



Forest Management Plan Summary 2026



Contents

Part 1 – We are Ernslaw One	2
Introduction	2
Ernslaw One vision, values and objectives	2
Forest and land description	2
Offices and forest estate	3
Legal Framework	6
Forest accreditation and certification	6
Company policies, procedures and key management objectives	6
Part 2 – Ernslaw One resources and productivity	8
Overview of forest operations.....	8
Establishment, species selection and silviculture	9
Infrastructure development and maintenance	11
Harvest planning and management.....	12
Replanting and opportunities for increasing forest resilience.....	14
Woodflow and quality control.....	15
Carbon trading and sequestration	15
Non-timber forest products	16
Forest Estate	16
Part 2a – South Island Forest Estate	16
Part 2b – Southern North Island Forest Estate	19
Part 3 – Managing social, environmental and cultural values across the rotations	24
Providing a positive work environment	24
Health and safety	24
Environmental performance	26
Indigenous flora and fauna	27
High conservation value (HCV) and Conservation Area Networks	28
Rare and threatened species protection	29
Social and cultural values.....	29
Working with local communities	30
Monitoring our growth and achievement	32

Cover photo: Manganui O Te Ao, Waimarino Forest (Lynette Baish)

Part 1 – We are Ernslaw One

Introduction

Ernslaw One (Ernslaw) is a softwood plantation company, growing and managing over 130,000 hectares of plantation and native ecosystems. Ernslaw is part of a New Zealand portfolio of companies owned by Oregon Group. Founded in 1990 with the purchase of cutting rights to crown forests located in the Southern North Island, Otago, and Southland, Ernslaw has since expanded through afforestation projects and other forest acquisitions and now manages a significant estate across both the North and South Islands. Ernslaw is currently the fourth largest forest owner and land manager in New Zealand.

Ernslaw additionally manages forestry for two Oregon Group subsidiaries, TimberGrow Ltd. and Forest Investments Ltd. These forests holdings are included in the approximately 84,000ha of total forest area under Forest Stewardship Council (FSC®C010424) certification.

Ernslaw One has maintained a strategic position in the evolution of national forestry regulation in New Zealand and the expansion of its portfolio is testament to the long-term commitment of the company to forests, the industry, and the people that make it happen.

Ernslaw One vision, values and objectives

Ernslaw is committed to the continual improvement and operationalisation of sustainable forest management practices. We advocate for the renewable, environmentally beneficial credentials of our forest products and ecosystem services. The achievement of the company's vision and objectives firmly rests on investing not just in forests, but in people - developing the skills, knowledge and experience of staff and contractors to grow healthy trees in resilient landscapes.

“GROWING TODAY, FOR A MORE PROSPEROUS TOMORROW” is a commitment to building a stronger, safer, and more sustainable future for our people, our business, and our communities. This vision is guided not only by the desire to be a constant throughout changing times, but also the principle that forestry is a long-term, high-value investment. Wood and timber products are a versatile, renewable resource used in developing and modern economies.

To bring this vision and company values to life, five priority pillars (pictured on page 4) provide a foundation and help to shape Ernslaw's progress towards the business goals that are set, reviewed annually, and embedded in the company's achievement and development processes.

Ernslaw One's primary objective is to ensure a stable and profitable return on investment for the forest owners whilst achieving a high quality and 100% safe operational regime, and sustainable management of all natural and physical resources.

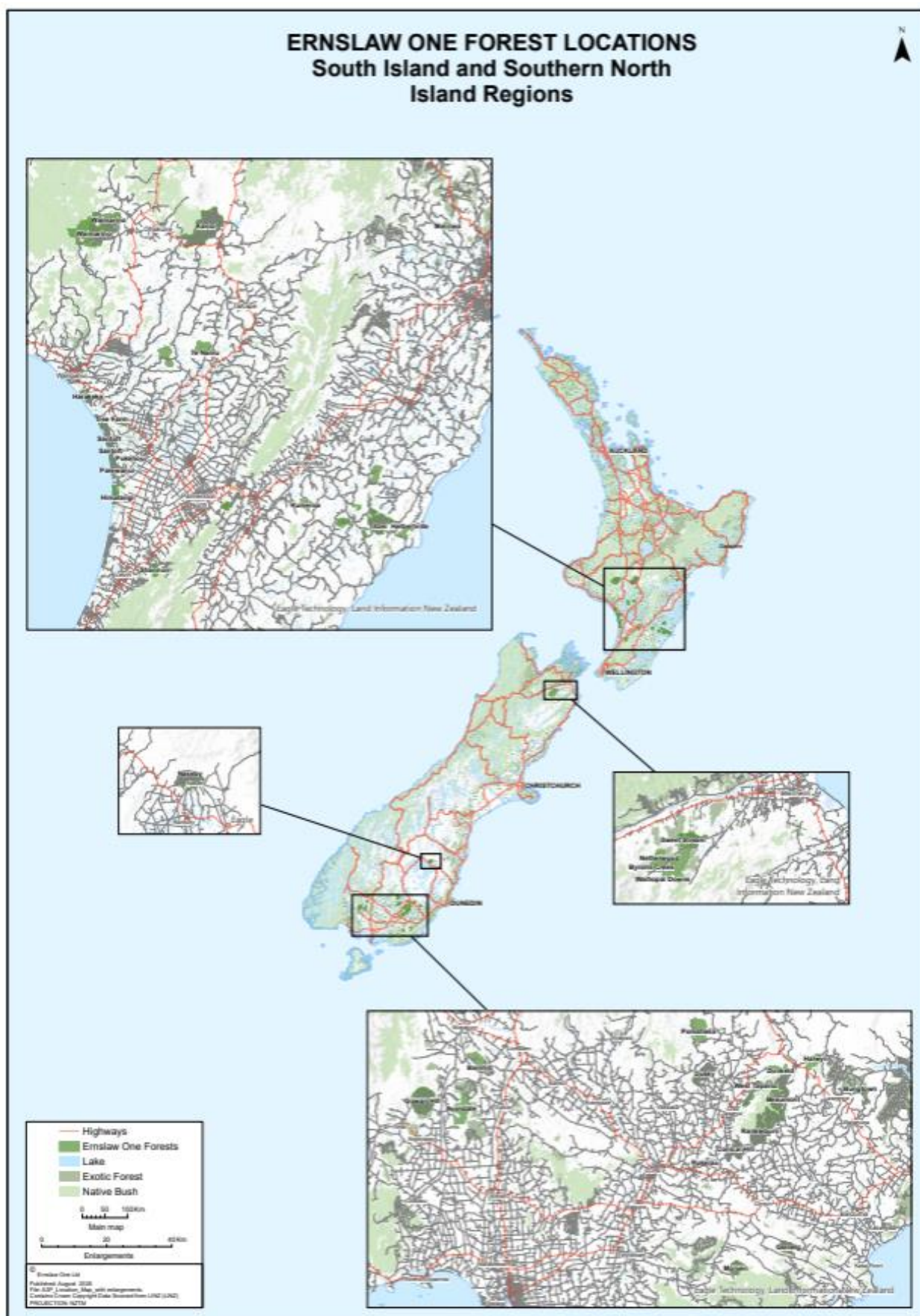
Forest and land description

Currently, the net stocked area under Ernslaw management is 130,168ha as at July 2026, of which 83,718ha is within the scope of FSC® certification (FSC®CO10424)). Ernslaw has a diverse asset base and is the largest grower of Douglas fir in New Zealand. Ernslaw is an active participant in the New Zealand Emissions Trading Scheme (ETS) and has over the years invested in non-timber forest products including KEEWAI, a freshwater koura farm. The company employs 84 internal staff and an external contractor workforce of around 400.

Offices and forest estate

Ernslaw One has office locations throughout the North and South Island, and a head office in Auckland, as set out below. The forest estate is further broken down in Part 2 of this document.

