



FSC® FOREST MANAGEMENT PLAN



Te Rata Forest

Te Rata Forestry LP

Reporting Period: November 2023 – September 2028

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1. What is this Plan?

About this Plan

This **specific** forest management plan provides details about Te Rata Forest.

It is to be used in conjunction with the **standard** forest management plan, which outlines the typical management applied to the Forest Stewardship Council® (FSC) Group Scheme estate forests.

Where Te Rata Forest is managed in a different way than described in the standard forest management plan, this is detailed within this plan, which takes precedence.

Foundation Principle

Te Rata Forestry LP is committed to adopting the FSC Principles and meeting the FSC® Criteria relevant to forest management.

Te Rata Forestry LP is committed to the PF Olsen FSC Group Scheme **NC-FM/COC-000190** processes and associated documents.

Te Rata Forestry LP seeks FSC certification, to ensure that their forests are managed in an environmentally appropriate, socially beneficial and economically viable manner and to obtain the best access opportunities to the local processing market which is seeking to source FSC certified logs.

2. The Forest Land

Location and access

Te Rata Forest is an 2,009.7 hectare forest in the Tairāwhiti region. The location of the forest on Tarndale Road, 70 km inland from Gisborne City, is shown in Appendix 1.

Forest Area

Forest	Net Stocked Area (ha)	Indigenous Area (ha)	Cutover / Awaiting planting (ha)	Other ¹ (ha)	Total Legal Area (ha)
Te Rata	1,006.0	852.3	20.2	131.2	2,009.7

Legal ownership

The forest is freehold fee simple, vested in Te Rata Forestry Limited Partnership.

Markets

The location of the forest in relation to potential markets is listed in the table below.

Distances from forest to log markets

Potential Market or Export Port	Distance from Forest (km)	Log market
Local Mills	65 – 68	Domestic
Taupo	359	Domestic
Whirinaki	255	Domestic
Gisborne Port	72	Export
Napier Port	272	Export

Topography

The topography consists of rolling to very steep hill country with the majority being steep to very steep.

¹ Other area includes unstocked gaps (where plantings have failed), roads, skids and/or small areas of indigenous vegetation that are too small to map (<0.5ha). Over time, these areas may get remapped as operations occur and boundaries get altered or they may remain as unstocked gaps.

- Te Rata Forest effectively straddles both sides of the Mangaotane River and its upper tributaries, with the whole forest located within and feeding into that catchment.
- The Mangaotane River flows into and through the Raukumara ranges before joining the Motu River which flows to the coast in the Eastern Bay of Plenty.
- The altitude falls from 1,000 m on the Tarndale Road (Gisborne side) of the range down to 430 m in the Mangaotane River valley.
- The topography dictates harvesting by cable-based systems including tethered machine felling where appropriate. Access is from the Gisborne side along the secondary council Tarndale Road from Whatatutu.

Soil

Soils across the forest area are not uniform being a combination of Orthic recent soils in the upper Tributary regions of the Mangaotane Steam, Orthic podzol, generally in slightly less steep areas and Orthic raw soils on some of the very steep areas.

Detailed soils mapping for this area is not currently available from the S-Map database. However, Landcare Research Soils map viewer describes the soils as follows:

- Orthic recent soils: “Orthic Recent soils are ordinary Recent Soils found mainly in sites that have been eroded. Recent Soils are weakly developed, showing limited signs of soil-forming processes. A distinct topsoil is present, but a B horizon is either absent or only weakly expressed. They occur throughout New Zealand on young land surfaces, including alluvial floodplains, unstable steep slopes, and slopes mantled by young volcanic ash”.
- Orthic podzol soils: “Podzol Soils are strongly acid and usually have a bleached horizon immediately beneath the topsoil. This horizon is the source of aluminium and iron oxides that have accumulated, in association with organic matter, in an underlying dark or reddish coloured horizon. Podzol Soils occur in areas of high rainfall and are usually associated with forest trees with an acid litter”.
- Orthic raw soils: Orthic Raw Soils are characterised by active erosion or sedimentation but are not waterlogged. Raw Soils are very young soils. They lack distinct topsoil development or are fluid at a shallow depth. They occur in environments where the development of topsoils is prevented by rockiness, by active erosion, or deposition”.

Climate

There is not specific locality data for the Te Rata Forest. However, NIWA reporting suggests general trends for the area being:

- Winter dominated rainfall with annual accumulations of between 1600 & 2000 mm. Days of soil moisture deficit are low.

- Median annual average temperatures of 8-10 degrees Celsius with average winter lows of 2-3 degrees and summer average highs of 19-21 degrees.
- Because of proximity to the Raukumara Range, mean annual sunshine hours are relatively low at 1900-1950 due to cloud formation.
- As with other parts of the region, the Raukumara's form a barrier to the passage of airflows travelling in either an easterly or westerly direction. Most adverse weather arrives from the SE and more particularly the NE where ex-tropical storms can bring severe accumulated rainfalls and intensities with strong winds.

3. Ecological Information

Ecological District

Te Rata Forest is primarily located within the Motu Ecological District (ED) (Raukumara Ecological Region), with a small eastern portion of the forest in the Waiapu ED2 (East Cape Ecological Region). More information about the ED's can be found in Part 2: Ecological Regions and Districts of New Zealand.

FSC requirement: Ecological District

As the area is more than 10% by forest, and more than 10% within both the Motu and Waiapu ED's within the PF Olsen Group Scheme, there is not a reserve shortfall.

Reserve areas in Te Rata Forest by Ecological District

Ecological District	Total Forest Area (ha)	Reserve Area (ha)	Reserve %	Meets FSC?	Reserve Shortfall (ha)
Motu	1,736.9	818.3	47%	YES	N/A
Waiapu	141.6	34.0	24%	YES	N/A

Threatened Environments Classification

The reserve areas in Te Rata Forest are within the following NZ Threatened Environments Classifications. All of the reserves are in the classes that are most prevalent and most protected.

Threatened Environment Classification	Area (ha)
<10% remaining	
10 – 20% remaining	
20 – 30% remaining	
>30% remaining & <10% protected	
>30% remaining & 10 – 20% protected	157.7
>30% remaining & >20% protected	694.6
Total Area (ha)	852.3

² The Waiapu section is likely a mapping error as it is close to, but does not follow, the ridgeline dividing the catchments flowing SE to Gisborne /Tairāwhiti and NW to the Bay of Plenty.

4. Cultural and Social Aspects

Forest history

Te Rata forest was planted primarily in 1993 and 1994, with these years accounting for 877.8 ha of the total 1026.2 ha planted. Prior to this the area was a working farm station. The remaining stocked area was planted between 1995 – 2010. The 2006 planting of 33.4 ha was the replanting of trees that had been harvested. Those trees were planted while the area was still a working farm.

