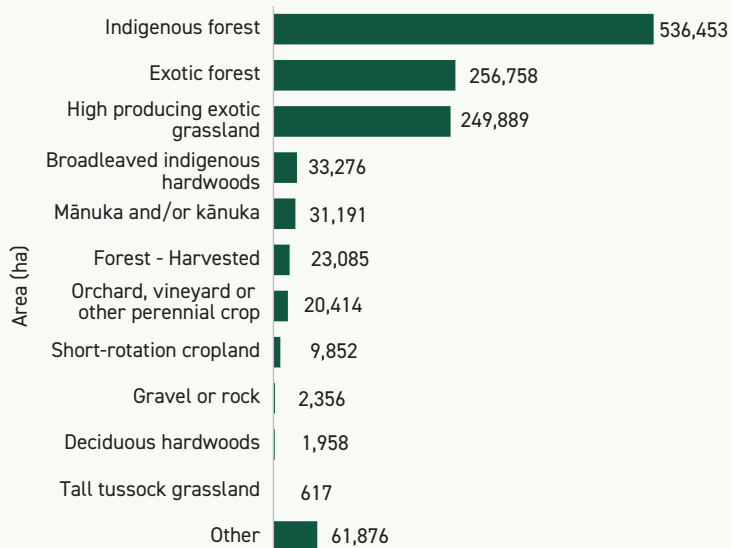
New Zealand's regions are primarily determined by areas of water collection into rivers, known as catchments. There are 8 river catchments in the BOP region, and the largest is the Rangitāiki River catchment (296,651 hectares). The other major catchments are the Whakatāne River (174,286 hectares) and the Kaituna River (148,129 hectares). All the other catchments in the region are less than 100,000 hectares.

Figure 2. Map: Land cover in Bay of Plenty. Data source: Land Cover Database (LCDB5) - LRIS 2018/19. View a high-resolution version of the land cover in Bay of Plenty map



Source: Geographic boundary viewer - Stats NZ

Figure 3. Area of land cover types in the Bay of Plenty. Source: Land Cover Database (LCDB5, 2018)



Breakdown of existing forest cover using Land Cover Database (Figure 3)

Indigenous forest covers 43.7% of the region's land.

Exotic forest covers 20.9% of the region's land.

Broadleaved indigenous hardwoods such as wineberry, mahoe, Pittosporum spp, fuchsia, tutu, tītoki and tree ferns, cover 2.7% of the region's land.

Mānuka and kānuka, which can act as a nursery crop in a reversion towards forest, covers 2.5% of the region's land.

Forest – harvested includes bare ground where exotic forest was harvested or, less commonly, indigenous forest. It covers 1.9% of the region's land.

Deciduous hardwood such as willows, poplars, oaks, elms and ashes, cover 0.2% of the region's land.

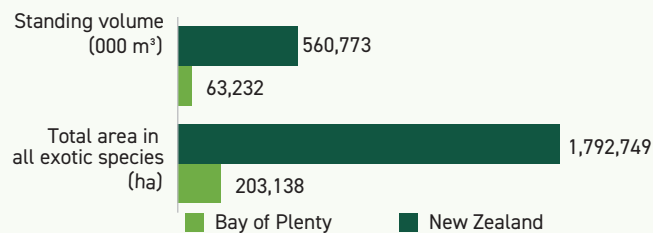
Other includes urban settlements, lakes, rivers, sand, among others. It covers 5% of the region's land.

Source and forest type definitions: Land Cover Database (LCDB5)

National Exotic Forest Description (NEFD 2024)¹

The Bay of Plenty (along with Waikato) is part of the central North Island (CNI) wood supply region. The CNI wood supply region has about 30% of New Zealand's exotic forests. With the largest forest resource, well-established processing capability, and well-connected transport infrastructure, the CNI region is New Zealand's main centre for forestry and wood processing. The Kaingaroa forest estate is between Rotorua and Taupō on the volcanic plateau spreading across the wider CNI wood supply region. It is the largest plantation forest estate in New Zealand, with an area of approximately 190,000 hectares.

Figure 4. Comparing the Bay of Plenty region and New Zealand on exotic forestry facts. Data source: NEFD 2024



The average age of exotic forest in the region is 17 years compared to 18.6 years nationally.

Figure 5. Proportion of exotic forest species in the Bay of Plenty in comparison to New Zealand.



