East Coast Forest Management Unit

Management Plan

PUBLIC SUMMARY 2025

Business Details

Logic Forest Solutions Ltd.

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Website: https://logicfsl.co.nz/

Logic Forest Solutions Ltd, Forest Manager - Introduction

Logic Forest Solutions Ltd - Ownership, History and Location

Logic Forest Solutions Ltd (LogicFSL) is a 100% New Zealand owned, Gisborne based, forest management company providing a range of services to both small woodlot and corporate forest owners primarily in the East Coast region, and more broadly throughout New Zealand.

The company was established in 2000 principally for the provision of harvest planning, road engineering and pre-harvest inventory services to the East Coast region. Logic has since become involved in the due diligence, consulting, planning, and management of large new forest establishment programmes including Pinus radiata and Manuka, and other species. By combining our technical expertise throughout the supply chain from forest establishment and management, to harvest planning, engineering, and marketing we can provide the sound and sustainable management service.

Logic has a strong focus on Health and Safety (H&S) and Environmental management. We are a small hard-working team with the necessary skills and experience to deliver a safe, environmentally sound, productive, and cost-effective operation.

People working in the business have a statutory obligation for the promotion and maintenance of safe working conditions and sustainable land practices by working together on our approach to improving safety attitudes and stewardship in what is potentially a high-risk industry for both.

Logic strongly believes success is gauged by the quality of our contractors, and as such, we have developed strong long-term relationships with highly skilled, professional contractors in all levels of our business.

Logic FSL has been engaged as Forest Manager by Ingka Investment Management NZ Limited, and Harvest Manager in the Ohiwa Forest FMU.

Ingka Investment Management NZ Limited estate will be managed to meet the Forestry Certification standards of good forest management.

At this stage the harvest ready Ohiwa Forest is the FMU put forward for Forestry Certification.

Forest Manager - Commitment to Forestry Certification Logic Forest Solutions Ltd

Logic Forest Solutions Ltd commit to adhere to the Forest Certification Principles and Criteria in the management unit and to related FSC Policies and Standards.

Logic Forest Solutions Ltd considers a Forest Certification system an essential tool for promoting responsible forest management for the forests managed by us.

Logic Forest Solutions Ltd also considers that, by complying with the Certification Principles and Criteria, forests are properly managed from an ecological point of view, generate social benefits and are economically viable.

We want that through the procedures and measures taken in order to implement the requirements of the Forest Certification standard, we ensure the continuity of the use of wood resources, accessory products and environmental services not only for the present generations but also for those that will follow.

We have become aware of, and undertake to adhere to, the Certification Principles and Criteria in the Management Unit, and to the related Policies and Standards. We undertake to respect and make every effort to fulfil the requirements of the standard for forest management in order to contribute to the responsible management of forests.

We agree to provide the certification body, subject to confidentiality, with the requested documents and to ensure its access to the managed forests that are included in the scope of the certificate.

Based on the above, we undertake to:

- Respect the national and international legislation (CITES, ILO, ITTO, CBD, etc.) to which New Zealand is a signatory party and to fulfil the requirements of the 10 Principles and Criteria of the Standard for forest management.
- Respect property rights and do not harm the integrity of the property of the members of the Forest Certification certified Management Unit(s)
- Implement legal measures to prevent and combat illegal cutting, poaching, violations of the forest fund and other illegal or unauthorized activities.
- Respect the national anti-corruption legislation and the acts assimilated to it, respectively the commitments assumed by the anti-corruption policy.
- Develop procedures for the expression of complaints and complaints and to ensure mechanisms to resolve them and implicitly the damages caused.
- Respect the general principle of equal opportunities and treatment with the aim of eliminating any discrimination based on race, sex, religion, political opinions, national or social origin, marital status, parental status or sexual orientation.
- Support the socio-economic development objectives of local communities, including by facilitating access to wood for local operators, encouraging the purchase of local goods and services, providing firewood for members of local communities.
- Offer employment and training opportunities to local communities in the area.
- Ensure the fulfilment of all the requirements related to Labor Protection and to monitor compliance with the requirements related to Labor Protection also by the exploitation companies or contractors.
- Ensure that forest management operations will aim at the efficient use of the multiple functions of the forest to ensure economic viability and a wide range of environmental and social advantages.
- Identify and take measures to protect rare, threatened or endangered species.
- Designate/maintain a network of conservation areas of at least 10% of the certified surface, as representative areas of natural ecosystems that will have biodiversity conservation as a priority objective.

- Ensure the preservation within the necessary ecological limits of the dead wood on the ground and on the feet/trees for biodiversity.
- Respect the technical norms of exploitation and to ensure the protection of the soil, watercourses and neighbouring ecosystems.
- Avoid the use of chemical substances as much as possible and to exclude from total use substances prohibited by Forest Certification In case of use, this will be done only in extreme cases and in compliance with the rules in force.
- Monitor the forest so that we have permanent and accurate data about the current state of the forest, the forest production, the chain of custody, the management of activities and their social and environmental impact.
- Properly identify, through a participatory, transparent process, the High Conservation Values, and to implement appropriate management strategies to ensure their maintenance and/or improvement in the Management Unit by applying the precautionary principle.

Forest Owner Reasons for certification - Ingka Investment Management NZ Limited

Ingka Investments Forest Assets NZ Limited and Ingka Investments Management NZ Limited are part of the Ingka Group of companies, whose ultimate parent is Stichting Ingka Foundation, which is registered in the Netherlands and is part of the Ingka Group which is the largest franchisee of IKEA stores internationally operating in over 30 countries.

Ingka Investments is the investment arm of Ingka Group. To secure its long-term growth, Ingka makes responsible investments in people and businesses that make a positive difference to people and the planet, including in forestry. Ingka Group currently owns around 280,000 hectares of responsibly managed forests in the United States, Romania, Estonia, Latvia, Lithuania and New Zealand. Its firm commitment is to be a responsible forest manager, balancing the environmental, economic, and social aspects. Its forest management view is for long term, and it works every day to preserve and increase the forest quality for generations to come. Ingka Investments follows a buy-and-hold strategy for its forestry investments.

Ingka Investment Management NZ Limited commit to manage all their forests in a sustainable way, with proper care for people and environment while also meeting our business objectives. We take an integrated, long-term approach, balancing interests of all stakeholders and securing the forests and their biodiversity for the future.

As a responsible forest owner, we employ methods that will allow us to preserve and even increase the quality of the forestland over time.

Ingka Investment Management NZ Limited are investing in New Zealand with acquisitions to create a forest resource for a long-term future and wood supply.

Ingka has a very strong focus in its approach to lead in environmental, economic and social outcomes. Ingka is undertaking Forestry Certification for all management areas as a certification to ensure that this focus is sustained for a long time. One of the key visions of Ingka is creating a

better everyday life for the many people. This gives us both a unique opportunity and an important responsibility to make a positive contribution to people and the planet through our investments.

Ingka are committed to Forestry Certification across our entire portfolio and all the Forest Managers must be working towards this goal. .