Auckland	Head Office Private Bag 92826 Penrose AUCKLAND	
Gisborne	Level 3 74 Grey Street GISBORNE 4040	Mangatu, Mata, Moonlight, Parikanapa, West Ho, Mangatu Forests
Karioi (WPI)	Karioi Forest Office State Highway 49 OHAKUNE 4660	Karioi Forest Waimarino Forest
Bulls	Southern North Island Regional Office 31 Bridge Street BULLS 4818	Te Namu Forests Sands Forests Manuka Forests
Dannevirke	107 Miller Street DANNEVIRKE 4930	Titoki Forest Merriwa Forest
Tapanui	South Island Regional Office PO Box 36 TAPANUI 9542	Blue Mountains Forests Apirama Forest Clutha Forest Waihopai Forest Tordarrach Forest
Naseby	Naseby Forest Office 16 Oughter Street NASEBY 9354	Naseby Forest



Ernslaw One Ltd. FSC® certified forest locations

1

Lead & support our people well

2

Be 100% safe & environmentally responsible

3

Optimise production & value. Increase resilience in our P&L

4

Build data quality & systems for better decision making & ease of work

5

Build positive relationships with our communities

Legal Framework

Ernslaw is a member of the New Zealand Forest Owners Association and is a signatory to the Forest Accord. It has always been the policy of the company to adhere to the Forest Accord and to protect areas of indigenous vegetation. Regional pest management plans and the Biosecurity Act 2013 inform critical elements of forest health and pest management strategies for biodiversity protection.

Forestry operations are regulated by the National Environmental Standard for Commercial Forestry (NES-CF) 2017, as well as in the case of some consented forestry activities, regional and district plans, and the higher-order Resource Management Act 1991. The NES-CF regulations set out technical standards, methods and requirements that are consistent across the country. Ernslaw has, along with most New Zealand Forest Owners, ratified the New Zealand Forest Owners Association Environmental Code of Practice. EOL has adopted the NZFOA Forest Practice Guides, republished in 2020, for relevant forestry activities.

The Health and Safety at Work Act (2015) and the Employment Relations Act (2000) ensure that all persons have a safe working environment and fair, reasonable working conditions and standards. The Emissions Trading Scheme and the Climate Change Response Act 2022 contain criteria pivotal to Ernslaw's carbon portfolio. A full summary of statutes and regulations pertinent to Ernslaw One's activities are summarised in the Ernslaw One Environmental Management Strategy.

Forest accreditation and certification

Forestry accreditation schemes set internationally recognised standards for forestry management that demonstrate how a company is managing its estate in way that is environmentally sound, socially beneficial and economically viable.

We strive to ensure that our management systems meet or exceed the requirements of the Forest Stewardship Standard (FSC®) for NZ [FSC®-STD-NZL-02.1-2023 Plantations EN]. Our South Island and Southern North Island forests are managed and certified under the Forest Stewardship Council® Certification (FSC®CO10424). Our Gisborne Forests are operating under the same management approach but are not currently FSC® certified.

Regulation and audits by accreditation bodies such as Preferred by Nature, Ernslaw's current auditor for FSC®, provide a system for responsible and accountable forest management as measured against internationally accepted standards. Accreditation also provides a 'chain of custody' which verifies forest products along the production chain and provides a valuable guarantee for Ernslaw's customer base.

Company policies, procedures and key management objectives

Ernslaw policies and procedures detail exactly how staff and contractors are expected to conduct business and undertake everyday forestry operations. Policies and procedures (along with other 'Controlled Documents', for instance, Standards and Guidelines) provide more detail on specific forestry practices and business workstreams can be found on the company intranet site 'Te Pataka'. Many guidelines and procedures are part of a higher order 'manual' - including the Harvest Manual, Silviculture Manual and Environmental Management Strategy.

Company documents are updated in line with our Controlled Document Policy, and it is the company's responsibility to ensure that staff and contractors understand and adhere to them.

Management objectives for focal areas of Ernslaw operational activities are summarised below and are collectively a benchmark for achieving the company vision and working in accordance with the five pillars.

Management Activity	Management objectives and verifiable targets for the natural and physical resources in the estate and operational activities over the course of rotations
Establishment	<i>Establish healthy, productive and resilient forests that support long-term forest productivity and value, using species, genetics and silvicultural systems that are appropriate to site conditions and identified risks.</i>
Forest growth dynamics	<i>Maintain accurate information on forest growth, productivity and yield using inventory, monitoring and forecasting systems to support sustainable harvest planning and long-term forest management decisions. Monitor forest performance to assess the effectiveness of management practices and identify emerging risks or opportunities.</i>
Forest protection	<i>Minimise the risk and impacts of pests, diseases, invasive species, erosion-related hazards and other threats to forest health, productivity and environmental values whilst meeting requirements and obligations of regional pest management strategies, biosecurity requirements, and cooperating with FENZ and other stakeholders to minimise and manage wildfire risk.</i>
Infrastructure	<i>Construct and maintain landings, roads, river crossings and associated infrastructure that appropriately mitigates environmental impacts such as sedimentation and stormwater run-off, is designed for climate changes scenarios, and contributes to whole forest resilience in the event of intensive rainfall events.</i>
Harvesting	<i>Harvesting is planned to optimise log extraction whilst minimising risk, particularly in steep, erodible forest stands, of harvest residues migrating into water bodies and sensitive areas, and to ensure safe working conditions for contractors and the avoidance of health and safety hazards.</i>
Re-establishment	<i>Apply critical decision-making in planning further rotations considering the risk/viability of continuous radiata rotation, opportunities for retirement of geologically vulnerable areas of forest out of commercial radiata and into an alternative regime where appropriate for forest resilience.</i>
Woodflow logistics	<i>Utilise systems for effective and efficient quality control checks, inventory reconciliation and logistical management of log movements to ensure customers receive deliverables to specification.</i>
Carbon	<i>Optimise carbon investments recognising the distinct risks and opportunities for pre1990 and post1989 forests; plan for a range of future carbon scenarios, including price volatility, government interventions, catastrophic events, and business changes.</i>
Non-timber forest products	<i>Realise the potential for forests to contribute a range of products and economic opportunities, utilise natural resources to benefit local communities.</i>
Estate profile	<i>Changes to the profile of the estate are reported annually in the Estate Plan and in Area Statements.</i>

Management Activity	Management objectives and verifiable targets for managing social, environmental and cultural values across the rotations
Providing a positive work environment	<i>Ernslaw strives to maintain a culture where everyone feels supported and empowered to do their best work.</i>
Health and safety	<i>Be 100% Safe Every Task Every Time. Every decision should reflect our commitment to providing and maintaining a safe and healthy workplace for all while meeting industry standards.</i>
Environmental performance	<i>To set consistent and clear standards for all operations, especially harvesting and earthworks, and to monitor the achievement of those standards, primarily through evaluating the environmental effects of operational activities.</i>
Indigenous flora and fauna	<i>The effects of forestry operations on indigenous vegetation distributed throughout Ernslaw's estate, and those designated as Significant Natural Areas (SNA's), are avoided, remedied or mitigated.</i>
High conservation value	<i>Identify and map areas of ecological value and determine appropriate level of management to maintain/enhance high value species, habitats and landscapes.</i>
Rare and threatened species protection	<i>Forestry operations are carried out so that rare, threatened or at-risk species and their habitats are not disturbed.</i>
Social and cultural values	<i>Ernslaw takes a proactive approach to engage with local stakeholders to identify and understand how forestry activities may impact on places of significance and values held for those places, whether that is spiritual, physical, customary or aesthetic in nature.</i>
Working with local communities	<i>Ernslaw proactively engages and communicates with local stakeholders and communities, works pragmatically to resolve issues and tensions and ensures that forests are places that are available to local communities for their enjoyment and amenity.</i>
Monitoring	<i>Apply an adaptive management (plan, do, review) approach and monitoring programme to ensure that the Ernslaw estate is being optimised for forest health, production, and quality, that operations are effective, appropriately planned and resourced, and to maintain social, cultural and environmental values, in accordance with the management objectives set out in this document.</i>

Part 2 – Ernslaw One resources and productivity

Overview of forest operations

Sustainable forest management involves effective long-term monitoring, pragmatic and well-structured resourcing and investment over a rotation to ensure that forestry health is optimised, and productive capacity is not compromised. Ernslaw is a commercial grower of planted exotic species of conifers and does not grow, cut or harvest any native species of trees.

Central to this, Ernslaw works to ensure that establishment is carefully planned and inventoried, catering for a diverse customer base, and monitored for mortality and threats to health from both

pests and disease. From establishment through to first lift or thinning out, best practices for silviculture are applied to maximise growth and vigour in the tree crop.

Any risks posed by erosion or land instability are profiled and built into harvest planning and replanting processes. Risk-based decision making informs operational mitigations used to reduce environmental impacts and crop losses and ensures that infrastructure is constructed and maintained with appropriate erosion and sediment controls.

In post-harvest phases, the intent is to maximise the resilience of the cutover through the distribution of slash and rapidly replanting to minimise the window of vulnerability as the new crop takes hold and stabilises the land into the next rotation. The critical stages of forestry management across a rotation are outlined below.