Source NEFD 2024

Radiata pine comprises 95.6% of the exotic pine forest in the region. Other exotic forestry species include Douglas-fir (2.6%), cypress (0.3%), eucalyptus (0.3%), other softwoods (0.6%) such as redwoods and other hardwoods (0.6%) such as acacia and blackwood.

12% of the total planted area of radiata pine forest in the BOP is of potentially harvestable age (26-30 years). This compares to 21% of the national total planted area in the same age range.

¹ The 2024 National Exotic Forest Description (NEFD) – MPI provides a detailed description of New Zealand's planted production forest.

Figure 6. The number of hectares of pruned and unpruned regimes in radiata pine in the BOP region. NEFD 2024.

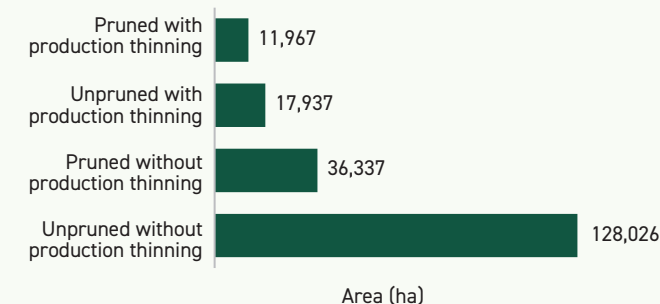


Table 1. Number of forest owners and total forest area by national size class for the CNI wood supply region, as the ownership data is not available for the BOP region. Source NEFD 2024.

	<40 ha	40-99 ha	100-499 ha	500-999 ha	1,000-9,999 ha	10,000+ ha
No of owners	-	132	128	27	20	14
Area (ha)	57,631	8,225	27,568	17,724	56,385	415,157

Wood Availability Forecast (WAF)

Figure 7. Pinus radiata wood availability forecast (WAF) scenario 3 for the central North Island (CNI) wood supply region. WAF is provided for the CNI wood supply region, as the data is not available for the BOP region. The CNI wood supply region is made up of the BOP and Waikato regions together. Data source: WAF 2021.

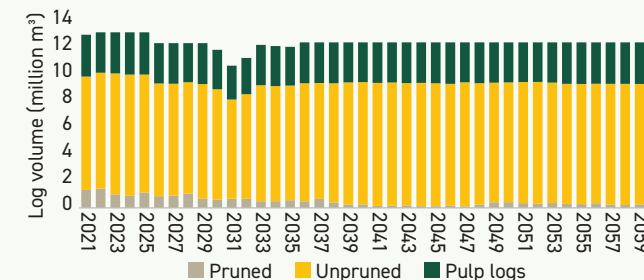
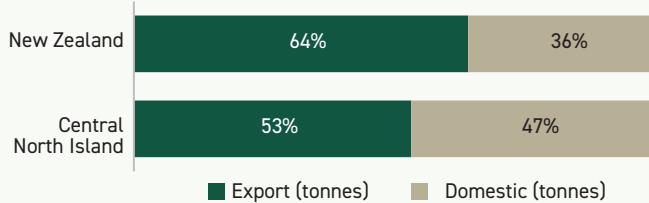


Figure 7 shows the availability of pruned, unpruned and pulp logs between 2021 and 2060, for the CNI wood supply region. Wood availability in the CNI is forecast to remain stable at around 12 million cubic metres from 2026 to 2060, except around 2031-2032 where it drops to about 11 million cubic metres.

Source WAF August 2021 – Scenario 3 – Canopy

Markets for Central North Island (CNI)

Figure 8. Percentage of exports vs domestic processing of logs for New Zealand and the CNI for the year ended in December 2023. Market data is provided for the CNI as the data is not available for the BOP region. Data source: Levy trust data for year ended December 2023.



In 2023:

- 6,550,408 tonnes of logs were exported from the Port of Tauranga (see infrastructure section for more details on the Port of Tauranga)
- 5,782,194 million tonnes of logs went to sawmills in the CNI wood region contributing to 51.2% of the total log volume processed in New Zealand.

Source: Levy Trust data for year ended December 2023

Indigenous forestry

For the year ending June 2023, rimu was the indigenous species that had the largest volume delivered to mills in the BOP region.

Table 2. Log volumes delivered to mills in the Bay of Plenty from July 2022 to June 2023. Source: Indigenous forestry - MPI.