Current social profile

The predominant land uses surrounding the forests are pastoral farms and plantation forest, with small rural towns servicing the predominantly rural communities. The forests contribute to the social profile of the area. They are privately owned. There is a modest contribution to the local economy by way of added incremental employment.

Historic and archaeological sites

Records from the 'Archsite' web resource has revealed there are no recorded historic sites in Te Rata Forest, or within 1 km of the forest boundary.

Accidental discovery protocols will apply should any physical evidence be discovered during operations.

Tangata Whenua

Based on the [Te Puni Kōkiri website](#), Ngāti Porou and Te Aitanga a Māhaki are the tangata whenua associated with Te Rata Forest. Ngāti Porou have a [joint management agreement](#) with Gisborne District Council (GDC) over the Waiapu Catchment, and the following Statutory Acknowledgements. Te Aitanga a Māhaki have no Statutory Acknowledgements, nor management agreements.

Ngāti Porou Statutory Acknowledgements:

- Waiapu River and its tributaries
- Uawa River and its tributaries
- Turanganui River and its tributaries within the Ngāti Porou area of interest
- Waimata River (as a tributary of the Turanganui River) to the extent that this area is within the area of interest), upstream of the coastal marine area.

Legislation for this settlement was passed on 29 March 2012.

Giving Effect to the Statutory Acknowledgement:

1. Relevant consent authorities, the Environment Court, and the Historic Places Trust to have regard to the statutory acknowledgement.
2. Relevant consent authorities to forward to the governance entity summaries of resource consent applications affecting an area.
 - Enable the governance entity, and any member of Ngāti Porou, to cite the statutory acknowledgement as evidence of Ngāti Porou’s association with an area.

Iwi Management Plan

To date no iwi management or iwi environmental management plans have been developed.

Consideration should be given to the joint management agreement when operating within the Waiaapu catchment.

Tenure & resource rights

There are no known iwi interests in Te Rata Forest. Te Rata Forestry LP will manage access for customary uses through the PF Olsen permit system.

Neighbours

Appendix 2 lists the forest neighbours. Some or all of these parties should be consulted when operations are proposed in forest areas adjacent to their boundaries.

5. Regulations

National Environmental Standards for Plantation Forestry (NES-PF) Erosion Susceptibility Classification

The NES-PF regulations are generally based on the Erosion Susceptibility Classification (ESC) of the underlying land.

The table below shows the proportion of forest by the respective NES-PF Erosion Susceptibility Classification (ESC).

Productive plantation area (ha) within each ESC Class

Forest	Low	Moderate	High	Very High	Very High (8e)	Total
Te Rata	0	90.9	262.4	672.8	0	1,026.2

The forests are located on generally high (orange) or very high erosion (red) risk land. The majority of the forest activities will be controlled under the NES-PF regulations.

Council RMA Plans

Te Rata Forest fall under the jurisdiction of the Gisborne District Council, which is a unitary authority fulfilling both district and regional council functions.

The Gisborne District Council has its own planning documents and associated rules, developed through public process. The [Tairāwhiti Resource Management Plan 2018](#) has rules that are more stringent than the NES-PF regarding:

- Harvesting
- Earthworks
- Replanting
- Discharges, disturbances and diversions
- Archaeological and waahi tapu sites
- River crossings
- Slash traps
- Work around / adjacent to wetlands and riparian areas
- Afforestation

They also have rules for aerial spraying operations, and around any land disturbing activities on Land 3A Overlay classified areas (Appendix 3).

Resource consents may be required for any of the above activities.

Consents & authorities held

There is one resource consent (0 Archaeological Authorities) relevant to Te Rata Forest. The consent (LV-2021-110627-00) is for harvesting, associated earthworks, and replanting activities.

Emissions Trading Scheme

Te Rata Forest qualifies as post-1989 forest land under the Emissions Trading Scheme as it was planted from 1993 onwards. This means that at the point of harvest carbon credits will need to be surrendered.

6. Managing environmental risk

Assessment of environmental risks

Refer to the Standard FSC Forest Management Plan.

It is recognised that some areas within the estate fit the criteria of steep, erosion prone land:

- NES-PF ESC class High/Very High
- Gisborne District Council Land Overlay 3A (Appendix 3)
- Geology and soil type

A holistic approach will be applied to the planning of harvesting, earthworks and planting/replanting of forest land within Te Rata Forest to minimise the risk of accelerated erosion. PF Olsen Ltd, as the forest manager for Te Rata Forestry LP, will utilise the latest knowledge and practices at a catchment level scale to provide recommendations to Te Rata Forestry LP. Current guidelines include:

- NZFOA Forest Practice Guidelines 2020³
- Eastland Wood Council Good Practice Guideline for Catchment Management 2022⁴

Risk mitigation techniques applied may include:

- Pre-operation identification of erosion-sensitive catchments
- Reduction in catchment-level clearfell extent (spatial and temporal)
- Specific management of harvest residues
- Instruments to prevent harvest residues leaving the forest:
 - Live trees as slash traps in riparian zone
 - Conventional slash traps in riparian zone
- Change of regime or species in targeted sites

NES-CF Red ESC Zone Monitoring

Under the updated FSC Forest Stewardship Standard for New Zealand (FSC-STD-NZL-02-2023 Plantations EN), there now requirements around the use, management and monitoring of plantation forests on Red ESC zone land. The table below identifies the area of Te Rata forest

³ [Forest Practice Guides • Documents Library: Forest Owners Association \(nzfoa.org.nz\)](https://www.nzfoa.org.nz/Forest-Practice-Guides-Documents-Library)

⁴ [22-06-23-EWC-Good-Practise-Guideline-for-Catchment-Management-23-02.pdf \(eastlandwood.co.nz\)](https://www.eastlandwood.co.nz/22-06-23-EWC-Good-Practise-Guideline-for-Catchment-Management-23-02.pdf)

affected by the updated standard. Appendix 4 contains details of each forest’s Red ESC areas, as well as monitoring and management activities.

Forest	Area of Red ESC (ha)	Total Productive Area (ha)	Percentage of Forest affected
Te Rata	655.4	1,006.5	65%

Infrastructure damage or service disruption

Powerlines run from almost the southern point of Te Rata Forest on Tarndale Road, in a NE direction, approximately 2.2 km into the forest. While the powerlines are non-functional, care will still need to be taken when operating around or near them. The lines company will need to be notified of operations to ensure risks and disruption of services are minimised. There are no other utilities or infrastructure that could be impacted by forestry management activities in or near Te Rata Forest.