Establishment, species selection and silviculture

Establish healthy, productive and resilient forests that support long-term forest productivity and value, using species, genetics and silvicultural systems that are appropriate to site conditions and identified risks.

Species selection at Ernslaw involves consideration of a range of factors including terrain, wilding risk, climatic conditions, and erosion susceptibility. Each rotation, we assess planting setbacks to ensure we maintain a high level of environmental protection for downstream receiving environments. *Pinus radiata* and Douglas Fir are the main species planted, although Ernslaw is additionally trialling Grand Fir (*Abies grandis* is known for resistance to dothistroma), Redwoods, Alders, Eucalypts and *Pinus attenuata* hybrid species, and is exploring longer rotation coppicing species to balance site-specific environmental challenges. A considerable proportion of the South Island estate is planted in Douglas fir, which provides a long-term, intergenerational investment portfolio for the company and helps to balance the company's carbon stocks.

Ernslaw mostly establishes open pollinated stock from elite seed orchards. The intent is to maintain genetic diversity while capturing the benefits of decades of research in breeding stocks and seed. Combined with selective silviculture methods, Ernslaw is investing in the resilience of its forests in selecting desirable genetics and matching that to site index, providing a level of tree growing performance to deliver preferred growth rates and timber qualities at harvest. Generally, the target stocking for *P. radiata* planting is 750 - 1100 stems per hectare (sph) depending on site conditions though stocking density may differ for other species, for instance 1600sph for Douglas Fir. Further information on seed and species selection is detailed in Forest Genetics and Seed Deployment Policy 4093.

Chemical spray is used as part of our preplant and post-plant programs. The agrichemicals used have been assessed as suitable via a suite of Environmental and Social Impact Assessments (ESRAs) and use is reported annually as part of the FSC® audit process. No chemicals used are on the FSC® "Prohibited" or "Highly Restricted" lists (with the exception of some vertebrate toxic agents that may be used for possum control). We maintain spray setbacks from waterways, kōura (freshwater crayfish) ponds and neighbours' boundaries to minimise adverse environmental effects.

Selected stands are progressively pruned and/or thinned optimising growing space, improving the formation of trees and reducing poor growth and health problems in the crop. Waste thinning's can be left on the forest floor as a mulch and to reduce raindrop impact and splash erosion. Production thinning operations are pursued where appropriate including where there is ease of access/terrain and favourable market conditions. Pruning is undertaken where appropriate to produce pruned logs and maximise the value of the stand and add market diversity.

Species selection, establishment practices and silvicultural regimes are periodically reviewed using monitoring information, operational experience and emerging research. Ernslaw continues to evaluate opportunities to improve forest resilience and environmental performance, including the assessment of alternative species, modified silvicultural approaches and future land-use options in areas where site-related risks may affect long-term sustainability. This adaptive management approach supports continuous improvement and informs future rotation planning.

Forest growth and dynamics

Maintain accurate information on forest growth, productivity and yield using inventory, monitoring and forecasting systems to support sustainable harvest planning and long-term forest management decisions. Monitor forest performance to assess the effectiveness of management practices and identify emerging risks or opportunities.

Ernslaw maintains forest inventory and monitoring systems to provide data on forest condition, growth, yield and productivity across the estate. Inventory information is collected through a combination of pre-assessment data, mid-rotation inventories, pre-harvest inventories, permanent sample plots and other monitoring programmes. Growth and yield models are used to estimate future forest development, forecast harvest volumes, and evaluate the impacts of different management regimes. Forecasting systems support operational planning, harvest scheduling, and long-term estate management, including carbon holdings, by providing information on expected productivity, yield and log grade outcomes.

Tree health is monitored over the course of the rotation. Foliage samples are taken from stands on an as needed basis to determine nutrient status, as per foliar sampling policies by region. Stands found to be deficient will then be fertilised if deemed necessary. With the exception of boron deficiency at Herbertville, Kumeroa, Naseby and Marlborough forests, no common nutrient deficiencies have been observed.

Ernslaw invests in research, innovation and continuous improvement initiatives to enhance forest productivity, resilience and management effectiveness. This includes participation in industry research programmes, operational trials and the evaluation of emerging technologies and practices. Ernslaw contributes to and participates in programmes such as the Precision Silviculture Programme and the Radiata Pine Breeding Company, while using operational monitoring and trial results to assess management outcomes and inform future decisions.

Forest protection

Minimise the risk and impacts of pests, diseases, invasive species, erosion-related hazards and other threats to forest health, productivity and environmental values whilst meeting requirements and obligations of regional pest management strategies, biosecurity requirements, and cooperating with FENZ and other stakeholders to minimise and manage wildfire risk.

Ernslaw identifies and assesses risks that may affect forest resources, environmental values and neighbouring communities. Risks considered include fire, pests, diseases, invasive species, erosion-related hazards, harvest residues, extreme weather events and other factors that may impact forest productivity, environmental outcomes or community safety. Risk assessments are used to inform planning, operational controls, and long-term management decisions.

Ernslaw maintains fire preparedness and response capabilities across its forest estate. This includes preventative forest fire planning, proactive skid burn management, staff training, engagement with Fire and Emergency New Zealand (FENZ), and implementation of fire prevention and response measures appropriate to forest-specific risks. Fire planning is undertaken to identify seasonal risks and support preparedness for potential fire events.

Ernslaw monitors forest health and biosecurity risks through operational surveillance, targeted monitoring programmes and participation in industry-led initiatives where appropriate. Monitoring activities support the early detection of pests, diseases, and other biosecurity threats that may affect forest productivity, environmental values, or forest resilience. Where risks are identified, management responses are implemented to minimise potential impacts.

Ernslaw applies integrated management approaches to combat pest animals, weeds and invasive species across the estate. Management activities are guided by company policies and strategies, regulatory requirements, and site-specific risk assessments. Wilding conifer risk is actively assessed and managed through implementation of the Ernslaw Wilding Conifer Strategy, with control measures undertaken where required to protect environmental values and neighbouring land.

Infrastructure development and maintenance

Construct and maintain landings, roads, river crossings and associated infrastructure that appropriately mitigates environmental impacts such as sedimentation and stormwater run-off, is designed for climate changes scenarios, and contributes to whole forest resilience in the event of intensive rainfall events.

The creation of new infrastructure in first rotation forests, and the maintenance of existing infrastructure, is a fundamental focus for harvest planners. Tactical level planning commences up to five years from harvest and includes considerations for contractor capacity, forest age, infrastructure, and assessments of effects for resource consent requirements. The construction of new infrastructure is generally completed one to two years ahead of a planned harvest. In addition to a steadfast alignment with industry standards for earthworking and infrastructure development, such as the NZ Forest Road Engineering Manual, Ernslaw has developed its own methodologies for earthworking and the creation of robust infrastructure in local geologies, and which is increasingly planned and designed for climate change scenarios and flood contingencies.

In the South Island, road and landing construction and maintenance is usually a permitted activity due to the stable types of geologies and lower erosion risk. Some forests in the Southern North Island require resource consent and rigorous mitigation planning due to the higher erosion and landslide risk associated with erodible sandstone and mudstone geologies. At least two forests are operating under a consent due to the higher erosion risk in those forest areas (Te Namu and Titoki Forests in the Southern North Island region).

The detailed process of harvest planning is described in the Ernslaw Harvesting Manual. A harvest plan is the method by which timber will be safely harvested and transported from a forest area with minimal environmental impact. Topography, landing requirements, design, location, and spacing of roads and landings, environmental constraints, statutory and voluntary compliance requirements must be analysed, balanced and considered so that harvesting operations are expedited with maximum efficiency and minimal disturbance. Forest management software tools such as RoadEng are used to analyse various scenarios to select the optimal harvesting layout for any given cut plan area.



Bridge installation at Renwick Forest (Ernslaw One)

Post construction documentation provides verification of standards achieved and sequenced audits ensure that roads, landings and other infrastructure are monitored and maintained, particularly following storm events.

Harvest planning and management

Harvesting is planned to optimise log extraction whilst minimising risk, particularly in steep, erodible forest stands, of harvest residues migrating into water bodies and sensitive areas, and to ensure safe working conditions for contractors and the avoidance of health and safety hazards.