Species	Cubic metres
Rimu	241
Kānuka	189
Matai	165
Tawa	132
Tōtara	125
Kauri	42

Māori and the Central North Island (CNI) Iwi Collective

The Bay of Plenty has New Zealand's third largest Māori population after Gisborne and Northland. It has the largest number of iwi within any region in New Zealand. There are approximately 1,800 land trusts in the region which hold more than \$6.6 billion in assets.

The CNI Forests Collective Settlement is one of the largest Treaty of Waitangi settlements. The CNI Iwi Collective is a confederation of 8 iwi, namely Ngai Tuhoe, Ngāti Rangitihī, Ngāti Whakaue, Ngāti Manawa, Ngāti Tuwharetoa, Ngāti Whare, Raukawa and Te Pūmāutanga o Te Arawa. CNI Iwi Holdings Ltd is the trustee of the collective, governed by a board of 16

directors. In June 2009 the iwi received 176,000 hectares of CNI forest land. The holdings were mostly from the Kaingaroa forest and smaller satellite forests including 40,000 hectares within the Waikato River Catchment. The land returned is leased under Crown Forestry Licenses that are committed to 35 years of forestry. CNI Iwi Holdings Ltd holds and manages the land until 2043.

Sources:
[Central North Island Iwi Collective website](#)
[Working with iwi – Bay of Plenty Regional Council](#)

Forestry and wood processing supply chain

Nurseries

There are at least 38 nurseries in the BOP region producing exotic and native species, including several large exotic nurseries.

Scion (a Crown Research Institute) has a research nursery in Rotorua. The 10 hectare nursery has shade houses, controlled climate propagation facilities, commercial bare-root² operations and a large purpose-built container-growing operation. The specialist container-growing facility can on-grow 700,000 seedlings a year.

Source: [Nursery – Scion](#)

Wood processing

In the BOP region, there are at least 27 mills including structural sawmills, remanufacturing plants, and a cross laminated timber (CLT) manufacturing operation.

The Red Stag mill, in Rotorua, is one of the largest wood processing mills in the southern hemisphere. The mill is strategically located close to 2 major forests, Kaingaroa and Kinleith. The Red Stag mill processes over one million tonnes of logs annually. It produces more than 600,000 cubic metres of radiata pine and Douglas-fir lumber and is a major manufacturer of CLT timber.

Sequal Lumber, based in Kawerau, is a sawmill capable of processing industrial logs to produce high value timber products. The mill can produce an unlimited range of sizes and specifications of timber, required by customers. This type of processing is known as the “mass customisation” model.

The Tasman Mill, one of the largest pulp mills in New Zealand, is in Kawerau. The mill is the largest employer in the eastern BOP. It manufactures unbleached softwood fibre cement pulp and unbleached kraft pulp. The fibre cement boards are produced by reinforcing fibre cement pulp with cement and are used in the building industry. The kraft pulp is used for packaging, printing, and writing applications. In 2019, the mill stopped the production of bleached pulp, eliminating the release of bleach chemicals to the environment. The mill has a log yard, debarker and a chip mill capable

² Raising nursery stock in open-ground beds where plants are raised in the open and leave the nursery bare-rooted.

of handling 1.1 million tonnes of logs per annum. 88% of mill's energy is from sustainable energy sources such as geothermal, biomass (kraft black liquor³ and wood residues) and electricity. Only a smaller proportion of energy comes from natural gas and diesel.

Whakatāne Board Mill operates New Zealand's only folding boxboard mill. The mill produces about 200,000 tonnes of folding boxboard annually. Made with a three-layer structure of kraft pulps, they are clay-coated for professional printing and comply with stringent food contact requirements.

In Kawerau, there is a personal care and hygiene product mill. The mill produces toilet tissue, facial tissue, paper towels, and napkins using pulp from the Tasman Mill.

Source:
[Transforming Tasman Mill – Oji Fibre Solutions](#)
[Tasman Mill – Pederson Group](#)
[Oji Fibre Solutions make-over of Tasman Mill – Appita Magazine \(PDF, 1.6 MB\)](#)

Industrial Symbiosis Programme in Kawerau

Kawerau showcases a wood processing cluster, where various processors are co-located for mutual gains, with easy access to renewable energy and fibre supply. The Kawerau wood processing cluster is made up of an industrial sawmill, a structural sawmill, and pulp and paper mills. The waste or byproducts of sawmills either become the raw materials for pulp and paper mills or are used as an energy source. Kawerau has the unique advantages of being close to large forest resources and having access to the geothermal energy. It also benefits from its proximity to well-established road and rail transport infrastructure and the Port of Tauranga.

