# Current state of the forestry and wood processing industries in Te Tai Tokerau/Northland

Te Tai Tokerau/Northland stretches from south-east of Mangawhai across to the Kaipara Harbour and to the most northern part of New Zealand, Cape Rēinga. It is the country's most northern region.

In the year ending March 2022, the agriculture, forestry and fishing industries were the second largest contributors to the regional economy generating \$948.9 million in GDP for the region.

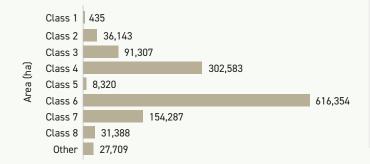


Source: Infometrics, Stats NZ, MBIE Regional Economic Activity. \*2022

# 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, considering physical constraints and specific management requirements.

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



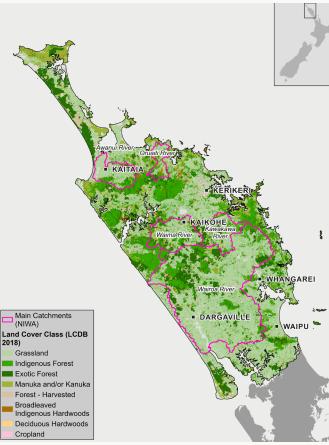
48.6% (616,354 ha) of land area in the region is classified as LUC 6. 14.6% (185,675 ha) of land area in the region is classified as LUC 7 and LUC 8 (land with slightly to severe limitations for productive land uses).

10.1% (127,885 ha) of the land area in the region is classified as Highly Productive Land (LUC 1 to 3).

Sources: Our Environment - Manaaki Whenua Landcare Research

# **Existing land cover**

Figure 2. Map: Land cover in Northland. Source: Land Cover Database (LCDB5) – LRIS. View a high-resolution version of the land cover in Northland map.



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Te Uru Rākau

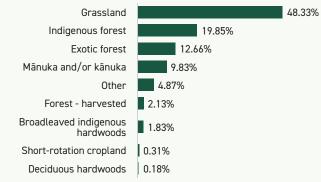
Northland's total land area is 12,507 km2 (1,250,700 ha), making up 4.7% of the total area of New Zealand.

The biggest catchment in the region is the Wairoa River catchment (355,637 ha), followed by Waima River catchment (51,865 ha), Kawakawa River catchment (44,315 ha) and Awanui River catchment (36,497 ha). Other catchments in the region cover areas of less than 20,000 ha.

#### Source: Geographic boundary viewer - Stats NZ

48.3% (604,101 ha) of the region's land is grassland, followed by 19.8% (248,122 ha) indigenous forest, and 12.7% (158,261 ha) exotic forest.

Figure 3. Percentage of different land covers in Northland. Source: Land Cover Database (LCDB5)<sup>1</sup>



## Existing forest cover using LCDB<sup>1</sup>

Exotic forest covers 12.7% (158,261 ha) of the region's total land area.

Exotic woodland including deciduous hardwood such as willows, poplars, oaks, elms and ashes, covers 0.2% (2,292 ha).

Indigenous forest covers 19.8% (248,122 ha) of the region's total land area.

Mānuka and kānuka, which can act as a nursery crop in a reversion towards forest, cover 9.8% (122,816 ha).

Broadleaved indigenous hardwoods such as wineberry, mahoe, Pittosporum, fuchsia, tutu, titoki and tree ferns, cover 1.8% (22,934 ha) of the region's land.

**Forest - harvested** includes bare ground where exotic forest or, less commonly indigenous forest, has been harvested. It covers 2.1% (26,597 ha) of Northland.

1. Land Cover Database (LCDB5) – 2019

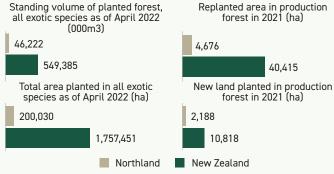
Source and forest type definitions: Land Cover Database (LCDB5) - 2019.





# National Exotic Forest Description (NEFD 2022)<sup>2</sup> for Northland<sup>3</sup>

Figure 4. Comparing Northland and New Zealand on key exotic forestry facts for the year 2022. Source: NEFD 2022



The average age of the exotic forest in the region is 17.1 years compared to 18.6 years nationally.

17.6% (34,375 ha) of the total planted area of Pinus radiata forest in Northland is of potentially harvestable age (age 26-30 years). Compared to 21.2% of the national total planted area that is of potentially harvestable age.

