

# Norsewood Estate Limited

## Monitoring Report

For FSC® Certified Forests (FSC® C131650)

March 2026

# Monitoring Strategy

Forest Enterprises' monitoring strategy is aligned with Forest Stewardship Council® (FSC®) Certification, and covers the criteria outlined in the FSC New Zealand Standard.

As of March 2026, Norsewood Estate Limited (NEL) is certified under certificate #FSC- C131650. Forest Enterprises aims to follow FSC principles when monitoring other forest estates under our management.

Forest Enterprises' staff, contractors and their employees follow sound environmental practices for all operations, so that the value of the forest asset continues to be enhanced.

Below is Forest Enterprises' Monitoring Plan, from which a public summary will be published annually.

**Note: Commercially sensitive or personal details are not publicised.**

**Table 1. Forest Enterprises Environmental Monitoring Plan**

| Element                          | Indicators   | Rationale   | Procedures  | Frequency   |
|----------------------------------|--|---|---|---|
| Crop Yields/<br>Reconciliation   | Tonnes/ha  | Efficiency and effectiveness of harvest<br>Accuracy of planning | Volumes from FLITS<br>Compare volumes and grades against inventory predictions                        | Monthly<br>Full reconciliation at completion of the block   |
| Growth Rates                     | Increment in tonnes or productivity m3/ha  | Productivity of the forest                                      | Diameters and heights are measured when thinning QC is undertaken and during a mid-rotation inventory | Post operation<br>Mid-rotation                              |
| Changes to Flora & Fauna         | Species presence/absence<br>Regen present<br>Rare, Threatened & Endangered species (RTE) | Biodiversity monitoring   | As per agreed forest monitoring plan<br>Contractor and staff reporting                                | 5-yearly<br>Before and after harvest<br>Summarised annually |
| Forest Health                    | New forest pests or diseases   | Crop health   | Routine forest inspections  | As required   |
| Environmental Impacts Assessment | See EIA procedure  |   |   | As required   |
| Social Impacts                   | Employee numbers<br>H&S statistics – Loss Time Injury Rate (LTIR)                        |   |   |   |
| Post-Harvest                     | Waste<br>Soil disturbance  | Contract management   | Staff visits<br>Post-harvest inspection   | Monthly   |
| High Conservation Areas          | Weed and pest control<br>Photo points<br>Ecological consultant analysis                  | Protect and monitor sensitive ecological areas                  | Weed and pest control visits and monitoring<br>Photo points<br>Ecological consultant analysis         | Annually and pest control as required<br>Bi-annually        |
| Water Quality                    | As required by Resource Consent  | Ensure operations maintain water quality                        | SHMAK testing in specific catchments of operational forests   | March/April and October/November                            |



|                          |  |   |                    |                          |
|--------------------------|--|---|--------------------|--------------------------|
| Efficacy of Pest Control | Possum Residual Trap Catch (RTC)<br>Hunter returns<br>Compliance reports (weeds) | Maintain forests in good condition<br>Comply with Regional Pest Management Strategy | Cooperate with AHB | As required and annually |
| Wildings                 | Removal  | Good management practice<br>Comply with RPMS  | Spray or fell      | As required              |
| Pesticide Use            | See chemical requirements  |   |                    | Annual report            |

## Native Flora and Fauna

### Rare, Threatened and Endangered (RTE) Species:

In 2025 1 RTE sighting was recorded. This was of a group of 8-10 whiteheads in Rocky Hills. Protected land snails are known to be present; however, because they are nocturnal and a wildlife permit is required to handle them, they are rarely seen alive.

A snail survey of upcoming harvest areas was undertaken on the 24<sup>th</sup> of October with help from the Department of Conservation (DoC), Horizons Regional Council (HRC), Makahika Outdoor Pursuit Centre and Massey University. This survey assessed the presence of snails in these areas, allowing a plan to be developed to ensure their protection.