Pests and diseases

The [Regional Pest Management Plan for Gisborne District Council 2017 – 2027](#) includes several pest plant and animal species that are or may be present within the forests. These include:

- Broom, site led
- Buddleia, site led
- Feral goats, sustained control
- Feral rabbits, sustained control
- Gorse, progressive containment
- Nassella tussock, exclusion
- Nodding thistle, progressive containment
- Old man’s beard, progressive containment
- Pampas, sustained control
- Ragwort, sustained control
- Rook, eradication
- Wallaby species, exclusion
- White-edged nightshade, eradication
- Wild ginger, sustained control
- Wilding conifers, site led
- Woolly nightshade, progressive containment

A full list of species can be found in the Regional Pest Management Plan.

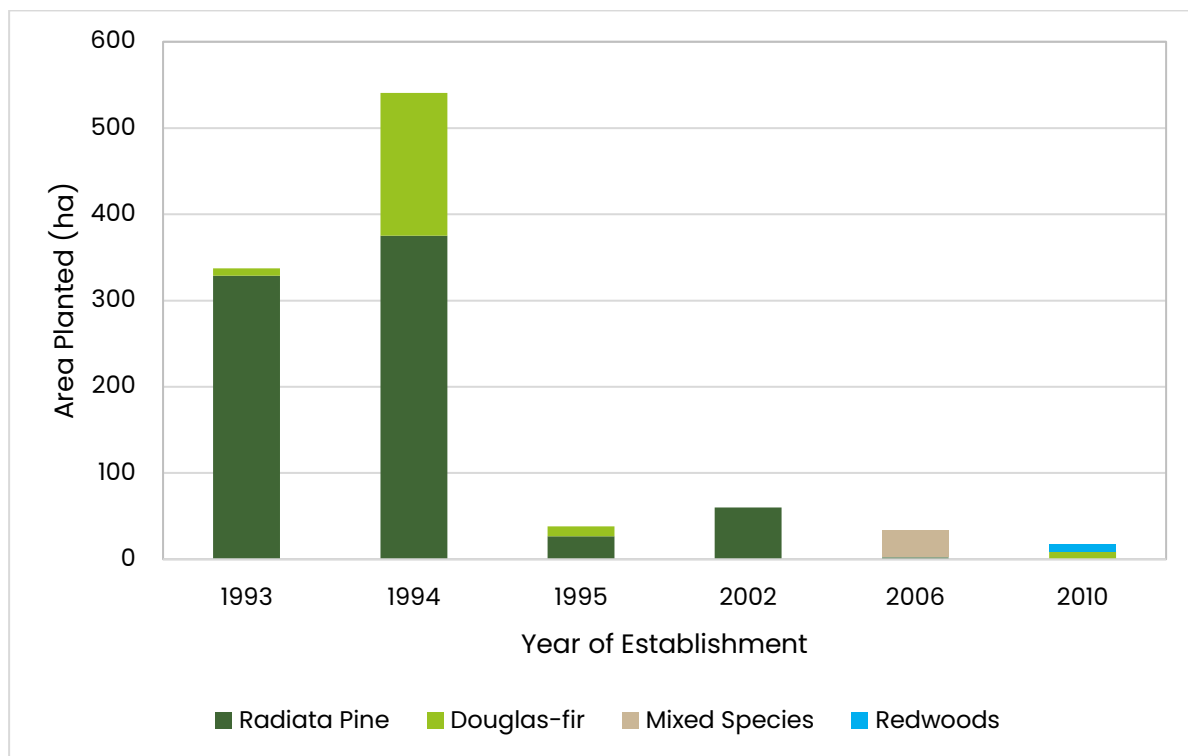
Fire

Te Rata Forest is within the Ngā Tai ki te Puku Fire and Emergency New Zealand (FENZ) region for forest fire management. The [Fire Plan for Tairāwhiti, Ngā Tai ki te Puku 2021 - 2024](#) contains additional key information regarding the protection of land and management of fires.

7. Commercial Plantation Estate

Current crop

Te Rata Forest is predominantly radiata pine (77%), the majority of which was planted in 1993 and 1994. Radiata pine has been selected as it is the most commercially viable species. Douglas-fir and coastal redwoods make up 19% and 1% of the planted area respectively.



Tending

The tending regime executed to date in Te Rata Forest is predominantly a clearwood regime for the radiata pine.

- Prune in 2 lifts at ages 4 and 6, targeting a final pruned height of 6.5 m
- Thin to 380 stems per hectare (sph)

The remaining species are managed on a framing regime (waste thin to 550 sph at age 9).

Future silvicultural treatment for the second rotation has not been confirmed yet and is pending market analysis in 2026. It will most likely be a framing regime for all species.

Tree nutrition

The soils are generally not deficient in nutrients for healthy tree growth.

8. Harvesting Strategy

Harvesting strategy

As market conditions allow the plan is to have one ground-based crew operating in Te Rata Forest. This crew will also construct the roading network. In addition to the ground-based crew, one cable hauler operation will do the cable-based logging.

Currently harvesting has stopped in the Te Rata Forest as it is cost prohibitive.

The planned harvest for radiata beyond the end of 2023 is listed below:

Annual harvest (ha)	2023	2024	2025	2026	2027
Radiata pine	25	150	200	200	200

Infrastructure

Approximately 49 km of roads will either need to be built or upgraded and landings constructed throughout the forest to facilitate harvesting. To date, approximately 12.5km have already been built or upgraded.

Prior to harvesting operations commencing, only the main road to the house would have been suitable for heavy vehicles to access the forest.

9. Indigenous Biodiversity

Protected ecosystems

There are 852.3 hectares of protected ecosystems within Te Rata Forest. A large proportion of those ecosystems fall into the higher protection categories (77% full or special). Parts of the indigenous reserves are already protected by a QEII Trust Open Space Covenant (580 ha in two parts).

Protected ecosystem & reserve areas by protection category

Forest	Special	Full	Limited	Passive	Reserve	Total (ha)
Te Rata	602.4	52.3	79.5	118.1	0.0	852.3
	71%	6%	9%	14%	0%	100%

High Conservation Value (HCV) Forests

The Wildlands ecological survey identified if any reserve areas met the criteria for High Conservation Value (HCV) areas under FSC rules. One of the reserve areas meet the criteria for HCV 3 – the management plan for that area can be found in Appendix 5.