Ernslaw aims to harvest as close as possible to optimal tree age and maintain an age class distribution for successional harvesting across each forest over time. Harvesting includes both production thinning and clear-fell harvest of mature stands. All harvesting operations are planned through a comprehensive process to determine how and when to harvest our plantation resource. Planning includes consideration of forest age, product estimates and customer needs, terrain, safety, watercourse values and fish presence, protected areas, neighbours as well as other values and risks. Detailed harvest plans specify the harvesting methodology, operational requirements, site-specific risks, controls and mitigations. Together with the planning maps and prescriptions, these documents additionally set out tracking limits, stream crossing locations, water controls, location of slash storage areas, and any additional consent compliance requirements, and are required to be held on the worksite at all times.

Harvesting is generally undertaken via ground based or cable hauler methods, or a combination of the two, depending on the terrain. Mechanised tree felling and log processing machinery is the dominant method used in our forests as a means of improving workplace safety, with upwards of 95% of felling and 100% of processing being mechanised. The type of machinery used is a function of steepness and slope – skidders, shovel loaders and grapple excavators are

appropriately suited to rolling to mildly steep terrain. However, swing yarders (hauler with a short tower), winch assisted or tethered harvesters provide better reach and accessibility on steep, short slopes. On any steep slopes with more than 500m haul distance cable harvesting via tall towers are essential to achieve the lift, suspension and deflection needed to protect underlying vegetation in riparian zones and reduce drag and land disturbance across the cutover.



Processing logs at a landing, Renwick Forest, Marlborough (Ernslaw One)

A lot of resource has been invested in training and support of contractors around safety protocols for tethered machines, along with environmental performance focus on post-harvest remediation of tracking and rehabilitation of infrastructure. Post-harvest monitoring systems of both the harvesting operation and the condition of roading and infrastructure ensure that harvest areas are monitored and maintained, particularly following storm damage. Post-harvest audits are recorded using Survey 123 – a copy of the final post-harvest report is provided to the contractor and retained in Ernslaw’s record management system.

Part of the consideration of a post-harvest audit is the amount of “residual slash” left on the cutover and the risk of migration of that slash into water bodies. Slash is tree waste from harvesting operations and occurs when stems break and tops and branches are shed from the felled stem. Slash migration to water occurs when slash is deposited into waterways through harvesting or shallow landslides during rainfall events. In the case where stems are extracted across gullies using suspended harvesting systems such as a hauler or swing yarder, the head may fracture under tension, resulting in harvest slash being deposited in the gully. Shallow landsliding is a naturally occurring erosion process, more prevalent in some geologies than others and is more likely to occur after harvest and before the next crop of trees have stabilised the site.

Ernslaw mitigates this risk through a range of controls intended to reduce the volume of residual material on the cutover and ensure that any slash left on landings after harvest is stable. Where appropriate slash traps are a mechanism by which to divert and extract slash from a riparian channel onto dry land. Ernslaw has sought to impose catchment area harvest constraints in its

estate and harvest planning. A methodology for restricting the concentration of harvest in specific areas and spreading risk across the forest and over time, is detailed in the Catchment Clearfell Harvest Area Constraint Procedure (3303) which applies in higher risk catchments.

This is particularly necessary in forests featuring high and very high erosion classifications such as Te Namu and Titoki Forests in the SNI region. The application of catchment constraints in forests highly susceptible to erosion is a method of minimising the spatial extent of landsliding should severe storms occur after clearfell harvest with risk reduced by our commitment to reduce the amount of residual slash and harvest debris left on vulnerable slopes.

Replanting and opportunities for increasing forest resilience

Apply critical decision making in planning further rotations considering the risk/viability of continuous radiata rotation, opportunities for retirement of geologically vulnerable areas of forest out of conventional radiata and into an alternative regime where appropriate for forest resilience.

The post-harvest stage presents an opportunity for a critical evaluation of species selection and harvest planning for future rotations, particularly where parts of settings have presented safety issues to harvest, have been highly erodible and are ultimately cost prohibitive to include in a further rotation. Where erosion and slash mobilisation risk cannot be effectively managed under a *P. radiata* clearfell regime, land at elevated risk of erosion with high connectivity to water will be retired from production forestry. Ernslaw has adopted three alternative approaches:

Approach		Description
1	<i>P. radiata</i> regeneration for transition to native forest	Deliberate use of naturally regenerating pine cover to provide short term erosion risk reduction and create a nursery environment for native understory (whilst maintaining canopy cover). Radiata is actively managed out over time through poisoning or other means.
2	Planting for erosion control and transition to native forest	Where regeneration of <i>P. radiata</i> is insufficient to manage erosion risk or support native establishment, supplementary planting may be undertaken to stabilise soils and facilitate regeneration of native vegetation succession.
3	Reversion to native vegetation	Where the above approaches are not viable, and where erosion risk can be managed without planting, allow natural reversion or assisted reversion (planting/seeding) to permanent native vegetation.

The above approaches are to be supported with supplementary pest control to protect regenerating native vegetation and pine nursery crop must be removed no later than 15 years from planting. All re-establishment planting must comply with regulatory requirements for setbacks from water bodies and sensitive areas, unless a larger setback is required for a higher level of protection/benefit.

Woodflow and quality control

Utilise systems for effective and efficient quality control checks, inventory reconciliation and logistical management of log movements to ensure customers receive deliverables to specification.

The company has two general regimes for growing *P. radiata*; clearwood and structural. In addition to this is a small amount of chip and firewood taken from production thinning's and clear-fell. Our silvicultural treatments determine the quality and end use of the trees. The clearwood regime focuses on producing pruned clearwood for appearance end uses. Pruning is done in 2-3 lifts and aims to produce a pruned butt log of at least 5.2 m with sawlogs above that. The structural regime

aims to produce a structural grade log with small branching that is used in the production of timber for residential construction, plywood and other panel board products. These regimes vary slightly between forests, as they have been customised for the local site conditions. Ernslaw's current sustainable harvest levels will vary among forests over time due to differing age classes. The annually produced Estate Plan will define these levels. The Estate Plan and harvest volume is determined using Remsoft Spatial Planning System (Woodstock), a spatial linear programming tool.

Woodflow logistics are an important part of our business, ensuring our products are delivered in the right quantities, timeframes and specifications, to customers. Most of the trees harvested are transported to local manufacturers and ports via road using local cartage fleets. Ernslaw also makes use of rail networks, particularly in the southern north island. Currently around 50% of the Ernslaw South Island volume is sold domestically, with Ernslaw supplying logs to up to ten domestic sawmills and one MDF mill in Southland and Otago. About 30% of the Southern North Island log production is fed into the domestic market. What timber is not sold domestically is exported in log form. The primary export destination is China, although our export team has at times pursued other shipping arrangements as required.

Quality control is managed through building relationships with customers to cater to needs of the market. Log quality control checks are completed at the time of harvesting and feedback from customers on quality is critical to ensuring the product delivered meets specifications.

Carbon trading and sequestration

Optimise carbon investments recognising the distinct risks and opportunities for pre-1990 and post-1989 forests; plan for a range of future carbon scenarios, including price volatility, government interventions, catastrophic events, and business changes.

Trees absorb carbon dioxide while they are growing, actively removing carbon dioxide from the atmosphere and storing it in the form of wood. This natural process is so efficient that approximately half the dry weight of a tree is carbon. And that carbon remains stored in the wood, and the wood products that they become, for the life of those products.

The creation of the Emissions Trading Scheme (ETS) has provided Ernslaw with an opportunity to derive additional value from the forest resource, through the sale of NZU's (carbon sequestration units, as tonnes CO₂ equivalent). Throughout the 1990's Ernslaw developed new *P. radiata* forests on company owned freehold land which had not previously been under forest cover. As these are forests established after 1990 i.e. post-1989 forests, they are eligible for entry into the ETS. Pre-1990 and post-1989 forest classifications pose very different management requirements under the ETS. Pre-1990 forestry land offers no opportunity for revenue and dictates that the land must remain in forestry, and deforestation creates a liability if not replanted within 4 years of harvest. Post-1989 forestry land registered in the ETS generates carbon units (NZUs) which can be sold to generate revenue using either stock change (registrations before 2023) or averaging (registrations from 2023) accounting methods.

Ernslaw manages approximately 70,000ha of pre-1990 forest lands and monitors any potential deforestation through reconciliation using mapping and spatial analysis. This is important as there are areas that cannot be replanted due to soil loss after landsliding or future erosion risk or proximity to streams and sensitive ecological areas. Strategies are employed to ensure that land not replanted in *P. radiata* or Douglas fir can still achieve a canopy closure in the minimum required timespace. Ernslaw's post-1989 forest lands are managed through a stock change accounting

and carbon modelling system, where carbon profiles and carbon safe levels are tested for impacts by species, age and time of harvest.