No snails were found in the areas that were planned for harvest in the 2025-2026 summer. In areas earmarked to be harvested next summer, 453 shells and 26 live snails were found. A map of the snail survey results is below:

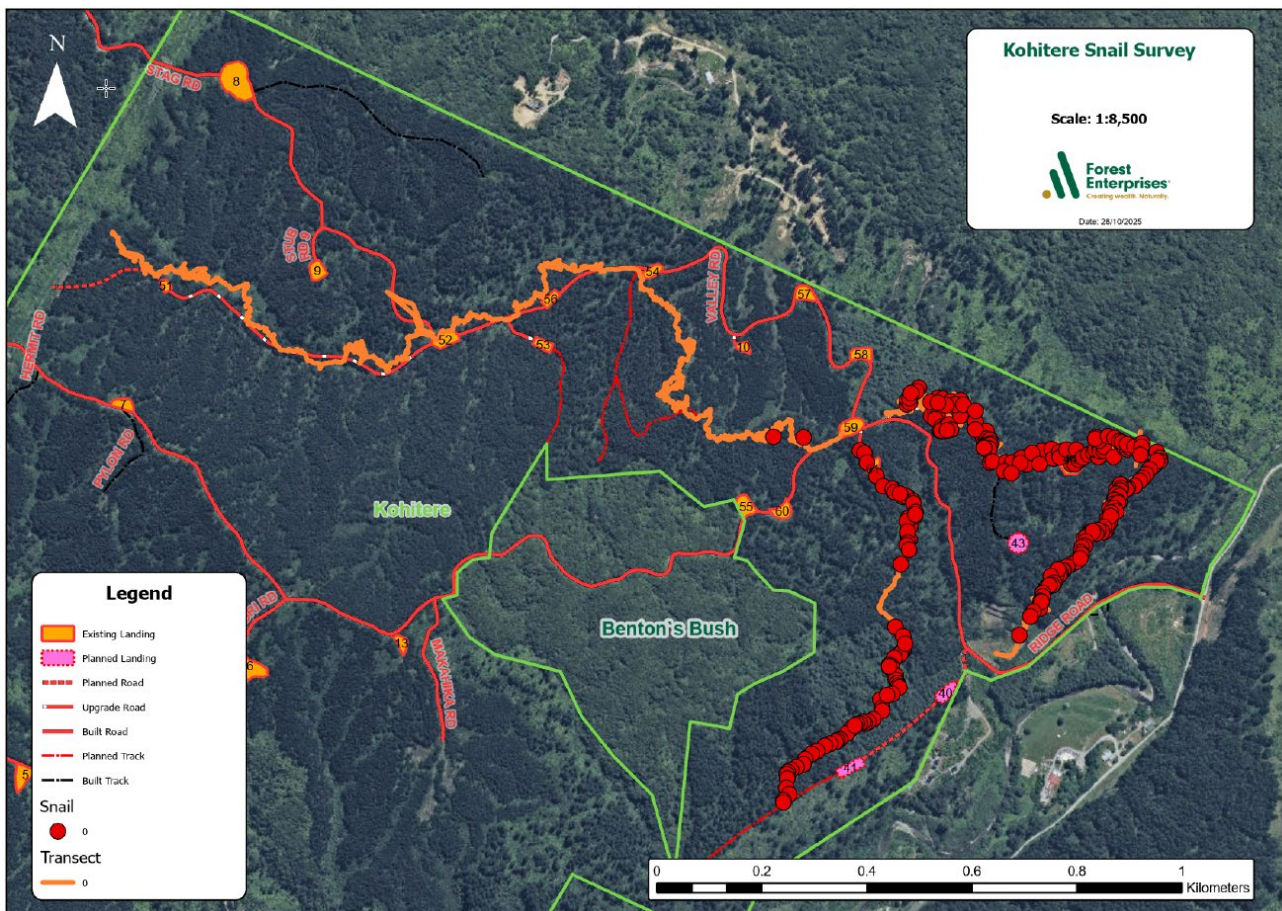
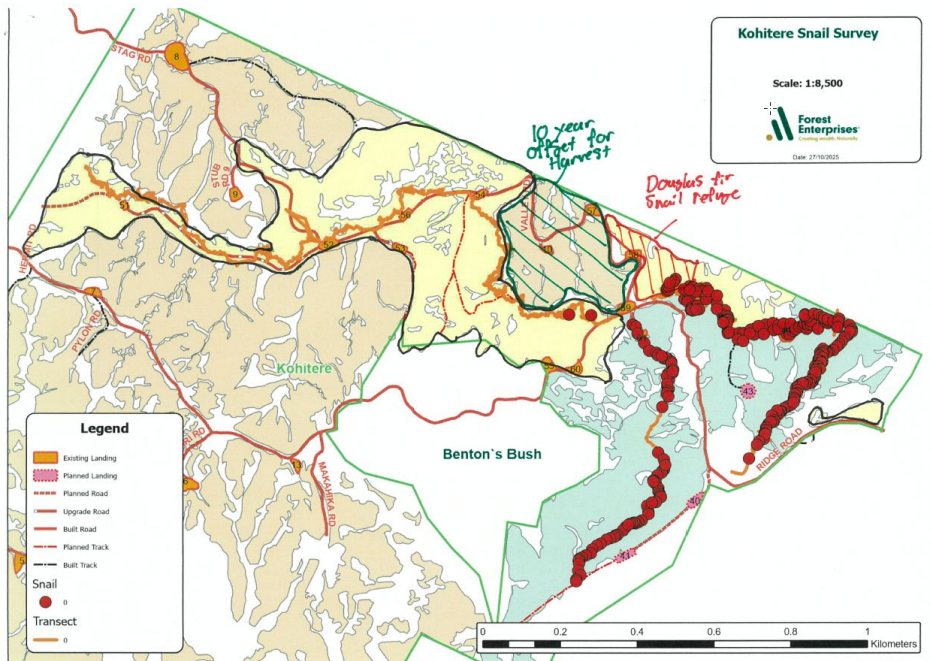