Threatened species

Wildlands carried out an ecological survey of Te Rata Forest in January 2023, building on a previous survey carried out by Kerry Oates in 2021. During the survey they recorded the following threatened species:

Overview of threatened flora and fauna

Species Class	Species	Status
Avifauna	Koekoeā (long-tailed cuckoo)	Threatened – Nationally Vulnerable
	Pīhoihoi (New Zealand pipit)	At risk – Declining
	Tītīpounamu (North Island rifleman)	At risk – Declining
	Toutouwai (North Island robin)	At risk – Declining
	Whio (blue duck)	Threatened – Nationally Vulnerable
Bats	Central lesser short-tailed bats	At risk – Declining
	Long-tailed bats	Threatened – Nationally Critical
Lizards & Frogs	Hochstetter’s frog	At risk – Declining
	Forest gecko	At risk – Declining
	Barking gecko	At risk – Declining
	Copper skink	At risk – Declining
	Ornate skink	At risk – Declining

Flora	Mānkua	At risk - Declining
	Nothern rātā	Threatened - Nationally Vulnerable
	Rātā	Threatened - Nationally Vulnerable

Threatened species will be managed in accordance with both the NES-PF and the NZFOA Species Management Guidelines. Additional surveys may be carried out and/or species specialists consulted prior to operations being carried out to help minimise any potential risk to the above threatened species.

iNaturalist⁵ (Biodiversity in Plantations) will be used to record sightings of important indigenous fauna or flora discovered in the forest.

Fish

Fish species likely to be within Te Rata have been identified from the NES-PF Fish Spawning Indicator tool⁶ and Freshwater Environments New Zealand.

Further information from the Wildlands ecological survey added to the list of fish species and aquatic invertebrates that may be present in the streams. Threatened fish species are in **bold**.

Probability of presence of fish species

Species	Threat Status	Probability
Brown Trout	Introduced	Moderate
Koaro	At risk - declining	Moderate
Longfin eel	At risk - declining	High
Shortfin eel	Not threatened	Moderate
Bluegill bully	At risk - declining	Moderate

Key ecological management activities are outlined in Appendix 6.

⁵ <https://www.inaturalist.org/projects/biodiversity-in-plantations>

⁶ <https://www.mpi.govt.nz/forestry/national-environmental-standards-plantation-forestry/fish-spawning-indicator/>

10. Other Special Values: Everything but the timber

Recreation

Te Rata Forest provides little recreational use as the forest is relatively remote. Local hunters may use the forest from time to time. Any approved access is managed through the PF Olsen forest access permit system for any departure from unformed legal roads (ULRs), esplanade strips or the Walkway easements.

Following the intent of the Outdoor Access Code (published by Herenga ā Nuku – Outdoor Access Commission) and any signage / barriers in place within the forest, is expected behaviour. Closures will also apply during times of high fire risk, any force majeure state and during forestry operations.

Public access roads

There are formed or unformed legal roads, easements and esplanade reserves (marginal strips) within or adjacent to the property boundary. These include:

- An esplanade reserve runs along Mangaotane Stream within the forest boundary
- Tarnedale Road runs along the south-western edge of the forest with a road leading off it down to Te Rata settlement
- A track runs from Te Rata settlement to Mangaotane Stream to access the esplanade reserve

Refer to the Herenga ā Nuku – Outdoor Access Commission website for more details.

In addition to the above, a walkway easement is currently being planned that will provide access from the public road down to the esplanade reserve that currently runs along Mangaotane Stream, plus the newly created esplanade reserves that will run along the Stream's tributaries. This management plan will be updated once the walkway easement details are finalised.

These routes remain open to the public, subject to any temporary closures as required for safety, as described above. Temporary closures can only be undertaken in conjunction, and with the authority, of the local Territorial Authority.

Any users are expected to abide by the intent of the Outdoor Access Code (published by Herenga ā Nuku – Outdoor Access Commission), or signage / barriers in place at track or public access points.

Other special values

There currently aren't any other special values (e.g. apiary sites, mountain biking, walking, hunting) provided by Te Rata Forest.

Non-Timber Forest Products

There are no FSC certified non-timber forest products⁷ from Te Rata Forest.

⁷ In FSC standards, the reference to non-timber forest products is a reference to such products that are able to carry the FSC label. It is not a reference to the presence or absence of other co-products from the forest areas that do not seek to carry the FSC label.

11. Future Planning

Plan changes & reviews

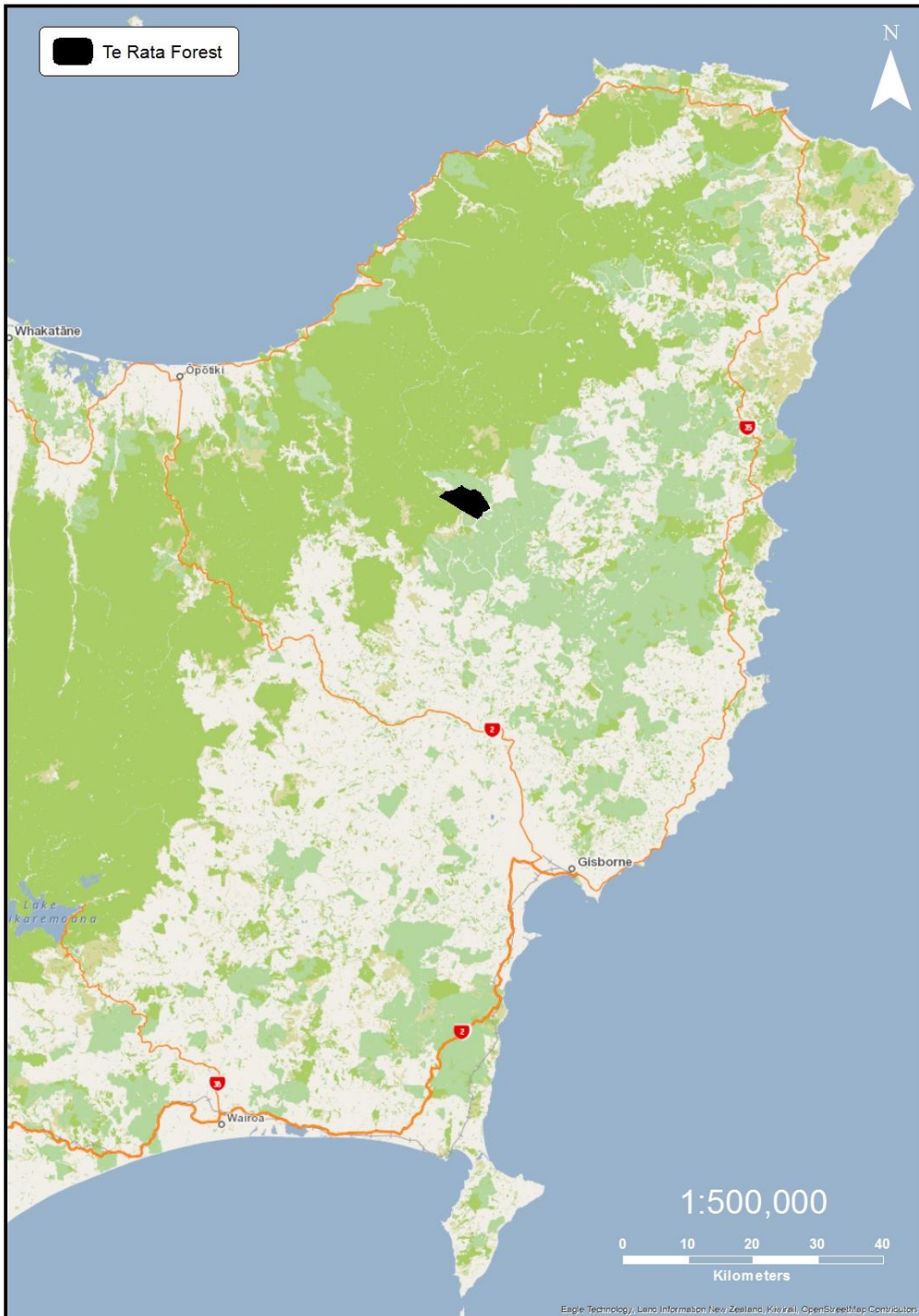
The next major review date for this plan is 5 years' time September 2028.