EAST COAST Forest Management Unit

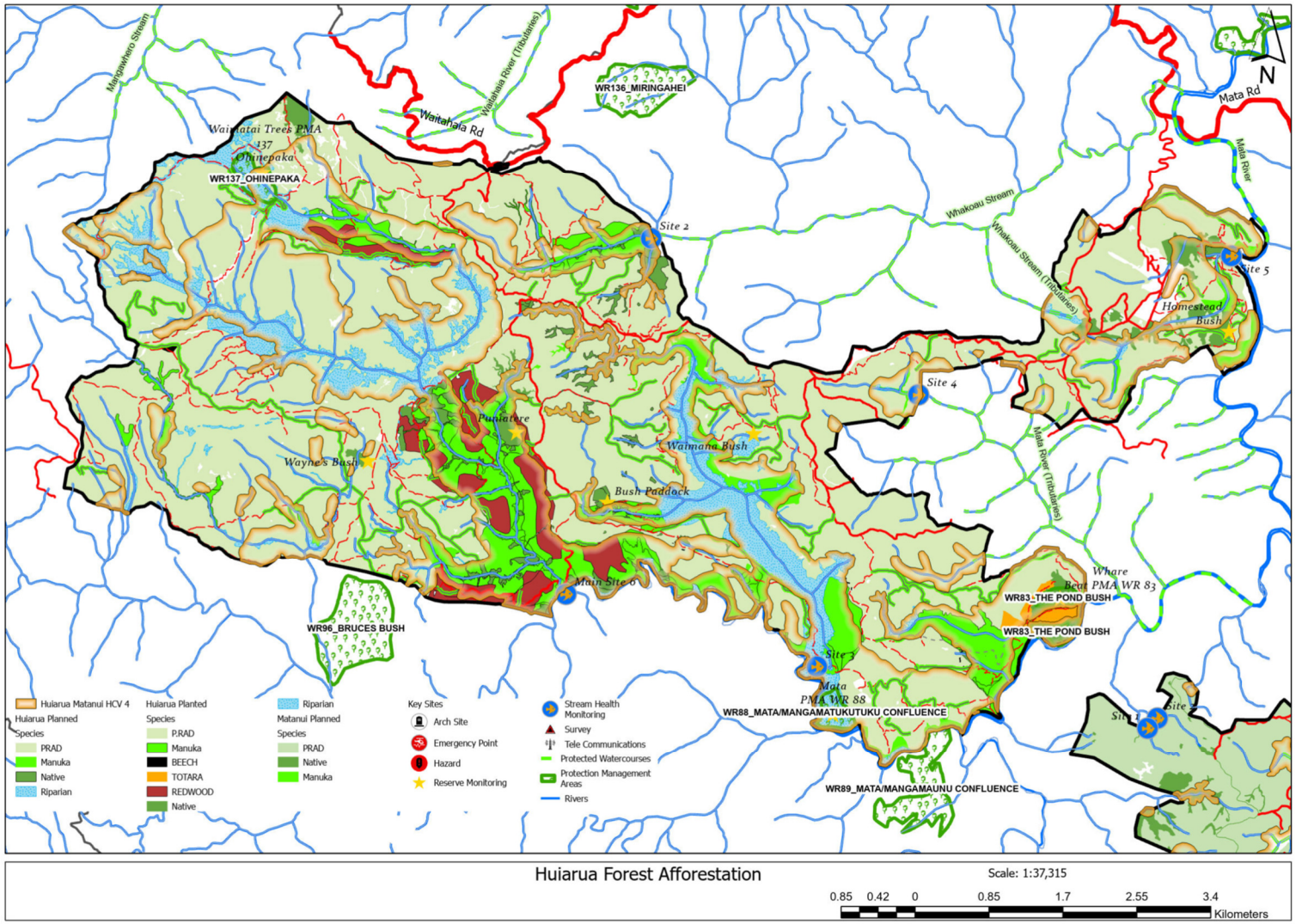

Figure 1 Huiarua Forest

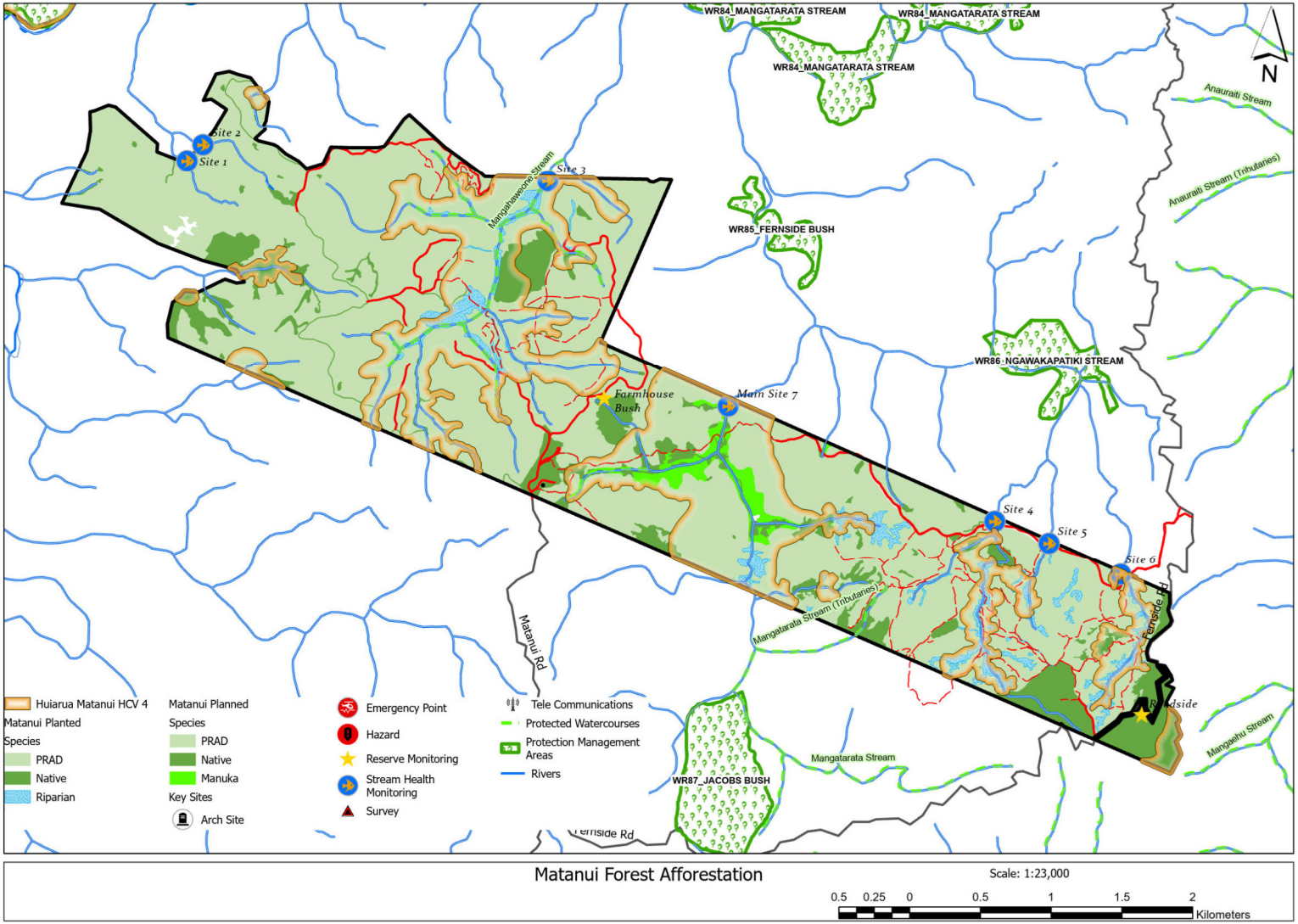

Figure 2 Matanui Forest

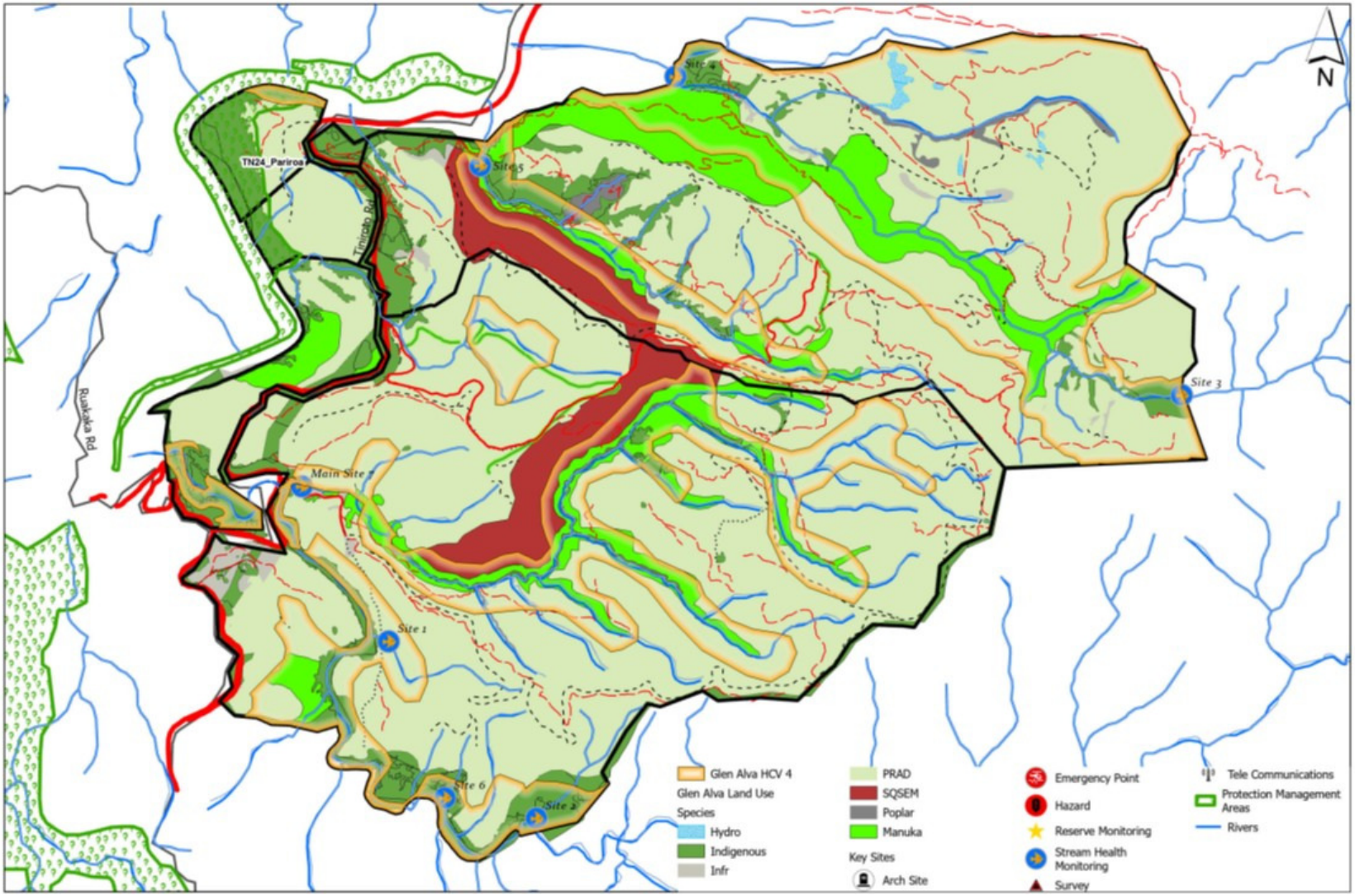

Figure 3 Glen Alva Forest

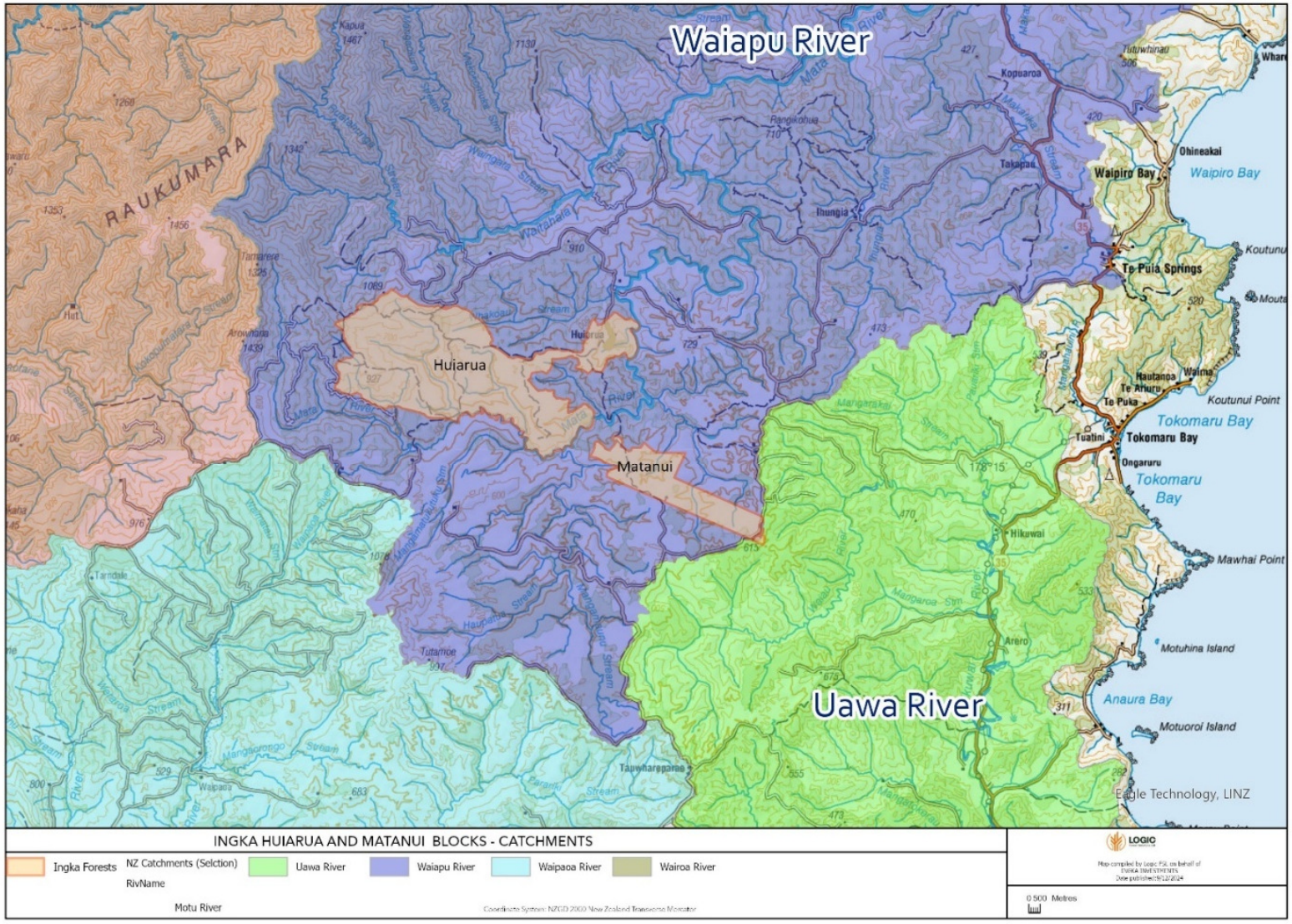

Figure 4 Huiarua Matanui Forests Location within the Main Waiapu River Catchment

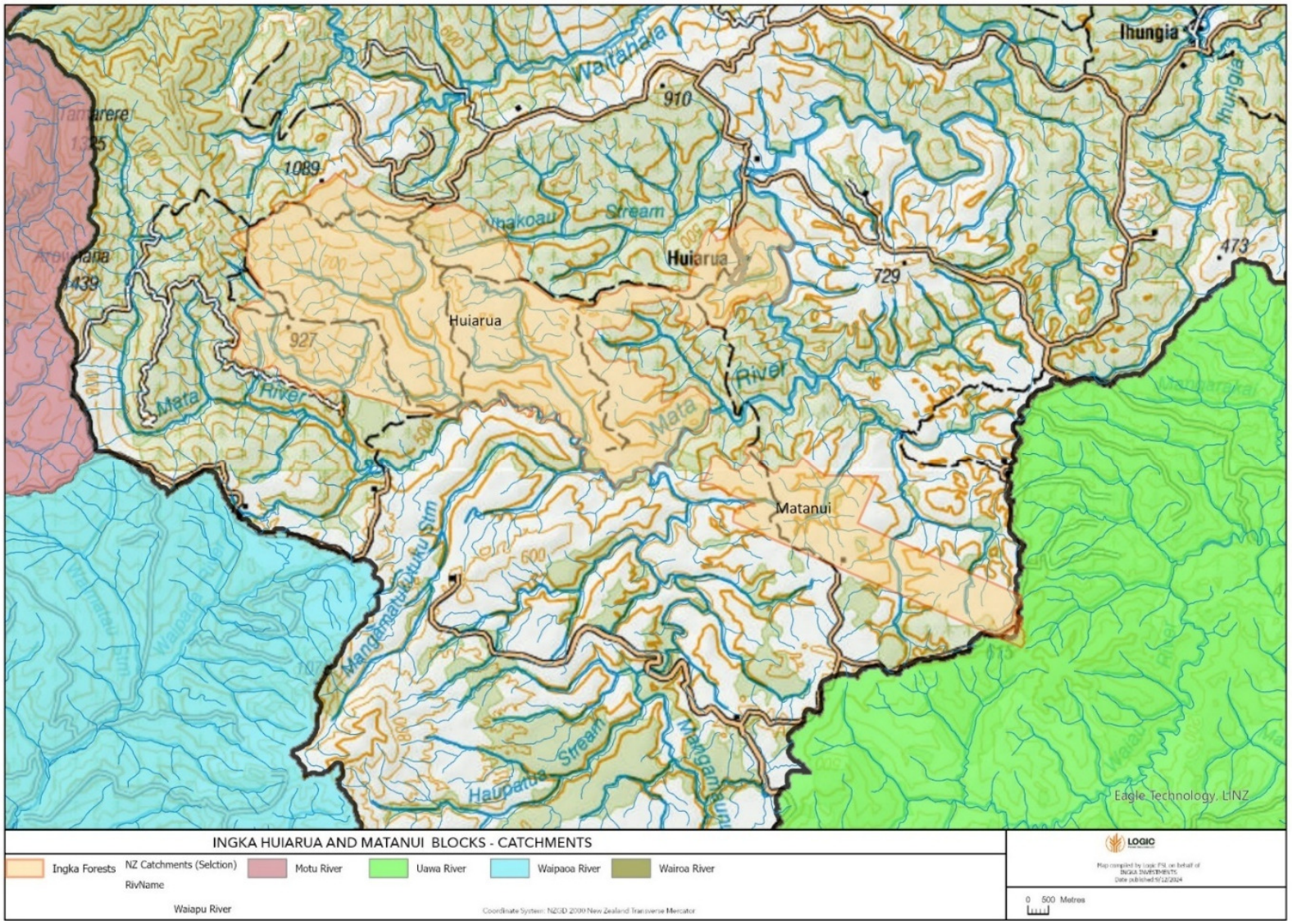

Figure 5 Huiarua Matanui Forests within the Mata Sub Catchment

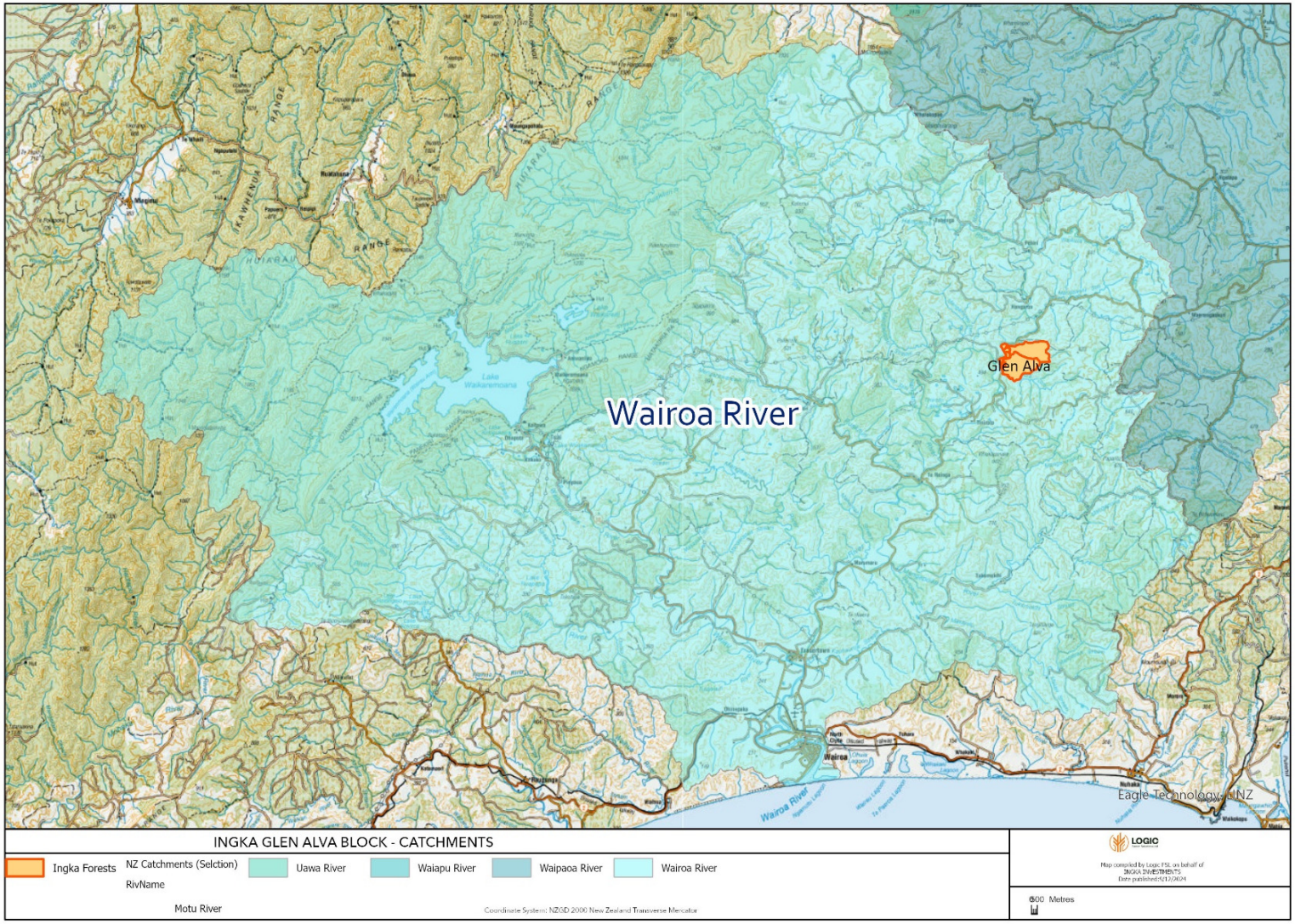

Figure 6 Glen Alva Forest Location within the Main Wairoa River Catchment

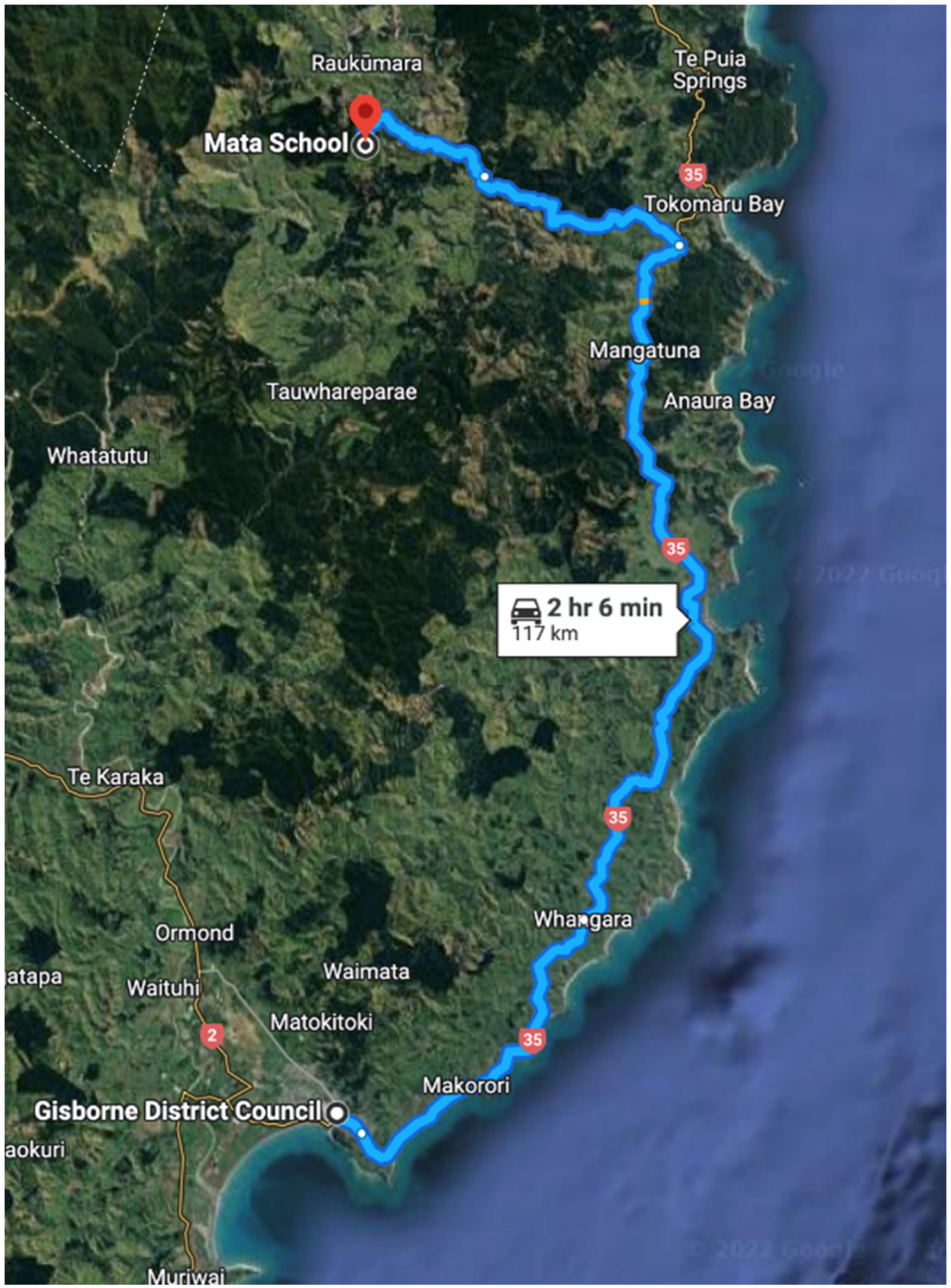
Raukūmara
Te Puia Springs
Mata School
35
Tokomaru Bay
Mangatuna
Tauwhareparae
Anaura Bay