Figure 1. Map of Snail Survey Results



Forest Enterprises worked with DoC and HRC to develop a plan for these areas. This is to leave the Douglas fir standing as a refuge, offset the harvesting of the pine around skid 10 by 10 years, and delaying harvest of the rest of the area affected. This will leave the snails present undisturbed and also fulfil:

- Special Condition 5 of the Kohitere OIO sale consent regarding the implementation of formal protection of areas of significant fauna or flora identified by the Department.
- The Norsewood Estate Forest Management Plans goal to “enhance wildlife and plant habitat leading to increased biodiversity”.
- Forest Stewardship Certification principle 9 to “maintain and/or enhance High Conservation Value areas through application of the precautionary approach”



**Figure 2.** Map of snail survey protection plan

**High Conservation Value Sites:**

- There are two HCV sites in the NEL’s forests (Rocky Hills QEII Covenant and Kohitere Powelliphata traversi latizona and Powelliphata traversi florida snail refuges). Both these sites are healthy and thriving.
- All identified wildling pines in the Rocky Hills QEII Covenant were poisoned in early 2025.

**Pest control:**

During 2025, 161 small mammal pests were trapped and there were 183 bait station refills due to the bait being taken. They were mostly possums as shown below:

**Table 2.** NEL Estate’s Trapping Results for 2025.

| Species  | Possum | Rat | Stoat | Mouse | Hedgehog |
|----------|--------|-----|-------|-------|----------|
| Quantity | 128    | 15  | 5     | 3     | 10       |

Additionally, Horizons Regional Council’s Pest Animal Team carried out pest control operations in Kohitere Forest and Waitarere Forest. The operation in Kohitere Forest was carried out from the 26<sup>th</sup> of August to the 19<sup>th</sup> of September with 2,575 pills of Feratox being used over this period. The operation in Waitarere Forest was carried out from the 5<sup>th</sup> of May to the 18<sup>th</sup> of June with 11,288 pills of Feratox used and over 1,500 possum kills confirmed (the true total will be higher.)