This wood processing cluster is part of the Industrial Symbiosis Kawerau Programme (ISK). Other members of the ISK programme include geothermal energy providers, industrial engineering firms, service businesses, Māori business groups and the Kawerau District Council. The geographic proximity enables the exchange of energy, water, by-products, services, knowledge, intellectual property and social capital. ISK helps industries to increase efficiency and revenue while reducing costs.

Source:
[Industrial Symbiosis Kawerau – Kawerau District Council](#)

Debarking operation in Murupara

Kaingaroa Processing Plant (KPP) is a central processing facility where harvested trees are transported as full-length stems and processed to logs and chips on site. The KPP is a unique facility in New Zealand near Kaingaroa Forest. Access to this facility is aided by the private forestry road network in the area. The facility has a debarker, chipper and computer-controlled movable saws for cutting logs efficiently. The operation has proved central processing is more efficient than forest-based processing. This is because stems from debarking are scanned for internal wood

³ Black liquor is the substance that binds wood fibre (cellulose) that is generated as waste when removing fibres during pulp manufacturing process.

properties, which can be used as inputs for computer algorithms to develop the best cutting strategy for each tree.

Processed logs are then transported to the Murupara log yard by truck and on to processors or to the port by rail. Processing residues (bark, chip, sawdust) are used for combined heat and power generation by the mills in the region, and as landscape supplies.

Recreational value of exotic forests

The Whakarewarewa forest in Rotorua spans 55,000 hectares. It contains a mix of exotic species such as Californian redwood, radiata, Douglas-fir, eucalyptus, larch, and native trees. The Whakarewarewa forest is used for recreational activities such as mountain biking, running, walking and horse riding. There are around 200 km of mountain bike trails in the Whakarewarewa forest. It is the most visited mountain biking destination in New Zealand, according to a national survey done in 2024. A study published by RotoruaNZ, in 2022, has estimated that mountain biking contributed between \$103 and \$140 million in spending to the local Rotorua economy during 2021. Mountain biking accounted for around 18-25% of Rotorua's total visitor economy (\$560 million) in 2021.

Sources:
[The contribution of mountain biking to the Rotorua Lakes economy](#), (PDF, 595 KB)
[Planted forests a big economic contributor – Scion](#)

Woody biomass

The Regional Energy Transition accelerator programme (RETA) is conducted by the Energy Efficiency and Conservation Authority (EECA). RETA has estimated the current demand for bioenergy and woody biomass supply available for bioenergy in regions from 2024-2050.

In the RETA BOP region, including the Taupō district, there is scope to increase the use of bioenergy from the current level without disrupting low grade export log markets or existing bioenergy consumers. On average over the next 15 years, approximately 2,580,000 tonnes of woody biomass are available for bioenergy annually, comprising:

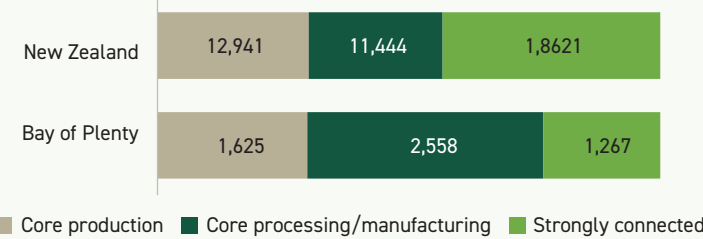
- 147,000 tonnes of harvest residues;
- 1,070,000 tonnes of KI and KIS export grade logs and pulp logs;
- 1,360,000 tonnes of wood processing residues.

Source: [Bay of Plenty Regional Energy Transition Accelerator – EECA](#)

Workforce

For the year ending March 2022, an estimated 43,006 people worked in the forestry and wood processing sectors in New Zealand and nearly 13% worked in the BOP region.