Whatatutu
35
2 hr 6 min
117 km
Te Karaka
35
Ormond
Waimata
Waituhi
Matokitoki
2
35
Makorori
Gisborne District Council
Muriwai

Figure 7 Location of Huiarua and Matanui Forests

Huiarua Matanui Forest is a former Pastoral Farm and plantation Forest in development located in the Mata Region of the Gisborne District.

The closest town is Gisborne, approximately 117kms South.

The current Huiarua Matanui Forest is bounded on all sides except the Southeast by existing Exotic Forest. To the Southeast and a small part North, by Pastoral farming

The Huiarua and Matanui Forests are located in the Waiapu Catchment and the Waiapu (East Coast Ecological District)

Glen Alva Forest is a former Pastoral Farm and plantation Forest in development forest located in the East Coast of New Zealand, Tiniroto District of Gisborne.

The closest town is Gisborne, approximately 49km or a 1 hour drive located on Tiniroto Rd.

The current Glen Alva Forest is surrounded to the East and North by existing Exotic Forest and to the west and south by Pastoral Hill Country Farming.

The site is currently (early 2025) part farmland and new forest some older woodlots, with existing farm tracking and old crossings in place although the property is in the process of being afforested with a wider tracking upgrade programme partly completed.

The Glen Alva Forest is located in the Hangaroa Catchment and the Tiniroto Ecological District.