Pinus radiata sequesters carbon at a rate at least three to four times the rate of the average New Zealand native forest. Growing both *P. radiata* and Douglas-fir puts us in a unique position to manage the carbon liability from harvesting the forests. *P. radiata* is clear-felled from 25 years onwards, whereas Douglas-fir is anywhere from 45 years. This harvest age diversification means that when harvesting commences total carbon balances out. We can therefore manage our forests for successional timber production, whilst ensuring that no liability arises for any carbon that is sold from the forest.

Non-timber forest products

Realise the potential for forests to contribute a range of products and economic opportunities, utilise natural resources to benefit local communities.

Ernslaw One investigates the long-term benefits and potential revenue of freshwater Kōura farming. Keewai was established in 2011 with the construction of a hatchery. To date 2000 ponds have been formed or adapted to grow Kōura across 11 forests in Otago and Southland. While the South Island freshwater crayfish is classified as one of New Zealand's native species under threat due to the degradation of freshwater habitats, it thrives in well managed plantation forests. Keewai has won several awards including the 2017 Spirit of New Zealand Award at the Outstanding NZ Food Producer Awards and overall winner at the 2016 NZ Food Awards. Ernslaw is also proud to have won an environmental award at the 2016 Environment Southland Awards for conservation and environmental initiatives.

Forest Estate

Changes to the profile of the estate are reported annually in the Estate Plan and in Area Statements.

Monitoring and updating these details reflect the changes in estate profile from harvesting, replanting, and the return of Crown Forest Licence land to iwi owners upon settlement of Te Tiriti o Waitangi claims.

Part 2a – South Island Forest Estate

Working circle and woodflow regime

Ernslaw One initially established with the purchase of Crown Forest Licenses at Tapanui in the South Island, (Sands and Whangapoua in the North), as well as the Conical sawmill, from the Crown Forest Estate. The sawmill, since sold to other interests, was renamed Blue Mountain Lumber and rapidly expanded including the installation of a second line and then a finger jointing and remanufacturing plant, employing 230 staff on a double shift at its peak in the late 90s. Blue Mountain Forest in Tapanui was originally established in 1900 and many of the stands purchased were second or third rotation, with up to 60% comprising of Douglas-fir.

Following the acquisition of harvesting rights for the Ngai Tahu owned Blue Mountain and Dusky Forests (established in the 1900's) near Tapanui in 1990, Ernslaw One was offered the opportunity by Iwi to purchase Blue Mountain Forests land (around 12,000ha) in 1998. Ngai Tahu purchased

the land as part of their settlement in 1996, but soon after decided to divest itself of forest land, providing the opportunity for Ernslaw to purchase.

Ernslaw One was additionally offered the opportunity by Ngai Tahu to purchase Naseby Forest (land and trees). Ernslaw One entered into a log supply contract with Naseby Lumber, also since sold, which was built to supply green Douglas-fir framing into the local market.

Ernslaw has entered into management agreements with TimberGrow Ltd and Forest Investments Ltd. Therefore, the resource of TimberGrow and Forest Investments form part of the forest management unit making up the FSC® certification area for Ernslaw.

Working Circle/Office	Forests	District/Region
Naseby	Naseby Forest	Central Otago
Tapanui	Blue Mountains Forests Dusky Forests Apirama Forests Clutha Forest Forestland Investments Pomahaka Forest	West Otago
Blenheim	Timbergrow Waihopai Forest Ernslaw Waihopai Forests	Marlborough

The South Island estate focuses on growing three species; *P. radiata*, Douglas-fir and *Pinus attenuata* hybrid. Approximately 36% of the certified productive area is stocked with *P. radiata*, 59% with Douglas-fir and the balance in other species. The main species have been proven to grow successfully in New Zealand and perform extremely well compared to other species. They can be grown on a wide range of sites, have minimal associated pests and diseases, and when purchasing land, the company has selected areas that are suitable for *P. radiata* or Douglas-fir.

In the South Island estate, harvested volumes come from a mix of production thinning and clear fell operations. Clear fell harvest volumes will increase around the year 2035 when new forests established in the Aparima and Clutha districts reach maturity and harvesting commences. Most of this volume will be in Douglas-fir, compared to SNI region where most of the volume is *Pinus radiata*. The South Island estate is low risk when it comes to erosion prone land and the management of our activities can comply with and operate under permitted activity regulations, in most cases.

Social and cultural context

Given that some of the forests in the South Island estate are in their third and fourth rotations, forestry is an established, and even historic land use in the Naseby and Blue Mountains Forest Areas. Forestry has been a long-term employer in these areas and contractor companies are very well established in these working circles.

As a land use, forestry often complements surrounding land use, such as Naseby Forest which is credited with containing some of the most extensive and well-preserved 19th century gold mining infrastructure in Otago. Ernslaw South Island has over 160 archaeological sites within its estate, primarily gold mining but also sites of significance to New Zealand and Chinese history. The majority of these are at Naseby Forest, with some also present in the Blue Mountains Forests.

Ernslaw ensures our forests provide benefits beyond timber production by supporting a wide range of recreational activities for local communities and visitors. The South Island forests offer opportunities for outdoor pursuits such as Rogaine, photography hunting, walking, mountain biking, and dogsledding. Our staff regularly hunt deer in our forests and donate the venison to local food banks which contributing a community good while reducing ungulate numbers.

Conservation of natural values

Ernslaw has developed an estate map to show areas of indigenous flora and fauna. An array of management options exists to mitigate adverse effects on indigenous species within the South Island estate. For instance, management strategies have been established for falcon (*Falco novaeseelandiae*), yellowhead (*Mohoua ochrocephala*), as well as various species of rare plants.

An agreement between Ernslaw and the Department of Conservation (DoC) ensures the company does not compromise the protection efforts for Mohua in the Rankleburn conservation estate. Mohua are particularly at risk from predation by mustelids and rodents in years of heavy flowering in the adjacent public conservation land Silver Beech forests. Ernslaw One works with the Department of Conservation to enable control of these pests to ensure the survival of this threatened bird species. Ernslaw is involved with the Upper Taiari and Lower Clutha Catchments Groups to ensure the community as a whole works collaboratively towards good environmental outcomes. As part of this we collect monthly water samples along with annual instream habitat monitoring in numerous locations within our forests.

Ernslaw has classified a 20-hectare tussock reserve purchased with a QEII covenant isolated from our Apirama forests but close to the Aparima river as HCV3 to maintain an example of lowland red tussock. Recently a wide range of rare or threatened plant species have been found in the reserve earning the additional status of HCV1. (These plants include the common dwarf broom (*Carmichaelia corrugata*), Charming Crimson Geranium (*Geranium cruentum*), Woolyhead Daisy (*Craspedia* sp. "Mararoa), and the spear grass (*Wurmbea novae-zelandiae*). Within Morven Forest, 13 hectares have been classified as FSC® HCV3 providing protective management of a wetland which is classed as regionally significant in the Otago Regional Plan. A management plan is in place, and the site is monitored via annual inspections. Ernslaw employs a freshwater ecologist surveying streams in the estate for the presence of indigenous and exotic fish life. Following storm damage in 2023, brown trout were discovered to be able to gain access to a section of stream above a culvert, posing a threat to the endangered native Pomahaka galaxiid (*Galaxias Pomahaka*). With the repair of the culvert to function as an effective fish barrier, Ernslaw partnered with Otago Fish and Game to remove brown trout from the upstream habitat.

To date, more than 400 brown trout have been removed, with work continuing to protect and restore habitat for the Pomahaka galaxiid and support the long-term recovery of this unique native species.



Naseby Forest (Sherry Hart)

A major biosecurity risk requiring management in the South Island estate are wilding conifers; Ernslaw works to meet regulatory requirements to eradicate wilding conifers in SNA's, wetlands and along the riparian margins of streams. Wilding conifer infestations are of national significance with a central government funded programme targeted at controlling wilding conifers now prevalent in some of New Zealand's most iconic landscapes.

Ernslaw has a history of engaging with neighbouring landowners to assist in wilding control efforts outside the forest boundary and is a member of the Central Otago Wilding Conifer group. Ernslaw has worked closely with research partners in the development of new technologies such as cone reduction sprays for Douglas-fir, although not operationalised fully it highlights the contribution Ernslaw has made towards the wilding issues.