Minor revisions may be made at any time. Any material changes made will be documented below.

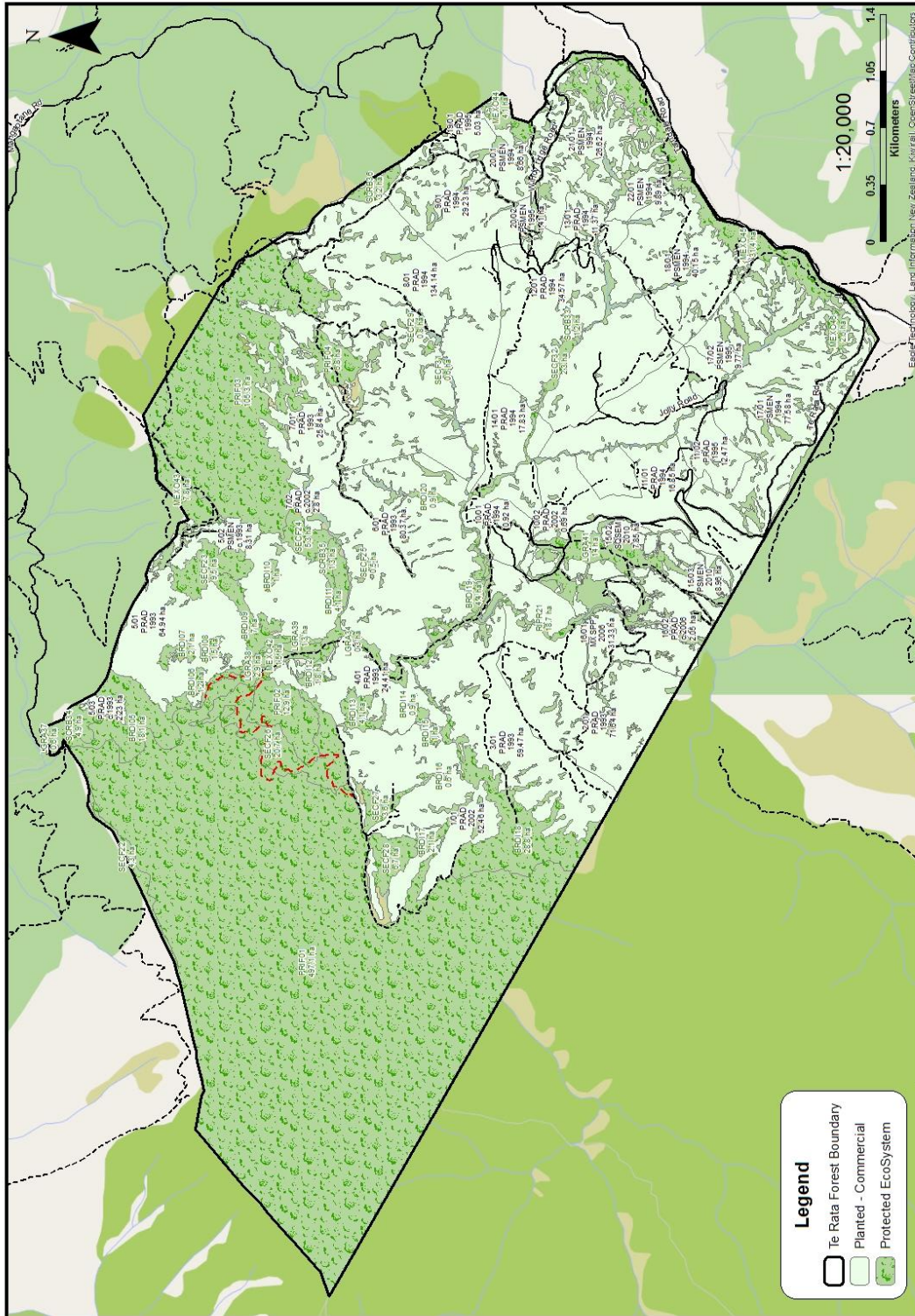
Change	Date	Section/Page
Addition of Red ESC monitoring to plan, and adjusted Appendices accordingly	12/12/2024	Page 13