Figure 9. Comparing the numbers of workers in forestry and wood processing for the Bay of Plenty region and New Zealand. Source: [Forestry and wood processing – Food and fibre workforce insights](#)



Core production	Core production includes forestry, logging, and forestry support services.
Core processing/manufacturing	Core processing/manufacturing includes log sawmilling, wood chipping, timber resawing and dressing, veneer and plywood manufacturing, reconstituted wood product manufacturing and pulp, paper, and paperboard manufacturing.
Strongly connected	Strongly connected activities include wooden structural fitting and component manufacturing, other wood product manufacturing, corrugated paperboard and paperboard container manufacturing, paper bag manufacturing, wooden furniture and upholstered seat manufacturing, timber wholesaling.

Erosion

The Erosion Susceptibility Classifications (ESC) for the BOP region (see Figure 10) are:

- around 2.5% (30,317 hectares) of region's land is classified as very highly susceptible to erosion, compared to approximately 13.1% (3,472,477 hectares), for New Zealand;
- around 37.4% (458,352 hectares) of region's land is classified as highly susceptible to erosion, compared to 19.2% (5,083,013 hectares), for New Zealand.

Government funding

One Billion Trees: As of January 2024, \$16.8 million in funding has been approved for direct landowner and partnership grants in the region. From the fund, 942 hectares have been planted in the BOP region.

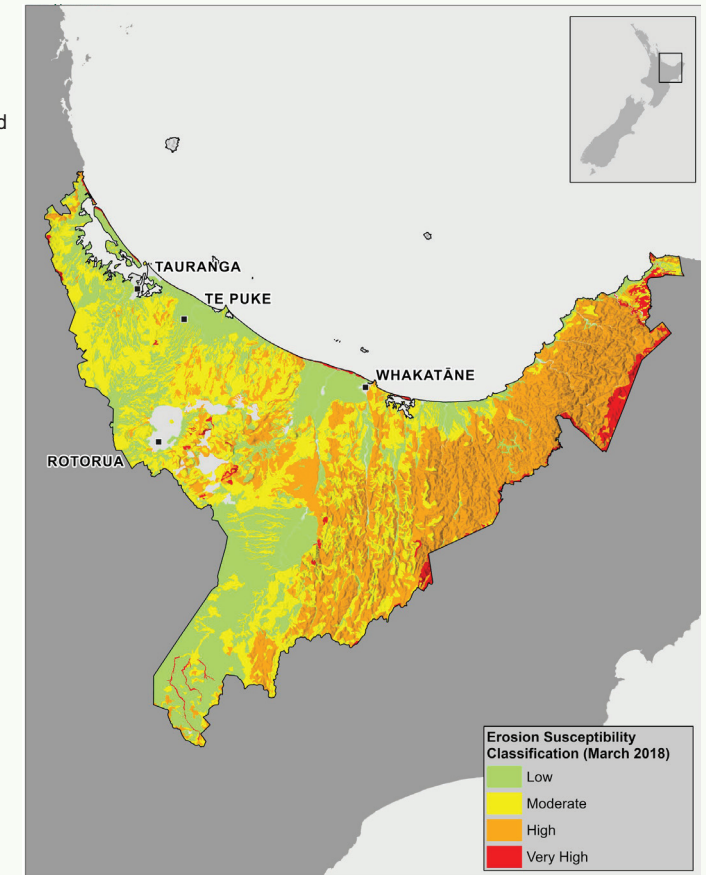
The One Billion Trees Fund, part of the One Billion Trees Programme, is now closed to new applications. The programme's goal is to plant a billion trees by 2028. [One Billion Trees Programme – MPI](#)

Hill Country Erosion (HCE) Programme

The HCE Programme is a partnership between MPI, councils and landowners to support regional erosion-control projects. From 2023 to 2027, the HCE programme has invested \$770,000 for work in the BOP. The funding is supporting native planting and poplar/willow planting on some of the region's steepest land to preserve soils and improve water quality in priority catchments.

[Hill Country Erosion Programme for councils – MPI](#)

Figure 10. Erosion Susceptibility Classification (ESC) for Bay of Plenty. Source: MPI. [View a high-resolution version of the Erosion Susceptibility Classification map.](#)



Infrastructure

Roads

The region has an extensive network of highways and local roads. The Bay of Plenty region is connected to:

- the south of Auckland through State Highway SH2, SH27 and SH29;
- the east coast through SH2, SH5 and SH35;
- the Waikato through SH1, SH5 and SH29.

SH30, SH33 and SH2 connect main wood processing centres such as Whakatāne, Kawerau and Rotorua to the Port of Tauranga.