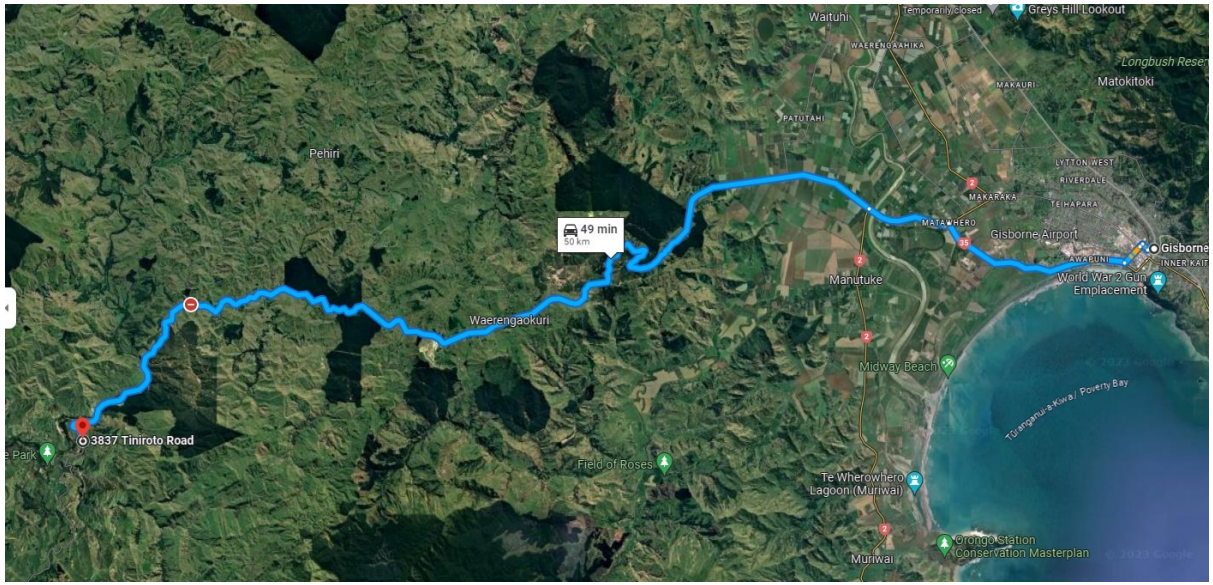

Figure 8 Location of Glen Alva Station within the region

Public Access

Public Access will be reviewed in 2025 to start discussions with interest groups on some formal access arrangements.

If you would like to enquire about access please phone +64 (0)6 863 2447
office@logicfsl.co.nz

Legal Framework of the Forest Management Unit

Forest Name	Location	Total Area (ha)	FMU Description
Glen Alva Forest	3837 Tiniroto Rd, Tiniroto, Gisborne. NZTM: 1999656 5702792 E,	954	The site is currently (early 2025) part farmland and new forest (2024) some older woodlots, with existing farm tracking.
Huiarua Forest	Huiarua Road, Mata District. NZTM Map Reference:1 952 425 (N) - 5 785 377	4922	The site is currently (early 2025) part farmland and new forests (2022-2024) some older woodlots, a large section of 2013 Planting, with existing farm tracking.
Matanui Forest	Accessed off Fernside Road, Tauwhareparae. Mata District. NZTM: 2035300mE, 5770000mN	1197	The site is currently (early 2025) part farmland and new forest (2022) some older woodlots including a second rotation woodlot (2021 replant), with existing farm tracking.

Policies and Objectives of the Forest Management Unit

The key objective of the Forest is to optimize the long-term value of the asset for our clients in accordance with the Forest s main functions: bio-productivity and conservation of environmental values

Logic Forest s Solutions will provide a professional service which maximises return on investment for our clients and achieves a reputation for innovation, honesty, reliability and integrity. LFSL will engage professional contractors and technology to improve knowledge and value to our stakeholders.

Economic Objectives

- To ensure our clients Forest s are Commercially and Economically viable.
- To ensure our business is Commercially and Economically viable.
- To maintain and add value to Forest assets
- Sustainable supply of Forest Products [Site productivity - Yield of all Forest products harvested]
- Appropriate sustainable land use

Compliance Objectives

- Compliance with all applicable Laws and Regulations.
-

Social & Cultural Objectives

- Restore our Social Licence to Operate
- Respect for our stakeholders, & rights of indigenous people
- Good employer to staff, and Contracted businesses
- Accountable in the community in which we operate
- Assist Stakeholder Social Programs where possible

Health & Safety Objectives

- Culture of care for the Health Safety and Wellbeing of all who participate in, or visit, the enterprise
- All home safe every day
- Drug and alcohol-free workplace

Environment Objectives

- Maintain or Enhance Growth Rates of Regeneration areas
- Protection and Enhancement of Rare Threatened and Endangered Species within the Forest
- Composition (and observed changes) in the flora and fauna shows no decline in values
- Maintain Soil Productivity, Minimise erosion
- Responsible chemical use
- Water Quality (and Quantity) is aligned with National Targets
- Soil erosion, compaction, fertility and carbon content is not negatively affected by Forest Management Practices

Exotic Forest Operations

Rationale for species selection and regime

Radiata pine (Pinus radiata)

Radiata pine (Pinus radiata) accounts for 90% of New Zealand's planted forest estate. Radiata pine is a fast growing and versatile softwood with a wide range of uses and applications.

NZ radiata pine is plantation grown, renewable and sustainable, was planted as a primary timber crop to provide an alternative to New Zealand Indigenous Forest timbers and the import of threatened tropical timbers.

It is a medium-density softwood, straight grained with an even texture. It is treated to H3.2 for durability and works well with hand and machine tools. Heartwood is light brown in colour and is non-durable to perishable in regard to decay resistance. Sapwood is pale yellowish-white colour treated with preservatives to be used in external applications.

New Zealand pine is a versatile softwood and well suited for a range of structural and appearance applications. The light consistent colour of radiata pine readily accepts stains and its general properties make it ideal for painting.

The pruned butt log can be used to make knot-free veneer or appearance grade timber

The unpruned logs can be used for structural timber, for veneer for plywood, and stock for finger jointing

Pulp type logs and those with defects and excessive knots can be used for pulp and paper.

Pinus radiata has been proven to grow successfully at the property.

There is a growing domestic market for Radiata Pine in the FMU Region, with a dominant export market.

The local sawmills process only Pinus radiata logs, and there is a strong and proven export market for the logs that the local mills don't use.

Redwood (Sequoia Semperverins)

The forest owner chose to afforest some areas of the forest with Redwood recognising that these areas required a longer rotation species, or permanent species.

New Zealand has limited domestic sawmilling capability for other exotic species however interest in Redwood is growing along with the plantation size.

Redwoods has been planted as a buffer to some riparian's above the eroded bank area, and often above areas buffered by Manuka

Totara (Podocarpus totara) Huiarua Forest

In areas where there are significant Indigenous remnants and where areas are deemed not suitable for rotational forestry a large-scale trial of Indigenous Totora has taken place.

Beech. Huiarua Forest

High Country Beech has been planted as a test trial on exposed sites where rotational forestry is unsuitable.

Beech occupied some of these lands prior to deforestation for pastoral farming.

Manuka

In areas where production forests will not be planted Manuka has been chosen as a first occupying species to give effective tree cover faster than relying on local seed sources, which may not be present after over a century of grazing and fertiliser applications,

Establishing manuka as an effective tee cover protects the vulnerable soils where land classes indicate that rotational forestry is unsuitable and also provides a nurse crop for shade tolerant natives to emerge and fully protect these areas.

Some areas of the forest have very thin soil cover over erodible sand and mudstones and will not take a heavy woody species.

Upon completion of each year's harvest, replant decisions will be made each December and the Forest Owner and Manager will consider the portion of the commercial plantation which will be restocked with Pinus radiata.

No genetically modified species will be grown at this property.

Productivity indices

Site index is used to measure of productivity of a site in terms of height growth of radiata pine. The parameter used is the mean height in metres of the largest 100 trees per hectare at age 20 years. Models predict this height given a measured height at any age.

The 300 index is a measure of productivity of a site based on stem volume growth (mean annual increment MAI) of 300 stems per hectare.

Management objectives for the next five years

These objectives are reviewed annually.

The main Operational management objectives for the next five years are:

- Construction of tracks for the continued Afforestation
- Continuation of Afforestation with Exotic Production species and Indigenous Permanent Species
- Pest Control for programs.
- Continue Ecological Management programs as developed.
- Woodlot Harvest planning for remaining woodlots on the property
- Woodlot Harvesting and Earthworks
- Woodlot Replant

Alternative Products

A social initiative within the Huiarua and Matanui Forests uses Meat from Pest Control Operations to distribute into school lunches.

Operational Plan for the next five years

Afforestation Phase

Establishment

As the Forests are a Greenfields Forest development there is currently a transition period where the pastoral farm grazing is being progressively replaced with Afforestation each winter.

Final year of significant afforestation for Huiarua will be 2025.

Final year of significant afforestation for Matanui will be 2026.

Harvest Planning

Draft Harvest Planning of the Forest was completed for planning purposes in 2022.

Building Roads and Landings

Forest Road and Farm road Maintenance continues

Presently no Harvest Roads are being constructed. Some may be required when Woodlot harvesting becomes viable

Harvesting

Presently no Harvesting is taking place. Some may be required when Woodlot harvesting becomes viable

Replanting

No replanting is planned

Re-planting considerations (when required)

Prior to re-establishment of the tree crop, a review will be conducted to identify and incorporate:

- Boundary changes
- Species choice
- Retirement from productive forest
- Riparian and reserve protection which would provide better outcomes for the plantation forest and the environment.

Wilding spread

A requirement of the NES-CF is that Afforestation of a new species, or any change in species must be evaluated using the 'wilding spread calculator' to ensure that the threshold for spread will not be exceeded. If it is exceeded a Resource Consent must be sought for the establishment of that species.

Logic Forest Solutions use an in-house Wilding Risk Calculator for estimation of Wilding Risk.