Appendix 1: Forest Maps

Location Map



Forest Stand Map



Appendix 2: Forest Neighbours

Not Publicly Available

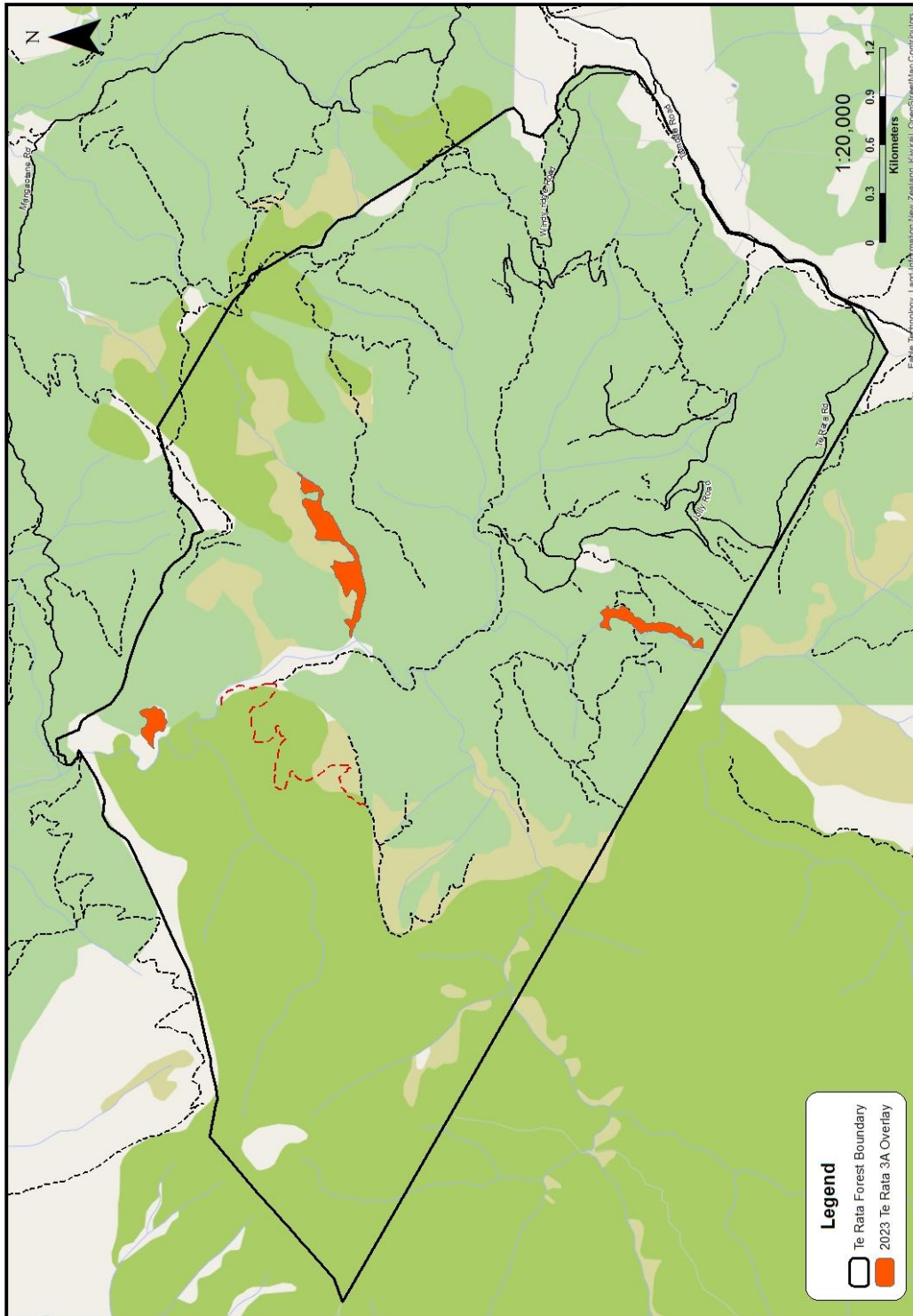
Appendix 3: Gisborne District Council Rules & Planning Maps

Subject Area	NES-PF Activity	Rule ID	Status	Rule	Activity Standards – Matters of Control or Discretion
Land disturbance on Land Overlay 3A ⁸	All activities	7.1.6(33)	Permitted	<p>Any activity, where the total area of LO3A land, on any single rating unit, is 5 hectares or more</p> <p>Note: this rule applies to plantation forestry activities regulated under the NES-PF Regulations 2017.</p>	<ul style="list-style-type: none"> The activity complies with and any more restrictive rules in respect of Land Overlay 3, where applicable: The activity complies with Specific C7.1.6.2 above (Sustainable Hill Country Project Works Plan)
	All activities	7.1.6(34)	Discretionary	<p>Any activity, where the total area of LO3A land on any single rating unit is 5 hectares or more, which is not in accordance with a certified SHCP Works Plan, or which disestablishes, or fails to maintain, certified works</p> <p>Note: this rule applies to plantation forestry activities regulated under the NES-PF Regulations 2017.</p>	In regard to any establishment Works (including establishment Works proposed in a Works Plan), the ECFP incentive exists.
	All activities	7.1.6(35)	Discretionary	Any land use activity undertaken on land administered by the Crown, where the total area of	

⁸ Te Rata Forest has approximately 12 hectares classified as Land Overlay 3A, 5.5 ha under exotic plantation forest, and 6.5 ha under indigenous forest.

Subject Area	NES-PF Activity	Rule ID	Status	Rule	Activity Standards – Matters of Control or Discretion
				<p>LO3A land on any single rating is 5 hectares or more, which is not in accordance with a certified SHC Works Plan, or which disestablishes, or fails to maintain, certified works.</p> <p>Note: this rule applies to plantation forestry activities regulated under the NES-PF Regulations 2017.</p>	