Mammal pests have also been controlled through the permit hunting system. The table below shows the kills of deer, goats, pigs, and possums in 2025:

**Table 3.** NEL Estate’s Deer, Goat, Pig, and Possum Kills for 2025.



| Species  | Deer | Goat | Pig | Possum |
|----------|------|------|-----|--------|
| Quantity | 253  | 112  | 99  | 2053   |

### Water Monitoring

In 2025 SHMAK (Stream Health Monitoring and Assessment Kit) monitoring sites were tested for Autumn and Spring. The results are below:

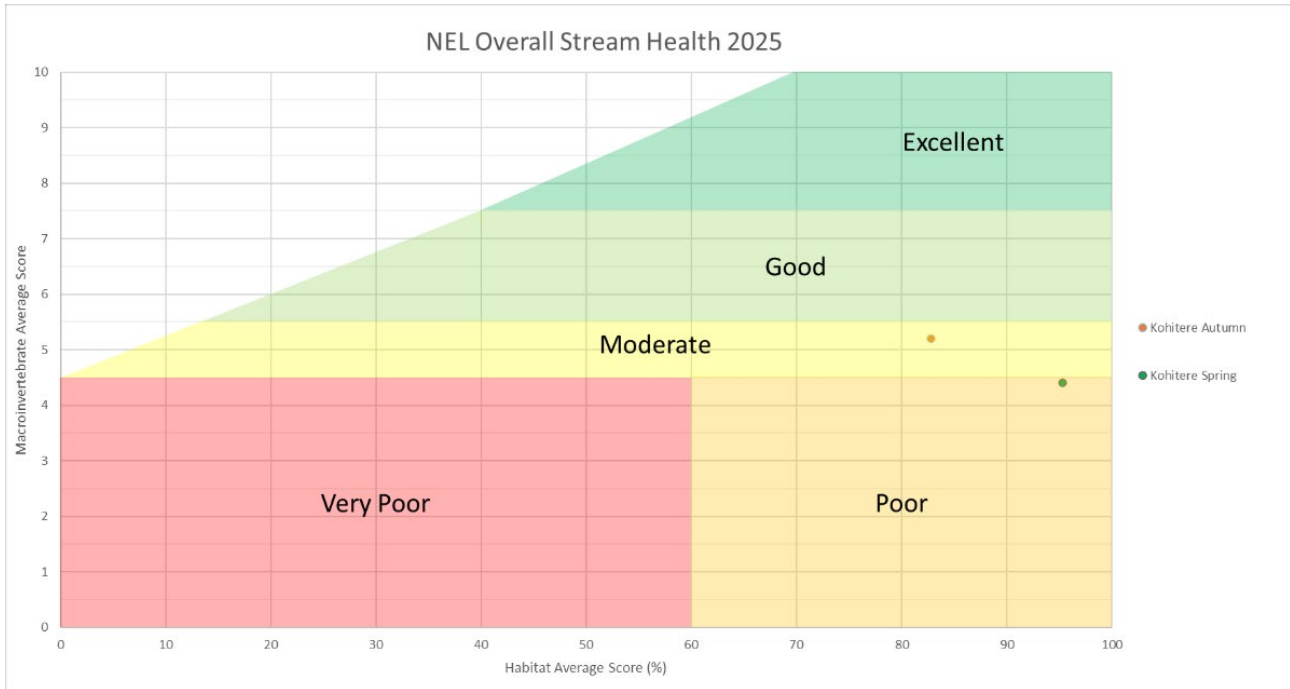


Figure 3. NEL Estate’s Overall Stream Health for 2025

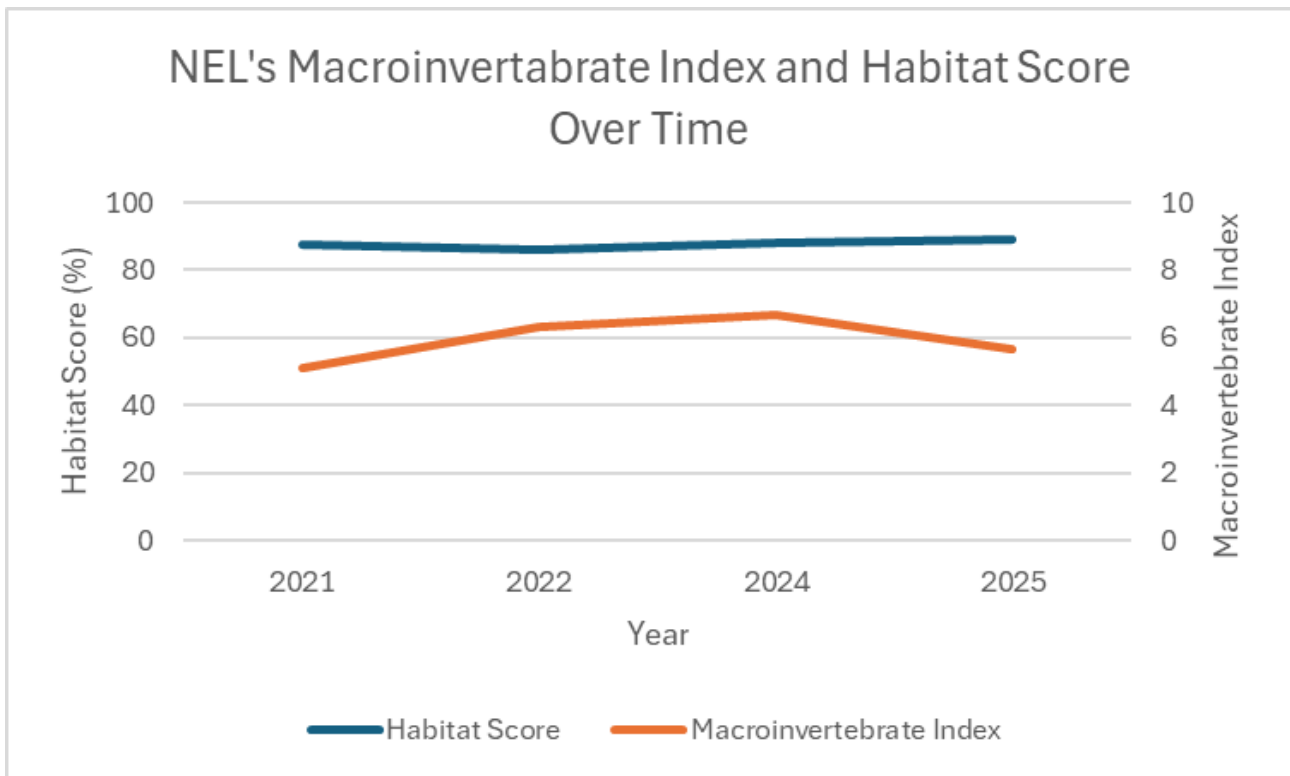


Figure 4. NEL Estate’s Macroinvertebrate Index and Habitat Score Over Time



Kohitere forest in the only SHMAK monitoring site in the NEL Estate. There was no testing in 2023 for this site. The graph above shows average habitat scores have been consistently high over time and average macroinvertebrate index has stayed in the moderate to good range.

### Forest Health Monitoring

- Forest health monitoring was undertaken by SPS Biota in October, and we are awaiting the report.

### Waahi Tapu and Archaeological Sites

- Waahi Tapu and archaeological sites have been mapped. Identification/notification booklets and posters have been issued to contractors.

### Health and Safety

Forest Enterprises uses IRIS (Incident Recording Information System) through the New Zealand Forest Owners Association (FOA) to record all accident and incident data, which includes:

- Hours worked
- Near misses
- Medical injuries
- Lost time injuries

The system is used to monitor improvements in Health and Safety and to compare data against industry

