

ENVIRONMENTAL MONITORING REPORT: 2025

Introduction

Ernslaw One undertakes a wide variety of environmental monitoring programmes across the forest estate. This report gives an overview of our results, with more details available from our regional offices on request. We constantly review our operations and procedures as part of our ongoing effort to improve how we care for the environment. Our monitoring results helps us track changes and see how we're doing against our goals and where improvements can be made. Our forests in the Southern North Island and South Island are managed under the Forest Stewardship Council® Certification (FSC-C010424). The Gisborne forests follow the same management approach but are not currently FSC® certified.

What We Monitor

- Estate information general details about our land and forests
- **Compliance** making sure we meet both legal and voluntary standards
- Rare & endangered species keeping an eye on vulnerable wildlife
- Biological control used to manage pests
- Chemical & pest control monitoring how we use chemicals and manage pests
- Storms & response tracking major weather events and how we respond
- **Ecological values** understanding the natural value of our sites
- High Conservation Value areas (HCVs) protecting special places with high ecological importance
- Stream health checking water quality and aquatic life
- Forest health & biosecurity making sure our forests stay healthy and pest-free
- Social & economic aspects looking at how our forest management affects people and communities

Monitoring Programmes

1 Estate Information

Ernslaw regularly updates changes to the profile of the estate. These changes are reported annually in the Estate Plan and in our Area Statements (Table 1 and 2). 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.

2 Regulatory and Voluntary Compliance

Ernslaw tracks compliance against regulatory requirements including the New Zealand Forest Owners Association (NZFOA) Forest Road Engineering Manual (2020), Forest Practice Guides (2020) and the National Environmental Standard for Commercial Forestry (2017). We constantly review and update our systems to ensure we comply with current environmental and best practice requirements. Additionally, operational inspections are regularly completed by staff to ensure contractor operations are meeting contract and operational specifications.

3 Species Management Plans

Species Management Plans are used in forest areas where rare, endangered, and threatened (RTE) species are present. These plans provide staff and contractors with the necessary information to manage operations alongside RTE species such as long-tail bats (*Chalinolobus tuberculatus*), Galaxiid fish, and Kārearea (New Zealand Falcon) (Figure 1).



Figure 1. Nesting Kārearea (New Zealand Falcon) chicks in a Marlborough Forest.

Table 1: Total area under Ernslaw One Ltd. Management: 30 June 2025 (combined Ernslaw One Limited, Timbergrow Limited and Forestland Investments ownership) (AWR = area awaiting restocking).

Group	Region	Mapped Area (ha)	Stocked Area by species (ha)				AWR (ha)	Productive area (ha)
			P.rad	D.fir	Other	Total	()	
Ernslaw One Limited	Gisborne Total	30,323	18,354	160	296	18,810	1,448	20,259
	Southern North Island Total	44,301	28,125	236	126	28,487	1,717	30,204
	South Island Total	31,443	6,269	16,902	1,404	24,575	650	25,226
	Ernslaw One Limited Total	106,067	52,748	17,298	1,826	71,873	3,815	75,688
Timbergrow Ltd	Gisborne	13,124	7,664	1	75	7,740	517	8,257
	Marlborough	6,172	4,191	188	34	4,413	318	4,732
	Timbergrow Ltd Total	19296	11855	190	109	12154	835	12989
Forestland Investments	Gisborne Toal	1,112	768		43	811	29	840
	Southern North Island Total	1,140	943		2	945	35	979
	South Island Total	2,495	325	336	128	789	1,552	2,341
	Forestland Investments Total	4,746	2,036	336	173	2,545	1,616	4,161
Total Management Area		130,109	66,640	17,824	2,108	86,572	6,266	92,838

4 Biological Agents

No biological controls were used in the forest estate in the 2025 audit year.

5 Chemical Usage

Ernslaw One Ltd. is committed to responsible pest management and pesticide use, in line with our legal and certification requirements. We record annual chemical use within the estate and the area and location of application. This process assists meeting certification requirements for the use of those pesticides designated as prohibited, highly restricted, or restricted. Ernslaw is currently not using any prohibited, or highly restricted pesticides or biological controls to manage pests. While non-chemical methods are preferred, where chemical intervention is necessary, we select the least hazardous options guided by our robust best practice standards. As part of our FSC obligations, we have completed Environmental and Social Risk Assessments (ESRAs) for all chemical pesticides in use, including Terbuthylazine, Triclopyr, Hexozinone, Metsulfuron, Cloralid, Glyphosate and 1080. The ESRA process informs updates to our pesticide application practices, reflected in our best practice standards and aerial operations procedures. We welcome feedback and encourage stakeholders to contact us with any comments or concerns.

Table 2: FSC® area, and total area under Ernslaw One Ltd. Management: 30 June 2025 (combined Ernslaw One Limited, Timbergrow Limited and Forestland Investments ownership).

Group	Region	FSC (ha)	Without FSC (ha)	Total (ha)	FSC (%)	Without FSC (%)
	Southern North Island	44,301	-	44,301	100%	0%
Ernslaw Ltd.	Marlborough	2,322	-	2,322	100%	0%
Emsiaw Lta.	South Island	29,121	-	29,121	100%	0%
	Ernslaw Ltd.	75,744	30,323	106,067	71%	29%
	Hawke's Bay	725	-	725	100%	0%
Timbergrow Ltd.	Marlborough	6,172	-	6,172	100%	0%
	Timbergrow Ltd.	6,896	12,399	19,296	36%	64%
	Southern North Island	1,140	-	1,140	100%	0%
Forestland Investments	South Island	-	2,495	2,495	0%	100%
	Forestland Investments	1,140	3,607	4,746	24%	76%
Total		83,780	46,329	130,109	64%	36%

6 Storm Events and Response

The trend of increased frequency and duration of high intensity rainfall events affect various forests within the Ernslaw estate. We collect information on storm intensity, impact and required remedial work to better understand the capability of forest infrastructure to withstand storm events. Measures such as improving harvesting methods, alternative tree species and land retirement options are being investigated. Our review process aims to lessen the impacts of events, such as cyclones, which result in major impacts on infrastructure, both within the Ernslaw forests and the wider catchment.