Figure 5. Number of hectares of pruned and unpruned regimes of Pinus radiata in Northland. Source NEFD 2022

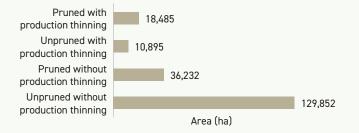


Table 1. Total net stocked area in hectares per forest ownership type, for forests larger than 40 ha. Source: NEFD 2022

Ownership type	Total New Stocked Area (Ha)
central government	1,271
local government	2,145
registered public company and Māori trust	5,094
privately owned	187,648
state owned enterprise and other	3,717
unknown	154

32,459 ha of the region's forests are between 40 and 1,000 hectares in size and owned by 217 forest entities. 132,074 hectares of forests are between 1,000 and 10,000+ hectares in size and are owned by 17 forest entities. 35,497 hectares are forests of less than 40 hectares in size.

Figure 6. Proportion of exotic forest species in Northland. Source NEFD 2022





The area of Pinus radiata forest in the region is 195,464 ha, equivalent to 98% of the exotic forest species in the region. Other exotic forestry species are: less than 1% Douglas-fir (10 ha), 0.2% cypress (484 ha), 0.3% eucalyptus (651 ha), 0.5% other softwoods such as redwoods (1,040 ha) and 1.2% other hardwoods such as acacia and blackwood (2,381 ha).

High quality durable eucalypt species thrive in Northland's unique subtropical climate. A small hardwood industry, producing around 1,000 tonnes of sawn timber per year, has been operating in Northland for over 30 years. The durable eucalypt species, sawn from historical plantings, supply the hardwood flooring and decking market throughout New Zealand.

2. The <u>2022 National Exotic Forest Description (NEFD) – MPI</u> provides a detailed description of New Zealand's planted production forest.

3. NEFD Northland includes the Far North District, Whangarei District, Kaipara District and Auckland Council

# Wood Availability Forecast (WAF)

Figure 7. Wood Availability Forecast (WAF) scenario 3 for Northland, in 000 m3. Source: WAF 2021.

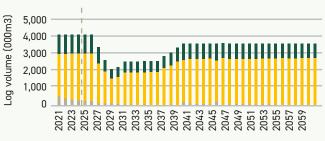


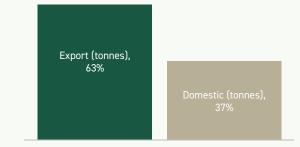


Figure 7 shows the availability of pruned, unpruned and pulp logs between 2021 and 2060, for the region. Wood availability is forecast to drop under 3 million cubic metres per annum between 2028 and 2037, with 2029 being the lowest at 2.1 million cubic metres. From 2039 onwards the forecast wood availability is more than 3.3 million cubic metres per year.

Source: WAF August 2021 - Scenario 3 - Canopy

# Markets

Figure 8. Exports and domestic processing of logs in Northland in 2022. Source: Levy Trust data 2022.



#### In 2022, in Northland:

- 2,179,526 tonnes (63%) of logs were exported through Northport, valued at NZD 407,245,953 and 1,256,230 tonnes (37%) went to sawmills registered in the region\*.
- Northport exported 11.3% of New Zealand's total log exports.
- 1,256,230 tonnes of logs went to sawmills registered in Northland contributing to 9.2% of the total log volume processed domestically in New Zealand\*.

#### \* these statistics include Auckland Council.

Source: Levy Trust data and Overseas Merchandise and Trade for year ended December 2022.

# Forestry and wood processing supply chain

#### Nurseries

There are at least 4 major nurseries in the region producing exotic species. Additionally, there are more than 10 nurseries producing native species.

#### Wood processing

There are 5 major wood processing plants in the region with an output between 50,000 m3 and 250,000 m3 per annum, producing panels, sawn timber and/or wood chips. There are at least 25 other wood processors producing less than 50,000 m3 of panels and/or sawn timber per annum.

Northland/Auckland regions produced 345,952 m3 of **panels** in 2022. This is 21.5% of New Zealand's total panel production for the period.

Northland/Auckland regions produced 240,236 m3 of **sawn timber** in 2022. This is 5.4% of New Zealand's total sawn timber production for the period.

# Northland/Auckland regions produced 79,914 m3 of paper & paperboard in 2022. This is 17.7% of New Zealand's total paper & paperboard production for the period.

Source: Quarterly production statistics MPI. Statistics for calendar year 2022 (Jan-Dec). This data includes only mills that report data quarterly. Data from mills that report annually are not included.

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Te Uru Rākau

## Indigenous forestry

In 2022, totara and kauri were the indigenous species with the most volume delivered to mills in the region.