Based on the following https://www.mpi.govt.nz/growing-and-harvesting/forestry/national-environmental-standards-for-plantationforestry/wilding-tree-risk-calculator/

Aerial desiccation (pre-plant) Spray

When required Cutover will be desiccated prior to replanting. This is to ensure that weed species will not out-compete the radiata seedlings.

Release spraying (Aerial and 'spot-spraying')

Pre and post-plant sprays are detailed in the Forest Operations Prescriptions.

Cutover that has been replanted may require a release spray due to the vigorous emergent weed species present in the FMU (such as Inkweed). This is to ensure that weed species will

not out-compete the radiata seedlings. See the Integrated Pest Management Strategy (IPMS) for more detail.

Pesticide and chemical usage, storage and disposal

Herbicides are used in pre-plant land preparation and post plant releasing for removal of competition species, and for weed pest.

The intent is always to use herbicides as efficiently as possible.

Presently no pesticides or toxins targeting insects or mammals are being used.

Logic FSL investigates alternative methods before committing to a chemical solution.

Further detail can be found in the LogicFSL Chemical Use Policy

Storage of Chemical meets the requirements of HSNO and NZS 8409:2021

Chemical Usage is calculated post plant June each year.

Silvicultural regime description and justification

The majority of stands will be managed as a Clearwood regime. This process will involve pruning and thinning to waste.

Clearwood is processed by domestic mills and is a popular product for export.

The main product is high value timber used in decoration and furniture. While pruning yields a higher value product, it also requires more investment.

Structural Logs grown under the clearwood/framing regime can also be processed locally, presently in small volumes, and sold for export under existing supply contracts.

Tree nutrition

Foliar samples will be taken if nutrient deficiency symptoms are observed or expected. Fertiliser* will only be applied if the health and the growth of the trees are significantly affected, or where economic analysis demonstrates a benefit.

Site productivity and tree nutrition are the subject of industry research programmes. Logic

*Note Fertiliser use is rare in the North Island and not required in the Eastern Bay of Plenty or East Coast.

No fertiliser has been used in the Forest at the time of writing of this Management Plan.

Logic FSL has a *LFSL Fertiliser Use Policy* in place if there is a requirement to Fertilise.

Pruning

Pruning will be undertaken in two (2) lifts to 6.5 metres at approximately age 5 and 7. Target Stems per hectare will be from 320-350 sph.

Thinning

Thinning will be undertaken in all regimes. A clear wood stand would have one final thin to 330 sph at age 8 years after the final 2nd lift. There is one thin/final crop selection undertaken on a framing timber stand when trees reach full canopy cover and a height of between 10m -12 m. The target stocking in the framing stands in 450 sph.

All thinning is by way of chainsaw and qualified operator. This is cost effective and provides employment for local contractors.

Regulatory checks and procedures for operations

The procedure for regulatory checks is detailed in the *LOGIC FSL Monitoring Plan.*

Local processors are used where possible

At present no harvest is undertaken in the forest.

Re-planting considerations

Prior to re-establishment of the tree crop, a review will be conducted to identify and incorporate:

- Boundary changes
- Species choice
- Retirement from productive forest

- Riparian and reserve protection which would provide better outcomes for the plantation forest and the environment.

Wilding spread

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Exotic Forest Monitoring programme,

All Monitoring is summarised in Appendix A Monitoring Summary

LOGIC FSL Monitoring Plan Public Summary available on the LFSL website https://www.logicfsl.co.nz/

The Ecological Context of the East Coast Management Unit

Huiarua Matanui Forests Biodiversity values

The Huiarua–Matanui FMU features a diverse range of indigenous forest remnants, with primary podocarp/broadleaf remnants and tawa-dominated stands to regenerating secondary vegetation present.

Site Survey

Huiarua Blocks

- The Pond Bush (16.5ha): Mature podocarp forest with an oxbow wetland. Contains emergent matai, with an understory of coprosmas and māhoe. The wetland area has raupō and patches of open water. Identified as PMA WR83, it supports extensive riparian native forest with mature podocarps and tanekaha, though the understory is degraded by browsing pressure.
- Mata/Mangamatukutuku Confluence (13.5ha): Features riparian podocarp forest, with an oxbow that was inundated during Cyclone Gabrielle. Notable for diverse tree species, including black beech, tanekaha, and pokaka. Identified as PMA WR88, it forms a key riparian corridor, though browsers have impacted understory development.
- Ohinepaka (20ha): The highest-altitude block in the FMU, regenerating after the burning of the beech forest that would have been present ~100 years ago. It contains a distinct suite of species compared to the other blocks, primarily low-growing and dense vegetation dominated by horopito, with occasional beech trees. Identified as PMA WR137.
- Wayne's Bush (4ha): Degraded treeland with limited understory due to prolonged stock and deer browsing.
- Bush Paddock (5.5ha): South- and west-facing block with a strong subcanopy, suggesting past recovery due to stock exclusion, before deer numbers increased.
- Waimana Bush (5ha): Dense canopy dominated by kāmahi, matai, and rewarewa, but with severe stock damage preventing understory growth. No viable understory remains due to recent or ongoing stock grazing.
- Homestead Bush (6.5ha): Contains a gully with emergent matai and tōtara, though browsing pressure has left much of the understory bare.

Matanui Blocks

- Farmhouse Bush (8.5ha): Primary broadleaf forest with a tawa-dominated canopy and occasional emergent hīnau. The understory is present mainly in steeper areas where browsing pressure is lower.
- Roadside (14.5ha): Kanuka-dominated catchment with high light availability, supporting a diverse understory despite localized browsing pressure. Occasional emergent rewarewa are present. Jovellana sinclairii (At Risk – Declining) was found growing near a small creek running under the road.
- In general, the blocks of a lower ecological value (blocks of secondary vegetation - Roadside, and Ohinepaka) were in the best condition. This is due to the increased light levels that enter a regeneration forest. The more mature primary blocks were negatively impacted to varying degrees by browsers.

While stock grazing and ongoing browsing by deer, possums, and goats have led to some degradation—particularly in the understory—the removal of livestock and effective browser control has already lead to small signs of recovery.

- Both Huiarua and Matanui support several RTE (Rare, Threatened, and Endangered) species. RTE plant species including *Jovellana sinclairii* and *Lophomyrtus obcordata* have been recorded in Huiarua, with a North Island Robin also noted in a remnant patch.
- Due to the range of forest types, aspect, and varied histories, collectively the blocks of indigenous vegetation across the Huiarua–Matanui FMU contain a large proportion of the expected plant dversity of the ecological district. The 9 blocks surveyed are small, and other than a few exceptions, are very isolated ecologically, in a quite degraded state.

Logic Forest Management commenced Stream Health Monitoring within the Forest in May 2023.

Recognised Significant Indigenous Vegetation and Habitat records

The Protected Management areas within the forest are based on the Department of Conservation PNAP Programme and share original names and boundaries.

Biodiversity values

Logic Forest Solutions engaged an independent Ecologist to field survey samples sites of indigenous vegetation and habitats in February 2025.

Glen Alva Forest Biodiversity values

Ecology and Biodiversity Summary

There is Protected Management Area within the property area but not near the production areas.

The Forest Manager recognises the high ecological value of the river edges and bush remnants, and others. As noted above the sites will not be negatively affected by this operation.

Activities that will take place as part of this Afforestation activity will have positive effects on the Biodiversity of these areas.

Retirement from stock access, Pest control, weed pest control and recreational hunting will continue, Wet areas currently open to cattle will be retired and some of these show potentials to recover into Wetlands and the Landowner is interested in restoring and enhancing these over time.

Some wet areas have been identified in the GDC 2022 Regional Wetlands Study.

These are located within the production area. These consist if seepage or marsh areas with low to medium confidence of their value as wetlands as they were amongst improved pasture

Afforestation will be setback from these areas and if deemed practical margins may be planted to

enhance recovery of these wet areas.

Afforestation will be setback from all streams with a wider than minimum setback on listed streams or in areas where slope or soil type indicate a higher risk of debris transport to waterways, or any potential land slipping while trees are on the soil.

The retirement of the land from livestock will have an immediate effect on compaction of soil, grazing of riparian's and entering waterways, , grazing of indigenous and emerging vegetation. Active pest control will minimise Deer, Goat, Rabbit, and possum damage.

There will a reduction in sediment entering the waterways, as well as a reduction of nutrients related to the cessation of fertiliser application, and reduction of animal excrement and urine

The Landowner recognises the inherent values of this river system that this activity is linked to, and is confident that the activity can be carried out in a way that provides for and protects these inherent qualities. The sediment and erosion control measures and general methods of

operation are considered to be best practise. Minimal Earthworks will be required due to the existing infrastructure on site and conversion from farm to Forest has additional sediment reduction benefits.

Malcolm Rutherford of MR Ecology has undertaken a desktop assessment, and a Coarse level field visit of the property.

Survey Biodiversity values

Glen Alva contains limited indigenous vegetation, with the notable exception of riparian kahikatea forest along the Hangaroa River and in some areas of the Kaikoura Stream.

The DOC Protected Natural Areas Program identified RAP TIN 37 Pariroa as ecologically significant (also known as GDC PMA TN24). 11 ha of this RAP fall within Glen Alva's boundaries, and include podocarp-rich terrace forest and advanced secondary forest. This is part of a semi-continuous 75 km corridor of indigenous vegetation along the Hangaroa River.