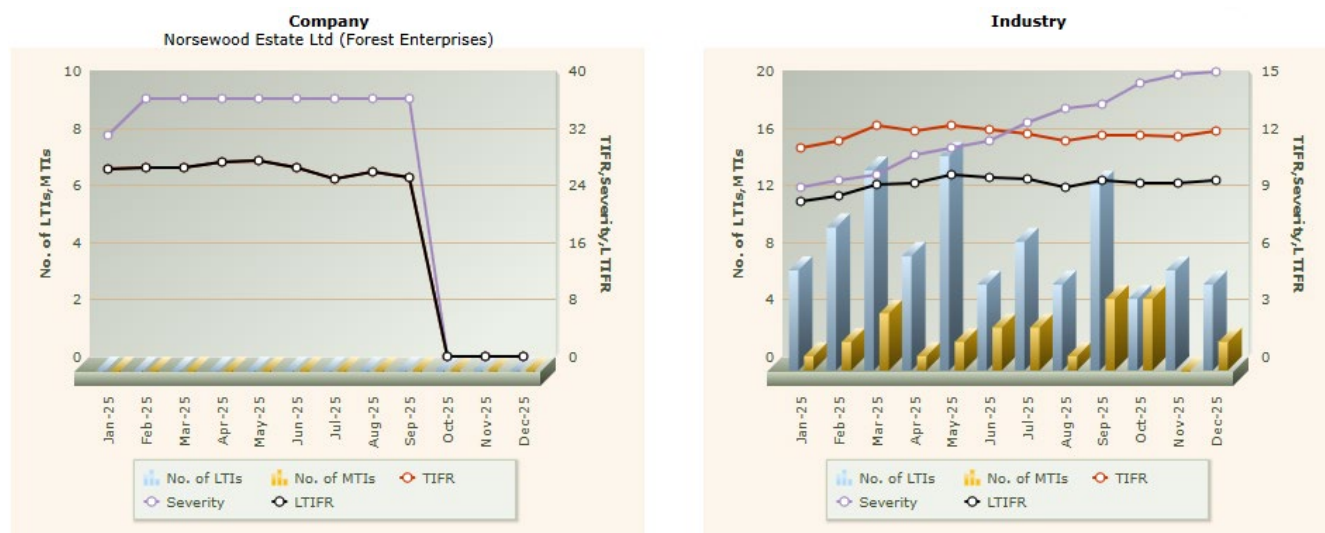


Figure 5. Health and Safety Statistics – Forest Enterprises and Industry, January 2025 to December 2025.

Figure 5 shows NELs health and safety statistics for the following:

- Total Injury Frequency Rate (TIFR) – Calculated using lost time injuries and medical treatment injuries per 1,000,000 labour-hours worked.
- Lost Time Injury Frequency Rate (LTIFR) – Calculates the number of lost time injuries per 1,000,000 labour-hours worked. For example, an LTIFR of 1 shows that 1 lost time injury occurs on a jobsite every 1 million labour-hours worked.
- Injury Severity Rate – The number of lost workdays experienced per 100 workers. The injury severity rate shows the extent of the safety anomalies by revealing how critical the injuries and illnesses are. The theory is that an employee who takes time to return to work after injury had a more severe problem than one who can return immediately.

### Pesticides and Chemical Use

- Forest Enterprises has 17 FSC approved ESRA's.



- Forest Enterprises continues to be a part an FSC cluster group and follow industry best practices (ECoP).
- Forest Enterprises continues to provide funding into industry cooperative research programmes in order to develop alternatives to highly hazardous chemicals.
- Forest Enterprises monitors the use of pesticides and chemicals (active ingredient and rate applied) within the NEL Estate. Below is the list of pesticides and chemicals used during this year:

**Table 4.** List of Pesticides and Herbicides Used During 2025

| <b>Type of Pesticide</b> | <b>Commercial name of pesticide / herbicide</b> | <b>Active ingredient</b>   | <b>Reason for use</b>       |
|--------------------------|---|--|-----------------------------|
| Herbicide                | Glyphosate 510                                  | 510g/L of glyphosate as the isopropylamine salt                    | Pre plant spray             |
| Herbicide                | Meturon   | 600g/kg metsulfuron-methyl   | Pre plant spray             |
| Other                    | Organosilicone                                  | Polyether-modified trisiloxane                                     | Pre plant spray             |
| Herbicide                | Terbuthylazine                                  | 500g/L Terbuthylazine  | Post plant release spray    |
| Herbicide                | Steed   | 520g/L Haloxyfop-p   | Post plant release spray    |
| Herbicide                | Valzine   | 75g/L Hexzinone + 425g/L Terbuthylazine                            | Post plant release spray    |
| Pesticide                | Feratox   | 475g/kg potassium cyanide  | Possum control              |
| Pesticide                | Double Tap                                      | Diphacinone – 0.05g/kg<br>Cholecalciferol (vitamin D3) – 0.60g/kg) | Pest control (small mammal) |
| Pesticide                | Feracol   | Cholecalciferol (vitamin D3) 8g/kg                                 | Pest control (small mammal) |