The region has a purpose-built, tar sealed, 60 km, private forestry road known as the “million-dollar highway” that connects Murupara in the south to Kawerau in the north. This road was built in 1950s to haul logs directly from the Kaingaroa forest to railheads, log yards and the main processing plants. The road has been critical to taking heavy-vehicle movements off the state highways in the region.

Rail

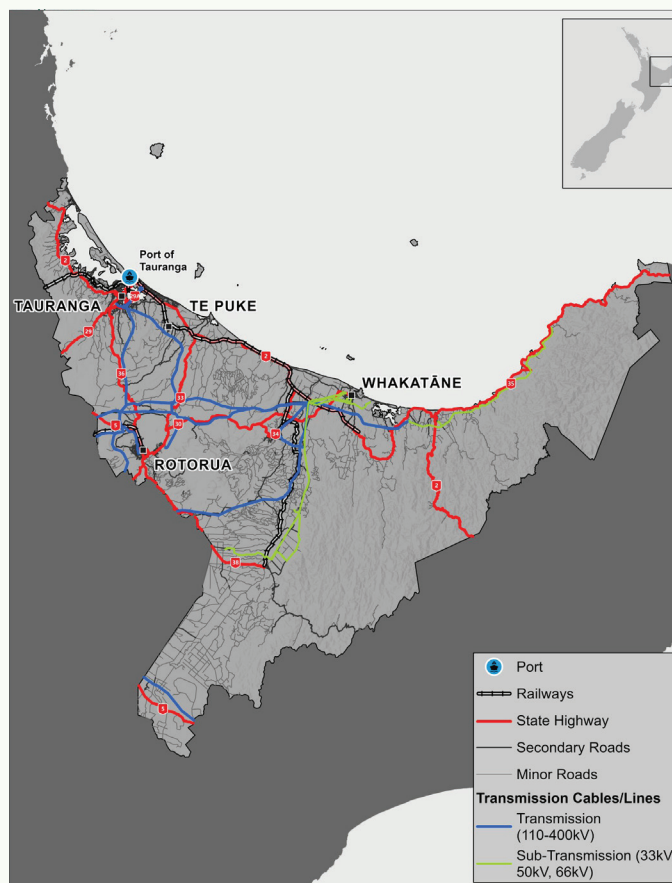
Rail plays a significant role in freight transport within the BOP region, with a main focus on the Port of Tauranga. The major freight products carried by rail are logs, wood pulp, paper products, dairy products, steel, coal, and containerised goods.

There is around 229 km of rail in the BOP, extending from Hamilton in the west to Murupara in the east. The major regional line is the East Coast Main Trunk (ECMT) line which is 181 km long and runs through Hamilton and Tauranga to major forestry centres such as Kawerau (pulp and paper mill and log yard). Kawerau is linked with the Murupara log yard through the Murupara branch line. The ECMT Murupara/Kawerau line runs 42 return services a week to the Mount Maunganui terminal, carrying logs and pulp.

The Kinelith branch line from the Kinelith Mill joins the ECMT at Waharoa. The Kinelith line has 29 return services a week to the Mount Maunganui terminal, carrying forestry (pulp, paper and logs) and dairy products. Logs are carried on 23 of those services. From the Mount Maunganui terminal, sidings run onto the port and into warehouses for placing logs and pulp on wagons.

The rail network also links the Tauranga Port to south Auckland's MetroPort.

Figure 11. Map of infrastructure across Bay of Plenty. [View a high-resolution version of the infrastructure map in Bay of Plenty.](#)



The power lines information on this map may be incomplete. The information that is currently displayed is what MPI had authorised access to at the time of creating this fact sheet.

Port

The Port of Tauranga is New Zealand's largest port. It handles a third of all New Zealand cargo, nearly 40% of New Zealand exports and nearly half of all shipping containers. Forestry, kiwifruit and dairy exports account for almost 75% of exports. For the year ending June 2024, log exports accounted for 48% (6.7 million tonnes) and other forestry products accounted for 13% (1.8 million tonnes) of the port's 14 million tonnes of total exports. Much of this cargo is destined for customers in Japan, China, South Korea, Southeast Asia, Australia and the Pacific Islands.

The Tauranga Port facilities include the largest container terminal in New Zealand, bulk cargo wharves, a debarking facility, a bunker berth with accompanying cargo storage and handling facilities. The Port of Tauranga is well-served by state highways and is connected by rail to Hamilton, Auckland and the central North Island which links to inland port operations in south Auckland and Ruakura.