Part 2b – Southern North Island Forest Estate

Working circle and woodflow regime

The Southern North Island (SNI) forestry estate comprises the well-established sand country forests along the west coast, as well as the Karioi Forest at the base of Mount Ruapehu. Both of these forests are in their third rotation and produce some of the higher quality log grades in the SNI portfolio. These are also the lowest risk forests being predominantly on low-risk erosion land, presenting an ease of access and extraction.

Forestry in the Rangitikei and Manawatu districts dates to the beginning of the 20th century when coastal sandy soils were severely eroded by overgrazing and burning. Forests were planted to protect the main trunk line at Foxton from sand encroachment, later extending to areas north of Foxton experiencing severe sand drift. From 1952 the New Zealand Forest Service assumed responsibility for sand control in the region, whilst meeting the demand for timber with population expansion. Ernslaw took over the Santoft Forest management from the Crown in the 1990's, adding to the forest estate with additional land purchases. A 500ha protection strip is maintained as a buffer between the forest and the fore and back dunes, which provides an essential protection (via stabilisation) to pastoral farming, cropping and other land uses from sand encroachment.

The SNI estate also contains some of the steepest and most erosion prone forests including Waimarino, Te Namu, Ngaruru, and Titoki Forests. The central northern forests were part of the Winstone Pulp International (WPI) working circle comprising the Karioi Pulpmill and Tangiwai Sawmill. The working circle sourced timber from the Karioi CFL and Waimarino forests which includes Atihau, Ngaporo and Pipiriki Forests leases. The two mills unfortunately closed due to high electricity costs resulting in significant job losses. Wood continues to be sourced from the Karioi Forest and is carted by rail eastwards to the Napier port.

Forestry was not only the backbone of emergent primary industries in the central North Island, and additionally a strong source of transport demand for the development of the main trunkline, but over time, it became a safe and stabilising land use, in particular for holding the line against hill country erosion. The Manawatu-Whanganui region contains the highest proportion of steep hill country per region. It has been conventional therefore, for the catchment boards and more recently the regional council, to promote funding and resourcing for pastoral retirement and afforestation of hill country farmland susceptible to erosion.

Working Circle/Office	Forests	Region/District
Karioi	Karioi Forest Waimarino Forest	Ruapehu
Bulls	Sands Forests Manuka Forests Te Namu Forests	Rangitikei
Dannevirke	Titoki Forest Kumeroa Forest Te Uri Forest Herbertville Forest Merriwa Forest	Tararua/Hawkes Bay

New opportunities for pulp logs and waste wood recovery were formalised shortly after the mill closures, with the expansion of a company local to Dannevirke who convert waste wood into chip for supply to third parties such as Pan Pac. Pulp and waste fibre is collected from Karioi, Te Namu, Sands and Titoki Forests, significantly reducing the volume of waste material within those forests.

Social and cultural context

Many of the SNI forests, being accessible to small settlements such as Scotts Ferry, Tangimoana and Bulls for the Sands; Hunterville and Marton for Te Namu, and Raetihi, Ohakune and Waipouru for Karioi and Waimarino, are popular for recreation deer hunting, game shooting, motor sports, firewood collection, tramping, whitebaiting, orienteering and dogsledding events.



Sand Country Forests (Ernslaw One)

Like the South Island Forests, the Karioi and some parts of the Sands Forests were previously crown owned assets, however these forests are now in the process of being returned to iwi upon harvest. Ernslaw has built strong relationships with iwi stakeholders and some of those relationships are underpinned by land agreements including joint ventures, and lease contracts based on crown forest license agreements. In many cases Ernslaw is harvesting and then continuing to replant and manage the land on behalf of iwi.

During the 1990's, as additional forests were purchased and planted, Ernslaw sought to establish agreements and MOUs with iwi, especially regarding procedures for accidental discoveries during harvesting, and other protocols around customary access and use of forest resources. Ernslaw seeks to work collaboratively with iwi partners and stakeholders to enable those critical connections to the whenua, and to deliver the best outcomes for our iwi and catchment partners.

Conservation of natural values

While the risk profile of the Southern North Island estate is high given the geological vulnerabilities across the steep terrained forests, Ernslaw has also come to value and appreciate the natural values within forests that not only provide for biodiversity and forest health but additionally maximise the resilience of forested land to natural disasters and climate events.

The protection of indigenous stands and large reserve areas, such as the Aramahoe and Anini Reserves in Waimarino Forest, and the extensive areas of beech and tawa in Te Namu Forests, provide refugia and ecological corridors for native bird and animals species, as well as providing a natural catchment constraint. Given the proximity of Waimarino Forest to the Whanganui National Park, forestry operations have had to be particularly mindful of kiwi and bat species. Since the forests establishment by WPI, population assessments of bat and bird species have been undertaken on 3-, 5-and 10-year rotations resulting in what is a rich and complex dataset for this forest. Waimarino Forest operations are also influenced by Te Awa Tupua and the status of legal personhood of the Whanganui River, as well as the Manganui Te Ao, a river rich in biodiversity and subject to a Water Conservation Order.



Karioi Forest (Ernslaw One)

Since 2009, Ernslaw has been actively involved in the Kia Wharite pest management initiative, the largest landscape scale pest management programme in New Zealand which is led chiefly by Horizons Regional Council in partnership with DOC and landowners and land managers in the Raetihi/Taumaranui area. Since its inception, the two key indicator species, kiwi and whio, have benefitted in notable population increases with the sustained resourcing of traplines and pest management in the area.

Recent studies in the Rangataua Reserve adjacent to Karioi Forest have identified incumbent populations of kiwi, and approximately 36 kiwis were released into the reserve in April 2026. Ernslaw is participating in a collaboration with Save the Kiwi, Ngāti Rangi and University of Canterbury in a two-year study looking at the impacts of harvesting on kiwi habit and movement.

Other stakeholder collaborations include working with DoC to inventory Powelliphanta populations in Shannon Forest, with Horizons Regional Council to monitor mudfish populations at Santoft Forest, and a University of Canterbury PhD project to monitor populations of pest species for more targeted pest management in our Titoki Forest Blocks. This project will be particularly useful to ensure that planned retirement and regeneration of blocks phased out of rotational forestry can be protected from browse and degradation by mammalian pests.

- E** EMBRACE safety in everything we do.
- R** RESPONSIBLE stewardship of the land.
- N** NURTURE our people – our people are our business.
- S** SHARE and learn together.
- L** LONG term value drives quality decisions.
- A** ALWAYS do the right thing.
- W** WORK as a team and own our part.

Part 3 – Managing social, environmental and cultural values across the rotations

Ernslaw's company value of being responsible stewards and our application of an adaptive management approach is how we make continual improvement consistent with key our management objectives, in a manner that meets social and cultural expectations of us, and furthermore meets regulatory and compliance conditions, industry standards and our commitments to FSC®.

We monitor and manage across a diverse range of variables including health, safety, and worker well-being, stream health and conservation values, socioeconomic values, environmental incidents, performance and operational quality.

Providing a positive work environment

Ernslaw strives to maintain a culture where everyone feels supported and empowered to do their best work.

Ernslaw is committed to providing a safe place to work where employees, well-being and working conditions are prioritised. This means the legal rights of all workers, contractors and Ernslaw staff alike, are upheld, aligning with the Employment Relations Act 2000, including all workers being paid *at least* the NZ living wage. Modern slavery may be a low risk in New Zealand, however Ernslaw manages this through our Modern Slavery Standard which includes ensuring contractors are meeting their employment obligations.

Ernslaw also maintains a Professional Standards Guide that addresses professional conduct and sets out standards of behaviour expected from all staff working for Ernslaw. This together with the 'Managing Inappropriate Behaviour in the Workplace Policy' ensure that evidence of any harassment, bullying or discrimination of any kind is addressed and managed.

Ernslaw supports managers to develop staff through performance conversations, providing targeted training and development opportunities that match needs. Ernslaw employs approximately 80 salaried staff across the business, with 10 in the South Island, and 15 in the Southern North Island. These staff are supported by nationally focused professional support teams including Health & Safety, Environmental Performance, Forest Investment Services, HR, IST and Finance.

To ensure everyone at Ernslaw is working on the right things and contributing to the achievement of the company business goals, Ernslaw has implemented an Achievement and Development Programme. This programme cascades the company's priority pillars and business goals/projects through individual Achievement and Development Plans. This programme is also aligned to the salary review process and the biennial Ernie Awards where outstanding performance is recognised. The Health and Safety Committee recognises health, safety and environmental achievement on a quarterly basis via an open nomination process.