At present the bush remnants on the property are degraded due to previous stock grazing. With the removal of stock, and control of deer and goats, the terrace forest will improve in condition and this may lead to the emergence of some less common species.

The Niwa database lists native and endemic freshwater fish in the area, including *Anguilla dieffenbachii* (longfin eel, At Risk-Declining). eDNA surveys nearby also recorded *Echyridella menziesii* (freshwater mussel, At Risk-Declining),Black Shag (*Phalacrocorax carbo*) (Naturally uncommon, relict) Little Shag (*Microcarbo melanoleucos*) (At Risk - Relict).

Glen Alva is likely habitat for *Falco novaeseelandiae* (New Zealand falcon, At Risk-Recovering) and, *Chalinolobus tuberculatus* (long-tailed bat, Nationally Critical) which have both been recorded nearby.

Recognised Significant Indigenous Vegetation and Habitat records

Protected Areas including Protection Management Areas (PMAs)

There are no Protection Management Areas within the production area.

TN24 (Pariroa) is located adjacent to Glen Alva Station, outside of the production area.

GDC has no monitoring data on this PMA (email from Don McLean May 15th 2024).

Protected areas (http://ourenvironment.scinfo.org.nz)
There are no other protected areas within the Application Area

Rare or Threatened species

There are no recorded or anecdotal reports of sightings of Rare or Threatened species in the FMU area or surrounding areas.

The Protected Management areas within the forest are based on the Department of Conservation PNAP Programme and share original names and boundaries.

Ecological Survey January 2025

Malcolm Rutherford of MR Ecology has undertaken a desktop assessment, and a Coarse level field visit of the property.

Protected Management Areas (PMAs)

The Glen Alva Forest contains the Protected Management Area's and records are taken from the GDC TRMP, these sites were visited in the Field Assessment January 2025.

There are no recorded or anecdotal reports of sightings of Rare or Threatened species in the FMU area or surrounding areas.

In lieu of sightings or information of Species present the Forest Manager will take the precautionary approach with regard to threatened species that may be found in the area and include actions within the Work Specifications prepared for the Afforestation Operations for those species.

There are unlikely to be any Terrestrial Species present within the application area. Any currently there, but undetected, will not be affected by the Afforestation process.

Species with the potential of being present in the area, once pastoral farming activity ceases, listed in Schedule of the TRMP G7B (Regional or Nationally Rare or threatened species found in the Gisborne District).

The Forestry Contractor and Management staff are trained in recognition and reporting of Rare and Threatened Species.

The Forest Management Company, as part of the induction process for new contractors and staff, will provide training materials and information to ensure this continues.

Pest Control Contractors are educated and engaged in being aware of biodiversity changes within the blocks they work and have a reporting system within their tools to alert the Forest Manager of possible sightings.

Setbacks from Significant areas

The applicant will set back 10 metres from the boundary of all PMA and where the PMA has spread outside the boundary of the PMA the applicant will setback at least 10 metres from the area of growth.

Stream Health Monitoring

The Forest Manager has carried out initial Stream Health Monitoring on the property twice in 6 months and will continue to do so annually for some sites.

The initial survey monitored 7 sites.

Over time monitoring will settle on a smaller number of sites.

Initial data was taken while the management area was continuing as a pastoral farm prior to stock exclusion.

Pest Management

Pest Monitoring and Management

Logic Forest Ltd manage Pest Control around and within the forest.

Currently Production Pests are being managed on a monthly schedule and also on as-needed basis with a Contract Pest Controller and an on-site caretaker.

A social Program uses meat from Pest Operations within Huiarua and Matanui.

Hunting & Pest Control

Recreational (if any) hunting is be managed via Logic's permit access system and issued as required. We would also advise:

- No camping or fires to be permitted within the forest.
- No forest access will be issued in times of High Fire Risk.
- No forest access will be granted whilst forest operations are undertaken in the forest.
- No dogs allowed AT ALL within Ohiwa Forest

If you would like to enquire about access please phone +64 (0)6 863 2447
office@logicfsl.co.nz

Monitoring Plans

Logic FSL will base its management and operational decisions on the results of monitoring.

LFSL has in place a Monitoring Plan for the FMU.

The Pest Control Plan will include managment of production pests, and plant pests, alongside Predator Control actions to meet the requirements of a wider Integrated Pest Managment Strategy (IPMS).

Natural Hazards and Risks

Natural Hazards Management Plan

LFSL has a Natural Hazards Management Plan in place to prepare for effects of the Natural Hazards prevalent in the forest Region including

- Prolonged or intense rainfall e.g. flooding, landslide. Notable examples within our management area in the region include the Cyclones Bola 1988, Cyclone Cook 2018, and Cyclones Hale and Gabrielle 2023 two weeks apart.
- The East Coast is prone to mass landsliding and slips.
- Volcanoes and earthquakes e.g. ground shaking, landslide, liquefaction, tsunami.
- A copy of an Emergency Plan for each Forest is kept with the crews onsite and is also contained in the contractor pack that all contractors should have with them when working on-site. The plan outlines: emergency procedures, Logic FSL staff contact details, maps of the property and escape routes.

For further details please see the LFSL Natural Hazards Management Plan, or Forest Emergency Plan.

Social Context of the Forest Management Unit

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.

Social, economic and cultural resources and condition, as identified in Principle 2 to 6 and Principle 9; results of assessments

Major social and environmental risks in the area, as identified in Principle 2, 3, 4, 5, 6 and 9. results of assessments.

Social Context of the Tairawhiti Region

The Gisborne Region (also known as Tairawhiti) is made up of the Gisborne District. The total current population is 53,300 across urban, coastal, and rural areas.

Population Growth is 1.3 % compared to the rest of NZ at 1.8%

Māori Population 29,680 which is a 0.8% growth and is 56% of the region’s total population.

Pacific Population is 2,830 which is a 3.7% growth and 5% of the region's total population.

Mean Income is $67,560 which is 5.5% growth in 2024.

Mean Māori Income is $62,371 which is 5.2% growth in 2024.

Mean House Value in Tairawhiti is $625,923 vs. $925,343 New Zealand

Māori in Gisborne

In 2024 among the 4 broad skill levels employment of Māori in Tairawhiti was highest in low skilled occupations with 49% which is higher than New Zealand being 45.6%. The next largest broad skill category was highly skilled which accounted for 28.7% which was lower than in New Zealand 28.9%.

Māori make up just over half (56%) of Gisborne's population.

This is significantly higher than for New Zealand (17%) as a whole. The largest cohort of Māori in Gisborne is aged 10-14 years.

The Māori population is more youthful that the total population. Currently 10.3% of people are aged 65+ years and 27% are 14 and under with the remaining 62.7% being of working age (15-64). This means that the demand for services and facilities by Māori is likely to be different to the rest of the population of Tairawhiti.

Social Problems of the Gisborne Region

The wellbeing framework for Gisborne noted that in 2024 Civic Engagement and Governance, Housing, and Safety were identified as key issues. The overview is that Tairawhiti underperformed New Zealand across all domains.

Principle sources of employment in the region.

Gisborne provides employment in the following key sectors:

- Agriculture, forestry and fishing
- Health care and social assistance
- Education and training
- Construction.

In the wider Gisborne Region, the unemployment rate is 5% compared to the rest of NZ at 4%

Employment Growth is 1.3% compared to the rest of NZ at 2.2%

Source: https://rep.infometrics.co.nz/tairawhiti

Heritage and Māori Interests of the Forest Management Unit

There are currently no known Treaty of Waitangi Claims on the FMU.

Heritage Assessment

Following purchase of the properties by Ingka Investments New Zealand Ltd Logic Forest Solutions engaged In Situ Heritage to provide Archaeological Advice

InSitu Heritage assessed there are no recorded archaeological sites in Huiarua, Matanui or Glen Alva Forests

During assessment InSitu Heritage also reviewed LiDAR, as well as modern and historical aerial photographs and survey plans were inspected for features consistent with archaeological sites.

The review found two possible unrecorded archaeological sites in Glen Alva Forest.

An on site inspection of these sites was undertaken by an InSitu Heritage Archaeologist in February 2025 and these sites were ruled out as Archaeological Sites.

InSitu Heritage general recommendations for all sites were:

- Insitu Heritage consider there is very low risk of effects on archaeological values from the proposed harvesting works, Logic Forest Solutions Ltd does not require a prior archaeological authority from Heritage New Zealand
- an Archaeological Site Discovery Protocol should be used during all ground disturbances. (Logic have this in place, see below.)
- Any archaeological features that may be encountered are subject to the provisions of the Heritage New Zealand Pouhere Taonga Act 2014
- This advice relates to physical evidence of past human activity. Advice about Māori cultural values can only be appropriately obtained from iwi/hapū representative.

Logic Forest Solutions have an existing Accidental Discovery Protocol which has been communicated to the Staff and Crews on Site as required above.

LFSL have had communications with Ngati Porou Runganag and interested Hapu for Huiarua and Matanui, and with Tatau Tatau o te Wairoa for Glen Alva, as a key Stakeholders and neighbour to the forest.