In 2023, The Port of Tauranga exported the highest volume of logs (33.2% of New Zealand log exports) and other forestry products worth \$2,616,917,162.

Table 3. Tauranga Port export volumes and value (free on board-FOB) for forestry and wood products for the year ending 2023. Data source: MPI overseas merchandise and trade.

Product	Unit	Quantity	Value – FOB (\$NZ)
Chips	Bone dry unit	1,488	920,906
Logs	Cubic metre	7,226,178	1,074,056,861
Other forestry products*	Mixed	–	109,027,069
Panels	Cubic metre	108,772	96,410,101
Paper & paperboard	Tonne	194,864,156	271,331,612
Pulp	Tonne	397,305	444,491,510
Sawn timber & sleepers	Cubic metre	866,260	620,679,103

*Quantity cannot be provided as other forestry products are reported in three different units of measure.

Sources: KiwiRail and Waka Kotahi websites.

[Port of Tauranga. Port Trade and Statistics Information, 2024 \(PDF, 218 KB\)](#)

Electricity

Transpower owns the transmission lines in the region, which consist of multiple 220 kilowatt (kV) double circuit towers, 220 kV single circuit towers, 110 kV double circuit towers and 110 kV single circuit pole lines. There are 9 sub-stations in the region.

The main power generation methods are hydro and geothermal. There are 3 power stations within the BOP region: 2 hydro and 1 geothermal (Kawerau). The Matahina Power Station (80 MW, controlled by Manawa Energy) is located on the Rangitāiki River, which is the longest river in the BOP. The Matahina Dam is the largest earth embankment dam in New Zealand's North Island. The Aniwhenua Power Station (25 MW, controlled by Pioneer Energy) is upstream of the Matahina Power Station on the Rangitāiki river.

Sources:

[Transpower transmission network - North Island \(PDF, 773KB\)](#)

[New Zealand Power Plants - Open Infrastructure Map](#)

[Matahina Power Scheme – Manawa Energy](#)

[Aniwhenua Hydro – Pioneer Energy Renewables](#)

Geothermal energy

The Central North Island is the largest geothermally active region in New Zealand, with geothermal systems commonplace across Taupō, Rotorua and the north-east into the Bay of Plenty. This area is called the Taupō Volcanic Zone. The major geothermal fields are in Kawerau, Mokai, Ngatamariki, Ohaaki, Rotokawa, Rotorua, Tauhara and Wairakei.

The Kawerau geothermal field, bisected by Tarawera River, is the largest field in New Zealand, covering an area of about 35 km². Several wood processing companies draw on the Kawerau geothermal resource for both industrial direct heat use and electricity production. The Kawerau Power Station, which is within the field, has a capacity of 100 megawatts. It is the largest single-generator geothermal plant in New Zealand. Four major consent holders are Mercury Energy, Ngāti Tūwharetoa Geothermal Assets Limited, Geothermal Developments Ltd, and Te Ahi O Māui Partnership.

Source: [New Zealand Geothermal Fields](#)



Useful links

Forestry

[Central North Island Wood Council](#)

[The sustainable management of indigenous forests - MPI \(PDF, 383 MB\)](#)

[New Zealand forest data - MPI](#)

[Afforestation and deforestation intentions survey 2023 - MPI \(PDF, 943 KB\)](#)

[Erosion and sediment control guidelines for forestry operations - Bay of Plenty Regional Council \(PDF, 1.84 MB\)](#)

[Rotorua Forest Futures Action Plan](#)

Wood processing

[Invest in New Zealand wood processing \(March 2020\) - New Zealand Trade and Enterprise](#)

[Information releases - Overseas merchandise trade - Stats New Zealand](#)

Regional statistics

[Bay of Plenty region 2023 Census data - Stats NZ](#)

[Regional Economic Activity Web Tool - Bay of Plenty - Ministry of Business, Innovation and Employment](#)

[Regional updates - New Zealand Transport Agency](#)

[Bay of Plenty Workforce Plan 2022 \(PDF, 4.3 MB\)](#)

[Bay of Plenty - Regional Economic Development & Investment Unit - Kānoa](#)

[Bay of Plenty climate - NIWA](#)

Infrastructure

[Maps and Geospatial data - KiwiRail](#)

[Transmission lines - Transpower](#)

Feedback

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