Table 2. Log volumes in cubic metres (m3) delivered to mills in 2022 in Northland. Source: Indigenous Forestry - MPI.

	kahikatea	kauri	mātai	püriri	rewarewa	rimu	tānekaha	taraire	tōtara	tōwai
m3	30.9	108.5	6.2	9.7	0.6	33.1	1.5	6.0	510.6	2.0

#### Swamp kauri

Kauri trees grow in the warm northern areas of New Zealand including Northland, Auckland, Coromandel and Waikato. Swamp kauri, also known as subfossil kauri, comes from trees that have been buried and preserved in peat swamps for between 800 and 60,000 years. Swamp kauri holds cultural value to New Zealand. Swamp kauri holds scientific value for improving the understanding of our natural history, including analysis of extreme events that lead to the preservation of the trees.

Exracting swamp kauri may require a resource consent under Resource Management Act 1991 (RMA). If the swamp kauri comes from nonindigenous forest land it can be milled after getting a milling statement from MPI in line with the Forests Act 1949.

It has been estimated that 50-70% of the original Northland swamp kauri resources are still available and between 30-50% have been extracted. The estimated available resource could be between ~240,000 m3 to 437,000 m3. The conservative minimum estimate of the remaining volume is ~110,000 m3.

#### Source: Swamp kauri - MPI

#### Tōtara Industry Pilot (TIP)

The Tōtara Industry Pilot was a 2-year study from 2018 to 2020. The study assessed the economic and environmental feasibility of a sustainably managed tōtara industry for high-value products, in Northland.

Many farms in the region have naturally regenerating tōtara, known as farm tōtara. The study showed this tōtara could made into timber products that provide economic returns for landowners. It also showed that continuous-cover forest management and low-impact harvesting can be applied to tōtara stands.

Estimated value-add to New Zealand after 10 years	Between NZD \$5.1 million and NZD \$37.7 million		
Estimated land are with tōtara-dominant stands	26,500 ha		

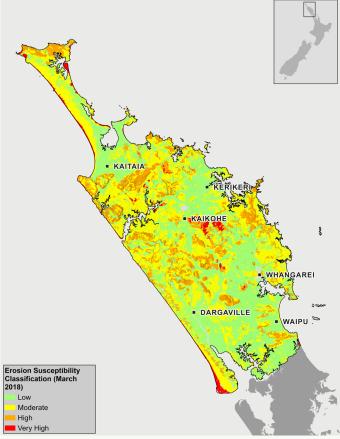
Farm tōtara can be used for structural applications under the building code using NZS 3603, although research continues to determine its durability in structural applications. Other manufactured uses include wall and ceiling linings, exterior cladding and joinery, flooring, indoor and outdoor furniture.

Sources: Totara Industry Pilot project. Final summary report - Tane's Tree Trust (PDF, 5.5MB),

<u> Structural grades – Farm Forestry New Zealand.</u>

#### Erosion

Figure 9. Erosion Susceptibility Classification (ESC). Source: MPI. <u>View a high-resolution version of the</u> Erosion Susceptibility Classification map.



The Erosion Susceptibility Classification (see figure 9) says that around 2.2% (26,927 ha) of the region's land is classified as very highly susceptible to erosion. 14.5% (180,990 ha) is classified as highly susceptible to erosion. Compare this to around 13.1% (3,472,477 ha) and 19.2% (5,083,013 ha) for New Zealand.

### **Government funding**

**One Billion Trees:** As of December 2023, \$20 million in funding has been approved for direct landowner and partnership grants in the region.

The One Billion Trees Fund is closed to new applications. It was part of the One Billion Trees Programme. The programme's goal is to plant a billion trees by 2028. <u>One Billion Trees Programme – MPI.</u>

Hill Country Erosion (HCE) Programme: Since 2009, \$6.3 million in funding has been approved for projects in the region.

The HCE Programme is a partnership between MPI, councils and landowners to support regional erosion-control projects.

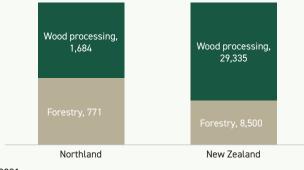
Hill Country Erosion Programme for councils - MPI,

#### Grants for fencing and/or planting on erosion-prone land - NRC

**Provincial Growth Fund (PGF):** as of 30 September 2023, \$662 million in funding has been approved for projects in the region. Through this fund, the government seeks to help build a regional economy that is sustainable, inclusive, and productive. <u>The Provincial Growth Fund – Kānoa</u>, What we have funded - Kānoa

#### Workforce

Figure 10. Comparing the numbers of workers within forestry and wood processing. Source: NZIER 2021



In 2021:

- The potential workforce in the region was 117,900 people, with 60% (70,552) working.
- An estimate of 37,835 people worked in the forestry and wood processing sectors in New Zealand. There were an estimated 2,455 workers in the forestry and wood processing sectors in the Northland region.
- 1.1% (771 people) of the working population in Northland worked in forestry and 2.4% (1,684 people) in wood processing.