In-field harvesting, harvest roading, forest silviculture, and logging transport is contracted out to suppliers which means there can be 100+ people working within Ernslaw forests at any time. Most of these people live locally in communities that are in close proximity to the forests.

Health and safety

Be 100% Safe Every Task Every Time. Every decision should reflect our commitment to providing and maintaining a safe and healthy workplace for all while meeting industry standards.

Ernslaw is committed to providing and maintaining a safe and healthy workplace for all workers, contractors, visitors, and stakeholders involved in our operations. We recognise that effective health and safety management is fundamental to responsible forest management and operational excellence. Our goal is **100% Safe – Working Safely, Every Task, Every Time**. Our vision is that **no life-changing harm occurs in Ernslaw operations**. We achieve this through a proactive approach that identifies critical risks, implements effective controls, and promotes a culture where health, safety, and environmental responsibility are integral to every activity.

Health and safety performance is supported by a documented management system that is aligned with New Zealand legislative requirements, industry good practice, and FSC® certification requirements. Ernslaw is committed to maintaining effective systems for hazard identification, risk assessment, incident reporting, worker engagement, training, monitoring, and continual improvement.



Safe practices at Renwick Forest, Marlborough (Ernslaw One)

Ernslaw recognises that workers are central to the successful management of health, safety, and environmental performance. We are committed to providing workers and their representatives with effective opportunities to participate in health and safety processes, including hazard identification, risk management, incident investigations, workplace inspections, and the development and review of operational procedures. Worker feedback is actively sought and considered to support continual improvement, strengthen safety culture, and ensure that operational decisions reflect the practical knowledge and experience of the work force.

Ernslaw works closely with contractors to ensure that health, safety, and environmental standards are consistently applied across all operations. Contractors are required to meet Ernslaw's health, safety, and environmental expectations and participate in assurance activities including inductions, operational assessments, equipment inspections, performance reviews, and compliance monitoring.

Particular attention is given to the management of critical risks associated with forestry operations. Ernslaw applies critical risk management principles to identify activities with the potential for

serious harm and implements verified controls to reduce both the likelihood and consequences of such events. The effectiveness of the health and safety management system is regularly reviewed through audits, inspections, workplace assessments, performance monitoring, incident investigations, and worker feedback. Findings from these activities are used to drive continual improvement and support our commitment to safe, healthy, and environmentally responsible operations.

Contractors must report health and safety incidents (including near misses). All incidents are entered into the company's incident management system for severity indexing and investigating accordingly. Ernslaw compiles trends from analysis of collected data and provides updates to contractors on those trends via quarterly newsletters and contractor meetings. Checks are made to ensure that the appropriate critical risk management is in place for high-risk roles such as tree felling and head breaker-outs and steep slope harvesting.

Environmental performance

To set consistent and clear standards for all operations, especially harvesting, and to monitor the achievement of those standards, primarily through evaluating the environmental effects of operational activities.

Ernslaw is committed to being a responsible steward of the land we manage. We understand that strong environmental performance underpins our licence to operate. As responsible stewards of the environment, we protect and enhance the resilience of our forests and our people. In doing so, we reduce legal and reputational risk, support safe operations, build enduring community trust, and safeguard long-term forest health and business resilience.

Ernslaw has an environmental performance strategy and tactical plan, which sets out a company vision for environmental management - *Embody responsible stewardship that protects, builds resilience and enhances the environment, earning lasting trust within our industry and communities*. Environmental outcomes are everyone's responsibility; however, the environmental Performance ensure that monitoring processes, such as audits, compliance checks, incident and technical investigations are implemented, completed and monitored for effectiveness.

Operational documentation is recorded via a Survey 123 app to ensure that operational, safety and environmental information is documented about a worksite at the pre-harvest stage, and that information continues to be captured throughout the operation that will have a bearing on health, safety and environmental outcomes. Post-harvest audit checks ensure that any consent conditions or other regulatory requirements have been met by the contractor and that the worksite is in an acceptable and functional condition prior to the crew's departure. Any rehabilitation work required that cannot be immediately undertaken by the crew is recorded as a timebound corrective action in the system.

Ernslaw undertakes annual stream health monitoring to assess water quality and instream habitat trends over time. We also undertake regular water clarity measurements and lab analysis to monitor for any effects of our activities on freshwater values. The location of monitoring sites is regularly assessed to ensure we capture stream health indices over the life of forests. Ernslaw is an early adopter of eDNA technology to identify the type, and location, of fish species within our forests. The results of this collective monitoring are used to reduce impacts on instream biodiversity values.



Matuku moana, White Faced Heron (Sherry Hart)

Indigenous flora and fauna

The effects of forestry operations on indigenous vegetation distributed throughout Ernslaw's estate, and those designated as Significant Natural Areas (SNA's), are avoided, remedied or mitigated.

Plantation forests provide for biodiversity through the protection of remnants, ecological corridors and in maintaining and enhancing significant habitat types or threatened species were identified in the Ernslaw estate. Independent ecological surveys have been conducted across most of the forest estate, both prior to and following forest establishment.

There are a number of mechanisms requiring varying levels of protection, maintenance or enhancement, of identified ecological features, areas or species in our forests, for instance species and habitats that are sensitive to impacts from land use activities or sit on the continuum of 'at-risk' through to 'endangered' status. Ernslaw has adopted three levels of protection based on the values within the forest, and the degree of regulatory or operational control required.

Category	Qualifying Areas	Notes
High Protection Statutory requirement & all wetlands >0.25ha.	Water Conservation Order's (WCO), Significant Natural Areas (SNA), Wetlands >0.25ha, QEII covenanted land, FSC® High Conservation Value land (HCV1-4) or PEFC areas of Significant Biodiversity Value (SBV).	These areas contain sensitive or legally protected ecological values and may be subject to strict regulatory controls. Forestry activities are prohibited, or highly restricted, and pest control is important to maintain or enhance ecological integrity.
Important Protection Mature and	Native Forest >5ha and >6m in height, Tussock grassland >5ha,	These areas contain significant ecological values that require

regenerating native vegetation, small wetlands.	Regenerating forest >5ha, Grey shrub land >5ha, Wetlands <0.25ha with RTE species or other significant value, Streams with an assigned riparian setback width of 20m, other than Esplanade Reserves under management by LINZ or DoC.	careful management but may allow controlled activities.
General Protection Areas of native vegetation with less ecological values due to their size and/or areas abundant in the ecological district.	Native forest, Tussock grassland, Regenerating Forest, grey shrub land.	These areas have lower ecological values but are managed to maintain ecological integrity and compliance whilst allowing tree crops to be (re)established if practicable.

Areas that do not meet the threshold levels for protection are subject to relevant regulatory and company policy, but forestry operations are able to occur (e.g., planting species with lower wilding risk). By defining clear levels of protection based on the ecological and cultural values present and any regulatory requirements, Ernslaw aims to achieve responsible environmental stewardship using a risk-based approach, minimising adverse environmental impacts and maintaining significant natural and physical values.

Accurate mapping of natural and physical features is essential and in some cases site specific plans are required should a crew be working in proximity to areas with recognised ecological values.

Identification and Management Plans are provided to contractors where rare threatened species are known to have localised populations, and these plans are highlighted in prescriptions and pre-harvest surveys. Contractors may also receive specific training about sensitive values and species known to be in and around their worksites, for instance where ground nesting birds have been identified.

High conservation value (HCV) and Conservation Area Networks

Identify and map areas of ecological value and determine appropriate level of management to maintain/enhance high value species, habitats and landscapes.

A requirement of FSC® is that there must be dedicated areas protected as Conservation Areas Network to the equivalent of 10% of the area of a given management unit. Approximately 20,000 ha of the estate is identified, mapped and managed as non-productive/ecological areas, the latter of which in effect are conservation area networks.

Work is ongoing to review the estate and to better understand biodiversity and ecological values and what is required to maintain and enhance those values from a conservation perspective.

Currently Ernslaw has 261 ha classified as having extremely high ecological value (HCV1 & HCV3). Ernslaw continues to reassess and consult on areas that have potential HCV values and develop management plans in line with expert recommendations.

Rare and threatened species protection

Forestry operations are carried out so that rare, threatened or at-risk species and their habitats are not disturbed.