Te Rata 3A Overlay Areas Map



Appendix 4: NES-CF Red ESC Zone Monitoring

Monitoring Actions

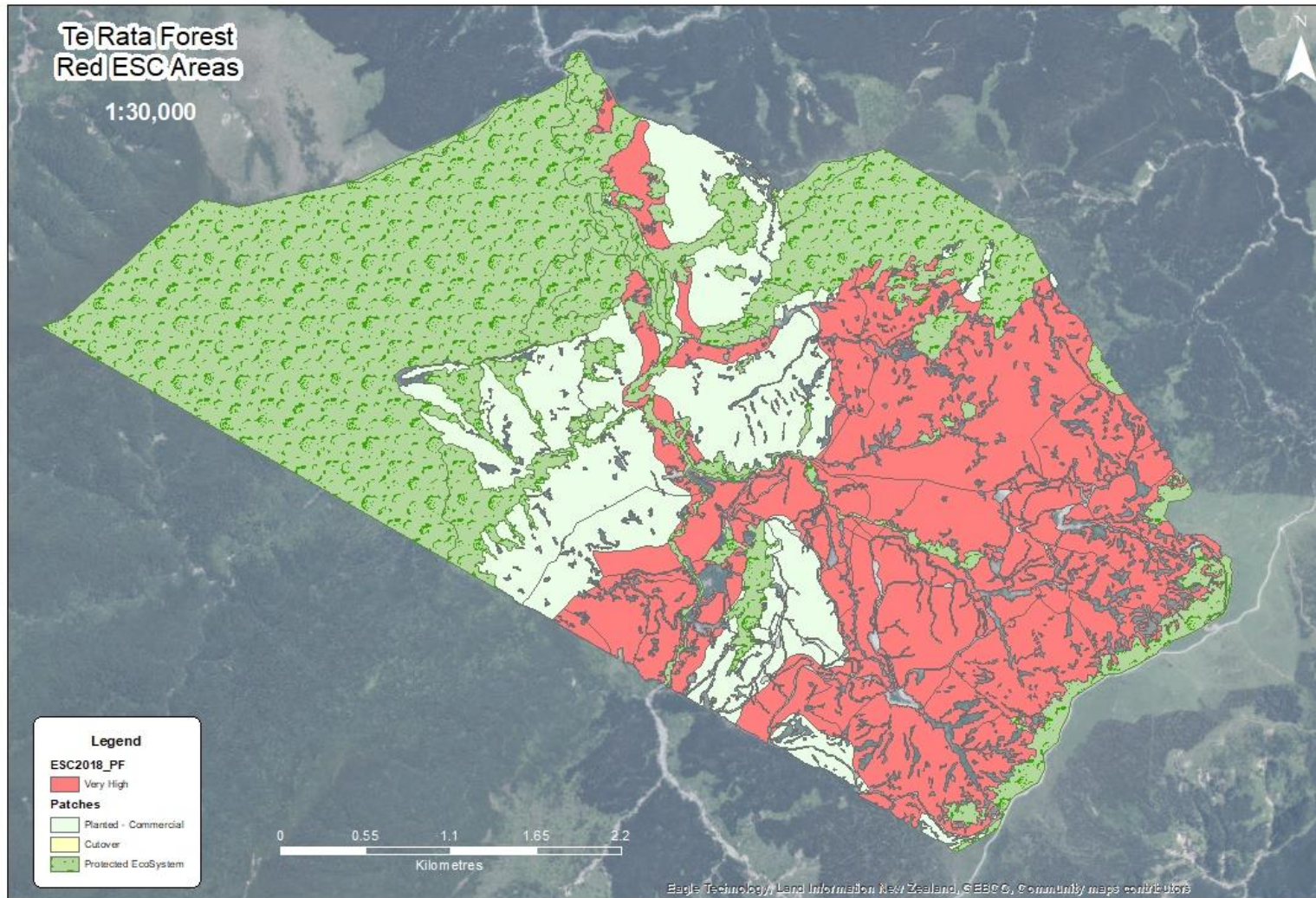
Activity Type	Actions
Monitoring of Red ESC Areas	<ul style="list-style-type: none"> • Orbica monitoring system <ul style="list-style-type: none"> - Take monthly satellite imagery of the identified Red ESC areas within the forest. - Analyse the imagery to determine levels of erosion and revegetation. • Using the PF Olsen Red ESC monitoring web tool we will: <ul style="list-style-type: none"> - Document the extent of any erosion and/or revegetation. - Determine if sediment has or will reach any water body. - Take any practicable appropriate steps to disconnect any sediment pathways to water bodies and minimise exacerbation of the erosion where feasible. • Harvesting erosion <ul style="list-style-type: none"> - Harvest managers will be aware of Red Zone areas that are being harvested and will follow NES-CF permitted activity regulations OR resource consent conditions. - Prior to harvesting commencing the harvest manger will determine if harvesting activities are likely to result in sediment reaching water bodies, and which water bodies will be affected. All practicable steps will be taken to disconnect harvesting disturbance from water bodies.

Stands to be monitored by forest

Te Rata Forest

The current total productive area of Te Rata Forest is 1,006.5 hectares. Of its current total productive area 65% is Red ESC class.

Stand	Area of Red ESC within the Stand (ha)	Total Stand Area (ha)	Percentage of Stand Affected
TERA-02-01	38.54	70.59	55%
TERA-03-01	4.46	59.47	7%
TERA-04-01	6.81	24.41	28%
TERA-05-01	16.23	64.94	25%
TERA-05-03	2.23	2.23	100%
TERA-06-01	14.30	80.37	18%
TERA-07-01	24.11	25.84	93%
TERA-07-02	0.09	2.80	3%
TERA-08-01	133.17	136.09	98%
TERA-09-01	29.25	29.25	100%
TERA-10-01	0.70	0.92	76%
TERA-10-02	0.69	0.69	100%
TERA-11-01	16.49	16.73	99%
TERA-11-03	12.28	12.46	99%
TERA-11-04	14.71	35.08	42%
TERA-11-02	13.76	22.57	61%
TERA-12-01	34.70	34.70	100%
TERA-12-02	23.53	23.53	100%
TERA-12-03	42.05	42.05	100%
TERA-13-01	11.37	11.37	100%
TERA-14-01	18.06	18.06	100%
TERA-15-02	2.86	7.87	36%
TERA-16-01	26.12	31.33	83%
TERA-16-02	2.05	2.05	100%
TERA-17-01	64.02	77.33	83%
TERA-17-02	9.77	9.77	100%
TERA-18-01	40.15	40.15	100%
TERA-19-01	5.03	5.03	100%
TERA-20-01	8.66	8.66	100%
TERA-20-02	1.41	1.41	100%
TERA-21-01	27.93	27.93	100%
TERA-22-01	9.90	9.90	100%
Total Area	655.44	935.56	