Sources: Stats NZ - 2021 data, <u>Forestry and wood processing labour force survey - NZIER July 2021</u> (PDF, 1418 KB)

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Te Uru Rākau

#### Infrastructure

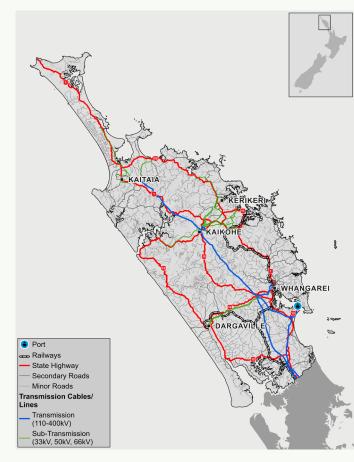
#### Roads

State Highway 1 (SH1) connects the entire region from Cape Rēinga, the northern-most point of New Zealand, to the Auckland region in the south. SH1 also connects the region with the rest of New Zealand. SH10, SH12, SH14 and SH15 run across the Northland region connecting different districts.

#### Electricity

Transpower owns the transmission lines in the region which consist of 2 double circuit lines of 220kV and 3 double circuit lines of 110kV.

Figure 11. Map of key infrastructure across Northland. Source: MPI. <u>View a high-resolution version of the infrastructure map in Northland.</u>



Power is generated in the region mainly by the Ngawhā geothermal plant (57MW) owned by Top Energy Limited, the recently opened Kaitāia solar farm (23MW) owned by Lodestone Energy and the Wairua hydro scheme (5 MW) owned by Northpower.

Northpower is the electricity distributor for the Whangārei and Kaipara districts. Top Energy Limited is the distributor for the Far North district

#### Northport (Northland Port)

Northport is the most northern multi-purpose port in New Zealand. Northport Limited owns a 3-berth facility at Marsden Point. Its primary exports are forestry and processed timber products followed by agriculture, horticultural products, and cement.

Table 4. Northport export volumes and value (Free on Board - FOB) for forestry and wood products in 2022. Source: Overseas Merchandise and Trade

Product	Unit of measure	Volume	Value-FOB(NZD)
Logs	Cubic metre	2,117,747.4	\$407,245,953
Sawn timber & sleepers	Cubic metre	65.4	\$19,407
Panels	Cubic metre	74,124.8	\$30,322,719
Chips	Bone dry unit	104,831	\$30,137,926

Export logs from Northport can be debarked at Marsden Maritime Holdings Industrial Land, a facility that sits adjacent to the port. Debarking logs eliminates the need for chemical fumigation when exporting logs to countries allowing debarked logs.

#### Rail

The main railway in Northland is the North Auckland Line (NAL). It comes from Auckland in the south and crosses Northland up to Otiria via Whangārei. The Dargaville branch connects the NAL to Dargaville in the West.

Currently, Northport is not rail connected. A business case is under development to build the 19km rail line to connect the Port to the NAL at Oakleigh.

As of December 2023, the NAL is closed due to damage at several points caused by major weather events at the beginning of 2023.

Sources: Northland Regional Council website, Transpower website, Top Energy website, Lodestone Energy website, Northpower website, Northport website, Kiwi rail website, Levy Trust data 2022.

### Useful Links

#### Forestry

The sustainable management of indigenous forests - MPI (PDF, 3 MB).

#### Totara industry pilot

<u>A practical guide to managing tōtara on private land – Tāne's Tree Trust</u>

Regional FAQ: Northland - Trees That Count (PDF, 2.9 MB)

New Zealand forest data - MPI

Plantation forestry best practice for Northland - Northland Regional Council (PDF, 634KB)

Plantation forestry regulations - Northland Regional Council

Forestry earthworks & harvesting guidelines for Northland – Northland Regional Council (PDF, 16MB)

Afforestation and deforestation intentions survey 2022 - MPI (PDF, 943 KB)

#### Wood processing and business development

Tuputupu - Grow Northland initiative - Northland Inc (PDF, 12 MB)

Invest in New Zealand wood processing (March 2020) - NZTE

Tai Tokerau Northland Economic action plan - NorthlandInc.

#### **Regional statistics**

Northland region 2018 Census data - Stats NZ

Regional Economic Activity Web Tool - Northland - MBIE.

Te Tai Tokerau - Northland - NZTA

2021-24 National Land Transport Programme Northland 2023 update - NZTA

Northland / Te Tai Tokerau - Kānoa

## Feedback

Contact email: info@mpi.govt.nz

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