Plantation forests are often a nursery ground for dense, rich and biodiverse native understory, corridors and indigenous stands providing valuable habitat for an array of birds, insects and other wildlife such as skinks, gecko's and snails. Since the arrival of humans, almost half of New Zealand's vertebrate species have become extinct including at least 51 birds. Mechanisms such as the National Policy Statement for Biodiversity exist to reduce further decline of those species requiring that significant natural areas within plantation forests must be managed to maintain the long-term populations of any threatened or at-risk species present in the area.

Identifications of presence of rare, threatened or at-risk species can be made via historical data including mapping, eDNA sampling, ecological surveys, observations and recording using devices such as A4R bat detectors. Recordings of RTE species are documented and held internally and in the secure NZ plantations portal in i-Naturalist with information used to assist in the management strategies for these species. Forest operations are planned so that threatened species and their habitats are protected. Animal species recorded in Ernslaw forests include Kiwi, NZ Falcon, Powelliphanta snails, galaxiid fish and mudfish. Rare plant species include the Swamp leek orchid, Porcupine Shrub, Woolly Daisy, and the Green Hooded Orchid.

Any indigenous species found within the estate have been recorded in the Ernslaw Arc GIS. This work is an important part of the identification and protection of rare, threatened and endangered species and their habitats. The Rare and Threatened Species Plans Identification and Management Summary are an additional tool for contractors and staff. In situations where forest operations could potentially have an adverse effect on Significant Natural Area's, and/or the habitats of threatened indigenous species, relevant stakeholders will be consulted prior to works commencing, particularly in the first instance ecological experts, and relevant statutory agencies.

Ongoing evaluations of indigenous vegetation within the estate are undertaken to identify and assess ecosystem values. Management priorities are then planned according to the associated value. Assessments are progressed both at a coarse and fine level in order to identify vegetation types, distribution of rare, threatened and endangered species, threats to the ecosystem and to develop management requirements accordingly.

Social and cultural values

Ernslaw takes a proactive approach to engage with local stakeholders to identify and understand how forestry activities may impact on places of significance and values held for those places, whether that is spiritual, physical, customary or aesthetic in nature.

During the forestry life cycle there are different periods of forestry management that can have a crucial impact on surrounding communities and individuals, and consequently the relationships we have with them. Opportunities arise for engagement and communication from forest establishment, changes in land use and changes in type of management/intervention, through to harvesting activities and transportation.

We actively engage with the community to ensure our management has minimal adverse impacts and preferably a positive effect, on people. We endeavour to engage proactively with stakeholders and to be pragmatic when it comes to stakeholder concerns by building mitigations for any issues raised into our operations rather than reacting to complaints afterwards. Contact is made with neighbours in advance of operational activities and notice is also given in local newspapers.

Some Ernslaw forests have been a part of the environment for as many as three rotations and therefore a part of the fabric of a community. However, communities can change and when a new activity in the rotation occurs, we must still be mindful of impacts on social and cultural values, particularly with respect to places of significance to people within the forest estate, whether that is fishing and hunting spots, walking and cycling access or heritage and archaeological sites.

Checks for archaeological features are conducted prior to harvest. Known heritage sites are recorded in Ernslaw GIS and are identified in operational and prescription maps (and in pre-harvest surveys) accordingly. An archaeological authority may need to be obtained from Heritage NZ prior to any operation likely to disturb archaeological sites pre-dating 1900. Additionally, resource consents may need to be obtained from a district council. Staff and contractors are trained to identify and report new sites.

An activity or operation may also be located within the geographical scope of a statutory acknowledgement or treaty settlement act. If this is the case it is important for Ernslaw to recognise the mana of the Tangata whenua in relation to a statutory area, and to give effect to any act or statutory mechanism, for instance engaging with Tangata whenua in respect to a site of cultural significance or a consent application impacting a statutory area. In some cases, a Memorandum of Understanding may have been agreed with an iwi or hapu that could impact communications with Tangata whenua around certain forestry activities - or indeed use of, or access to the forest by Tangata whenua.

Forestry activities can also impact on neighbours and the wider community, particularly when a quiet forest suddenly becomes a busy operation with numerous vehicle movements per day. A Social Impact Assessment (SIA) may need to be undertaken as part of the pre-planning for an operation in a forest for instance where it is anticipated there would be a significant increase of activity or intensity and where this would adversely and directly affect communities. An SIA can help to understand what mitigations or management options might be available to ensure that forestry activities can be undertaken to minimise adverse impacts.

Working with local communities

Ernslaw proactively engages and communicates with local stakeholders and communities, works pragmatically to resolve issues and tensions and ensures that forests are places that are available to local communities for their enjoyment and amenity.

Dealing with a diverse range of stakeholders requires an ongoing commitment and a structured approach to consultation and communication. Ernslaw is committed to maintaining a company culture and set of values that recognises there is more involved in forestry management than just growing trees. Ernslaw has forestry staff living and working in communities in which its forests are situated. Our offices are located close to forests, and this facilitates an ease of communication and interface for local communities, and this assists staff to maintain effective functional relationships with local communities.

It is locals who provide much of the work force, and many of the goods and services to enable our forest activities to function. Forests can be a community resource for recreation and food production, and we have made it an ongoing commitment to providing goods such as wild venison, honey, and food donations to local food banks. We consult with the local community regarding forest access and recreational activities and are involved locally with sports clubs, Fire & Emergency (FENZ), hunting clubs, catchment groups and schools. Ernslaw proudly supports local communities by way of sponsorships, and school educational experiences along with access

for activities including, mountain biking, NZ Army exercises, hunting, motor sport, horse riding, firewood collecting, dogsledding, and orienteering. People who wish to use the forests for hunting and recreation can do so – permits are necessary unless there is a right of public access to a particular forest area.

Legal roads, public access easements, marginal strips and esplanade reserves are all publicly owned land and therefore accessible by anyone. Forest managers must enable that access, although temporary closures may occasionally be required where fire risks or safety concerns occur. Ernslaw has an Access Policy that outlines rights and responsibilities with respect to accessing Ernslaw Forests. Maps of public access easements can be found on the Ernslaw One Website, as well as links to Herenga a Nuku Outdoor Access Commission for outdoor access maps.

Any complaints, concerns or issues of contention are considered by Ernslaw's Ethics and Professional Practice Committee who will conduct a fair and transparent review of matters in line with Ernslaw Complaints Resolution Procedure.



Aerial contorta operation using Aerial Basal Bark Application Method, Karioi Forest (L. Baish)

Wilding conifers are a significant pest plant issue for the central plateau where Ernslaw is one of many land managers working to progressively contain the spread of *P. contorta*. This is particularly critical in the Karioi Forest, a landscape pervaded by river systems originating from the glacier lakes in Mount Ruapehu. Ernslaw is a member of the Central Plateau Wilding Control Group. In 2024, recently retired Ernslaw forester Keith Wood received a recognition for 30 years' service to the Contorta management programme and Ernslaw remains committed to the objectives of this essential programme of work.

Monitoring our growth and achievement

Apply an adaptive management (plan, do, review) approach and monitoring programme to ensure that the Ernslaw estate is being optimised for forest health, production, and quality, that operations are effective, appropriately planned and resourced, and to maintain social, cultural and environmental values, in accordance with the management objectives set out in this document.

Just as Ernslaw monitors the achievement and performance of people, it is critical that the company track its own progress towards achieving its management objectives, ensuring not just that the impact of operational activities are monitored but additionally that social, environmental and cultural conditions of the forest are monitored for changes arising from forestry activities over time. The management objectives in this document provide a high-level monitoring framework that is underpinned by an array of systems and procedures for individual activities and workstreams.

Ernslaw is committed to an adaptive management approach to ensure that trends, lessons learned, in-field experience and the results of any trials are brought to bear on activities and workstreams. Monitoring is evaluated in proportion to scale, intensity and risk – higher risk activities are serviced by a higher level of evaluative assessment to ensure that planning and resourcing is adequate for the task. Any social or environmental impacts are factored into planning to ensure risk mitigation is appropriate and adverse effects are appropriately minimised and managed.

VERSION CONTROL

VERSION	WHO	DATE	COMMENTS
1.0	AMY + JOHN	OCTOBER 2025	DOCUMENT CREATION
2.0	LYNETTE	AUGUST 2026	FULL REWRITE OF MANAGEMENT PLAN TO ALIGN WITH FSC® PRINCIPLES

ASSOCIATED DOCUMENTS

DOCUMENT	ID
MONITORING SUMMARY REPORT	8331