A consultation session for High Conservation Value Forests was completed April 2025 and ongoing communications on issues as they arise will continue.

Stakeholders of the FMU

The largest Stakeholders within the FMU are;

Huiarua Matanui Forests:

- Te Runanga o Ngati Porou
- Popoti Ahuwhenua - Matahiia A1B Hapu Group
- Nga Hapu o Tokomaru Akau
- Waiapu Catchment Restoration Group
- Gisborne District Council Integrated Catchments Team
- Te Kura o Mata (Mata School)
- Puketoro/Mc Neil Farming
- Ernslaw One Ltd

Glen Alva:

- Tatau Tatau o Te Wairoa
- Forwood Forest Pariroa Forest Consortium

Health and Safety

Logic Forest Solutions Ltd (LFSL) is committed to providing, so far as is reasonably practicable, a working environment that is safe and without risk to the health and wellbeing of its employees, contractors, clients, and other key stakeholders. Every person working at or alongside LFSL must take reasonable care of his or her own safety and the safety of others.

Health and safety policy for employees and contractors is available for Staff and Contractors.

Auditing is scheduled as per the Monitoring Plan and is covered on every Site Visit and observation by LFSL Staff. Twice monthly full audits by the harvesting supervisor to ensure that contractors have up to date health, safety and wellbeing systems and to observe these systems in action.

Harvesting operations health, safety and wellbeing policies and procedures can be found in the Contractor Induction Booklet as outlined under general and critical rules. These rules and the contents of the booklet are the minimum standard alongside the Approved Code of Practice for Safety and Health in Forestry Operations (ACoP) and national current best practice guides for contractors. The induction booklet is reviewed and updated annually to ensure that it is current and covers all content that is required. Contractors are required to have their own health and safety plan, which should at minimum meet and ideally exceed the LFSL policies.

Incident Reporting

Every contractor maintains an incident and near miss register. All near-misses, incident and accidents must be reported to the health and safety manager to go to the accident register as per the process in the Health & Safety Manual.

LFSL review property damage, near-misses, incidents, and accidents to stop or reduce the chances of the same or similar incidents happening again.

LFSL prides itself on its safety culture and actively endeavour to “Stand in the Gap”.

Corrective Actions

Corrective Actions will be issued on the appropriate forms for any non-compliance including but not limited to the following:

- Safety breach or breach of a critical rule.
- Environmental breach.
- Property damage
- Deficiencies or improvements that can be made following an accident investigation.

The severity of the non-conformance will determine the corrective action given.

Health and safety on site

Employees, sub-contractors, and service providers are made aware of site-specific hazards during their site induction. All visitors must sign in and state their intentions at the entry gate. This allows LFSL employees to monitor individuals who are on the worksite and respond if someone does not check out at the end of the day.

Health Checks

All employees will be provided with the opportunity to complete an annual health check. All contractors should provide the same opportunity to their employees.

Training

LOGIC FSL maintain a record of contractors that hold qualifications for high-risk jobs, to ensure that contractors are capable of completing the job they are being hired to do.

Contractor employee's training records can be accessed through the Competenz Training Portal. The trainers have access to LOGIC FSL employee's records of learning, and a separate record of courses and competencies is kept that covers first aid, traffic control/STMS, general requirements etc.

Employment

Contracts for employees and contractors are legal, satisfying the needs of New Zealand legislation.

At this stage all contracts are individual, with no collective negotiation undertaken with a union. Union membership is not discouraged, and access is not denied if requested. See below.

Employees (Staff) have individual employment Contracts.

LOGIC FSL policy on unions

Employees of LOGIC FSL and employees of contractors that LOGIC FSL hires are entitled to and welcome to join a union if they wish. LOGIC FSL and its staff will not discriminate against any worker that is represented by a union. Where workers are union members, wage bargaining can occur though a collective process. LOGIC FSL will enter negotiations with a union for wage bargaining or dispute resolution in good faith.

Unions must liaise and negotiate with the Managing Director.

Dispute resolution procedure/process

Logic Forest Solutions Ltd dispute resolution processes for employees, clients, and stakeholders. Please refer to the LOGIC FSL Disputes Resolution Summary for more detail.

https://www.logicfsl.co.nz/contact-and-careers

Chemical Use Policy

Under current conditions in NZ the use of agrichemicals is an essential tool in the establishment and protection of plantation forests. However, Logic will seek to minimise chemical use as far as practical and use the least hazardous formulations available whilst maintaining forest health and productivity.

Logic Forest Solutions Ltd promotes the reduction of chemical use in its forests through:

- feedback on current operations from managers and field staff.
- research into the effectiveness of non-chemical alternatives, integrated pest management control, and reduction in chemical use and toxicity.
- continuous review of the Chemical register and usage.

Logic Forest Solutions Ltd will manage the use of Agrichemicals in accordance with:

- Forest Certification systems Principles and Criteria
- Relevant Legislation – Hazardous Substances and New Organisms Act, and the Health and Safety at Work Act, and any attendant regulations.
- Regional and District plans.
- NZ Standard for the management of Agrichemicals *NZS 8409:2021*
- Industry Best Practice Guidelines.

Chemical Records

The Forest Stewardship Council (FSC) has a specific policy in place for managing chemical pesticides, which includes requirements for record keeping https://connect.fsc.org/forest-management-certification/pesticides-policy.

FSC requires forest managers to document regarding chemical use:

- The Chemical Used: This includes both the trade name and the active ingredient
- Quantity: The amount of the active ingredient used.
- Dates of Application: Keep track of when the chemicals were applied.
- Target Species: Document what pest or problem the chemicals were intended to address.
- Application Method: How the chemicals were applied should be recorded (e.g.,spot spraying, broadcast).
- Location and Area: Record where the chemicals were used, and the size of the area treated.
- Reason for Use: Document the justification for using chemical pesticides.

Chemical (Active Ingredient) use rates per hectare are collated for reporting annually for the period ending 30 June of each year.

Appendices:

Appendix A: Monitoring Schedule (Summary) as at April 2025

LFLS Monitor the following within the East Coast FMU;

- Genetically Modified Organisms
    - *Note: Currently no Genetically Modified Organisms are used within the FMU and none are intended to be used.*
- Biological Control Agents
    - *Note: Currently no Bio-Control Agents are used within the FMU and none are intended to be used. At times Regional Authorities may request releases, these will be assessed and follow LFSL Biological Control Agents Policy and Procedure*
- Fertiliser Use (Note: Fertilisers are not currently used in the FMU)
    - *Note: Currently no Fertilisers are used within the FMU and none are intended to be used. If required these will be assessed and follow LFSL Fertiliser Policy.*
- Chemical Use
- Pest Management (for full details see the IPMS)
- Operational Management Activities - Harvesting and Roading
- Compliance with all applicable Laws and Regulations.
- Economic Viability of the Business and FMU
- Forest Access -Illegal Entry and theft.
- Forest Conversion
- Staff & Contractor Employment
- Waste Management
- Impacts of Management Activities - Stream Health
- Operational Contractor Management - Harvesting and Earthworks Management
- Operational Contractor Management - Establishment and Silviculture Quality Control
- Forest Productivity
- Community
- Natural Hazards Management
- Biodiversity Management
- High Conservation Values (some replicated from Biodiversity)
- Contractor Health, Safety and Wellbeing
- Cultural Values Management

Appendix B – Legislation Relevant to LOGIC FSL operations for the East Coast Forest Management Units.

Laws and Regional Plans

Up to date copies of all the legislation and plans in New Zealand can be found at www.legislation.govt.nz .

Logic FSL are notified of any change in laws and regional plans from membership of the Eastland Wood Council (EWC), involvement in EWC working Groups, GDC notices, and Friday Offcuts newsletters.

The Senior Technical Forester is responsible for ensuring these copies are up to date.

NOTE: Industry Legislation is currently in an unprecedented period of change with Regulatory Authorities not up to date on their own references. Logic FSL ensure that while this is occurring staff are kept informed at weekly meetings to highlight changes.

Below is a summary of the most relevant legislation to the management of the East Coast Forests. This legislation is accessed by LOGIC FSL staff online to ensure that the most recent version is being used. Other relevant legislation can be found in Annex 6.5 of the FSC Forest Stewardship Standard for New Zealand FSC-STD-NZL-02-2023 Plantations EN

National Legislation:

- Health and Safety at Work Act (2015)
- Resource Management Act (1991)
- National Environmental Standards for Commercial Forestry (2023)
- Employment Relations Act (2000)
- Wages Protection Act (1983)
- Holidays Act (2003)
- Minimum Wage Act (1983)
- National Environmental Standards for Commercial Forestry (more detail below)
- Heritage New Zealand Pouhere Taonga Act 2104
- Soil Conservation and Rivers Control Act 1941
- Regional and District Plans
- Fencing Act 1978
- Fire and Emergency New Zealand Act 2017
- Rural Fires District Regulations 1980

- Forest Act 1949 and subsequent amendments
- Hazardous Substances and New Organisms Act 1996
- NZS 8409:2021 Management of Agrichemicals

Regional/District Legislation:

Tairāwhiti Resource Management Plan (TRMP) https://www.gdc.govt.nz/council/tairawhiti-plan/chapters-and-appendices