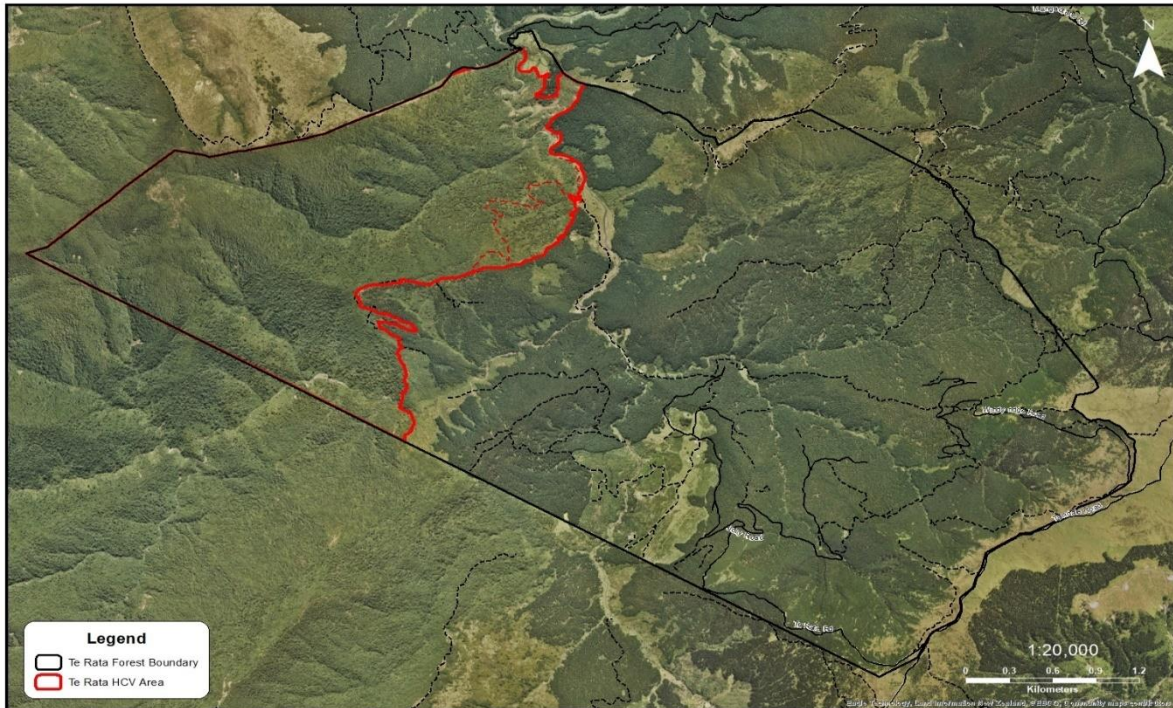


Appendix 5: HCVF Management Plan

Te Rata Forest High Conservation Value Forest Management Plan

Stand	Area (ha)	Species Composition ⁹
TERA-BRDI-05	17.6	<ul style="list-style-type: none"> Tarata – mahoe – putaputawētā forest
TERA-PRIF-01	496.6	<ul style="list-style-type: none"> (Rimu) – (miro) – (northern rātā) – (red beech)/tawa- (hīnau) forest (Rimu) – (miro)/silver beech-red beech forest Silver beech forest Tawa – rewarewa – (mataī) – (kahikatea) forest
TERA-PRIF-02	12.9	<ul style="list-style-type: none"> (Rimu) – (miro) – (northern rātā) – (red beech)/tawa- (hīnau) forest
TERA-RIPR-21	1.1	<ul style="list-style-type: none"> Mangaotane Stream and riparian margins Tarata – mahoe – putaputawētā forest
TERA-SECF-22	4.3	<ul style="list-style-type: none"> Tawa – (rimu)/whekī – putaputawētā – mamaku forest
TERA-SECF-26	20.5	<ul style="list-style-type: none"> Tawa – (rimu)/whekī – putaputawētā – mamaku forest
Total	553.0	

⁹ As per the Wildlands Ecological Report – Wildlands (2023). *Natural area survey and assessment of High Conservation Value areas of Te Rata Forest, Gisborne*. Contract Report No. 6603.



HCVF class

HCV3 – Forest areas that are in or contain rare, threatened or endangered ecosystems

Species composition

See above table, and the Wildlands Ecological Report (No. 6603) for more details on the species composition.

HCVF assessment

The HCV site in Te Rata Forest is a very large, high-quality example of indigenous primary and modified forest, which includes a good example of an important vegetation and habitat type (conifer/tawa forest) which is greatly reduced in extent in Matawai Ecological District, as well as nationally. It is also protected as a QEII Open Space Covenant (5-04-233).

Work Program

Refer to Appendix 6 – Schedule of Ecological Management

Appendix 6: Schedule of Ecological Management

Review Date: June 2028

High Conservation Value Forest

Activity Type	Required actions	Area/s	Due date
Photopoint monitoring	<ul style="list-style-type: none"> Establish photopoint vegetation monitoring of both sites. Record location of monitoring points and photos in an electronic file/document Repeat photos annually. 	HCV Area	31-Mar (annually)
Annual walk-through check / drone survey	<ul style="list-style-type: none"> Forest manager to do annual onsite check to note any issues including weeds, wilding conifers, animal browse. This can be done via a combination of a walk-through check on the ground and/or use of a drone to carry out an aerial assessment of the block. 	HCV Area	31-Dec (annually)
Pest control - Animals	<ul style="list-style-type: none"> Formalise a pest control plan – (an external contractor could be engaged). May include shooting, trapping and/or poisoning (with initial and ongoing Residual Trap Catch for possum density). 	HCV Area	31-Dec (annually)
Pest Control - Plants	<ul style="list-style-type: none"> Carry out any pest plant control based on annual walk-through check / drone survey information and the Regional Pest Management Plan. 	HCV Area	31-Dec (annually)

Other Actions

Activity	Action detail	Area/s	Due date
iNaturalist entries	<ul style="list-style-type: none"> Species and status frequencies (especially new finds) entered by public, crews, operational supervisors. 	Forest wide	As required
Archaeologist consultation	<ul style="list-style-type: none"> Consultation with an archaeologist prior to harvesting is recommended 	Forest wide	As required
Train crews in threatened species observation & management	<ul style="list-style-type: none"> Include photos of species in rare species ID posters and train (during inductions) crews to be alert for presence of threatened species and to avoid damage within operational areas. Record any sightings in iNaturalist database. Apply relevant forest management protocols (e.g. NZ Falcon Management Guide – Plantation Forestry) 	All contractors	As required
Ecological Survey – Hochstetter’s Frog	<ul style="list-style-type: none"> Undertake a pilot ecological survey for frogs in a likely habitat area, identified in consultation with an ecologist Record any sightings in the iNaturalist database. If any frogs are discovered, review for further survey work as required, plus review any additional controls for all forestry and harvesting operations 	Pilot survey in likely habitat	31-Dec-2024
Ecological Survey – eDNA	<ul style="list-style-type: none"> Undertake eDNA sampling of Mangaotane Stream for freshwater fish Record any sightings in the iNaturalist database. To be carried out annually during harvesting, and one year post harvest 	Mangaotane Stream	31-Dec (annually)
Annual surveillance check / drone survey	<ul style="list-style-type: none"> Forest manager to do annual onsite check to note any issues including weeds, wilding pines, animal browse. This can be done via a combination of a drive/walk-through check on the ground and use of a drone to carry out an aerial assessment of the block. 	Forest wide	31-Dec (annually)
Pest control – Animals	<ul style="list-style-type: none"> Formalise a pest control plan – possibly using an external contractor. May include shooting, trapping and/or poisoning (with initial and ongoing Residual Trap Catch for possum density). 	Forest wide	31-Dec (annually)

Activity	Action detail	Area/s	Due date
Pest Control - Plants	<ul style="list-style-type: none"> Carry out any pest plant control based on annual drive/walk-through surveillance check / drone survey information and in accordance with the Regional Pest Management Plan. 	Forest wide	31-Dec (annually)
Bat surveys	<ul style="list-style-type: none"> Carry out targeted pre-harvest surveys for long-tailed bats Ideally, carried out in warmer months to avoid hibernation Record any sightings in the iNaturalist database and the National Bat database (DOC) 	See below map	Summer prior to clearfell harvest

Bat Survey Location Map