7 Ecological Values

Ernslaw currently exceeds the minimum 10% of the total management unit that is to be kept or restored to a natural condition with 14% (10,224mha) protected. While we are deficient in some ecological districts, the NZ FSC® National Standard provides an ecological equivalence procedure where percentage shortfalls can occur in specific ecological districts.

8 Naturewatch – Biodiversity in plantation forestry

Flora and fauna observations are uploaded directly onto the i-Naturalist "NZ biodiversity in plantations" portal and downloaded into the Ernslaw GIS (Geographic Information Systems) (Figure 2). These include native species such as the native Lilly (*Wurmbea novae-zelandiae*), Woolly Head Daisy (*Craspedia* sp. 'Mararoa'), Kārearea (*Falco novaeseelandiae*), North Island Brown kiwi (*Apteryx mantellpteryx*), and the Pomahaka Galaxiid (*Galaxias* Pomahaka).



Figure 2. Image from i-naturalist's biodiversity in plantations portal.

9 High Conservation Value (HCV) Forest

Ernslaw has undertaken an assessment and consultation process to identify and classify HCV areas within its estate. HCV areas need to be appropriately managed to maintain or enhance the conservation values. Currently 261 hectares are classified as HCV in our forest estate (Table 3). Specific management plans have been developed to protect the values of these areas. We continue to re-assess and consult on areas which have the potential to be classified as HCV.

Table 3. N	Name, lo	cation, and	ecological	classification	for Ernslaw	HCV reserves.
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Forest	Reserve Name	Ecological Region	Ecological District	Status	Area (ha)
Gowan Hill	Durobin Tussock Reserve	Southland Foothills	Taringatura	1 & 3 QEII	21
Herbertville	Herbertville	Eastern Hawkes Bay	Eastern Hawkes Bay	3	41
Morven	Upper Tahakopa Wetland	Catlins	Tahakopa	3	13
Tordarroch	Jacks Sub-alpine Reserve	Marlborough	Waihopai	3	186
Total					261

10 Stream Health Monitoring

We conduct monitoring programmes designed to benchmark stream health pre-harvest, during harvest operations, and then through into the next rotation. The programme includes various combinations of stream habitat assessment, and water quality measures including dissolved reactive phosphorus (DRP), turbidity (NTU - nephelometric turbidity units), total suspended solids (TSS), visual clarity (cm), invertebrate indices (MCI, QMCI and TICI) and E-coli at various sites within the forest estate. Examples of collected data are represented below (Figure 3).

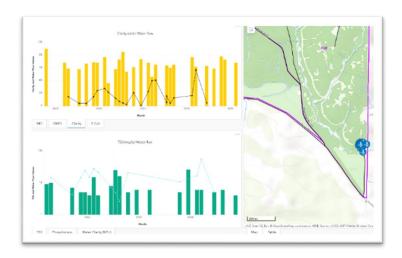


Figure 3: Dusky Forest water clarity and suspended solid results (2021–2025).

Fish Surveys - Ernslaw was an early adopter of eDNA monitoring technology to determine fish species in our forest streams. This information is used when planning harvest operations to ensure there is minimal impact on fish spawning or habitat values. Fish species found include Bullies (Upland, Crans, Common, Redfin, Bluegill), Brown mudfish, Eels (Endemic and Australian long fin and short fin), Lamprey, Common Smelt, Galaxiids (Inanga, Gollimoides, Southern, Clutha Sp. D., Canterbury, Koaro & Pomahaka), Torrent fish, Trout (rainbow & brown) and Salmon. Figure 4: results from an eDNA samples showing a range of terrestrial and aquatic taxa including brown trout, Koaro, Lamprey and long finned eels.



Figure 4: Species identified from eDNA testing in Blue Mountains Forest.

11 Forest Health/Pest Management

The Ernslaw estate is monitored by staff and contractors to ensure the early detection of forest health diseases and/or biosecurity incursions. This is vital to minimise damage and manage the potential for risk of further spread. Occurrences such as theft, intentional damage, animal browsing, invasive plant species are all recorded, and we work with the community and authorities to ensure and appropriate management response undertaken.

12 Social and Economic

Ernslaw has a close involvement with local communities around its forests. Most of our labour force comes from those communities, and we provide support by way of donations, sponsorships, and hosting events (Figure 5). Our forests are extensively used for a raft of activities including training course locations, recreational hunting, mountain bike clubs, car races, orienteering and horse trekking. Ernslaw staff actively participate in catchment groups (e.g., Pomahaka Water Care group in West Otago) and are bound by the NZ Forest Owners Association Code of Conduct (2022), the Log Truck Safety Accord (2021) and are a signatory to a MoU (Memorandum of Understanding) with Federated Farmers on being Good Neighbours (2013). The Health and Safety of workers in our forests, and along the supply chain is paramount to Ernslaw, as is a commitment to pay the NZ Living Wage to all workers.



Figure 5: Contestants in the 2025 Great Naseby Water Race, Naseby Forest.