

# Forest Enterprises Estate Monitoring Report

For FSC® Certified Forests (FSC® C168647)

December 2023

# Monitoring Strategy

Forest Enterprises' monitoring strategy is aligned with Forest Stewardship Council Certification. It covers the criteria outlined in FSC-STD-01-001 V5-2 International Standard and FSC New Zealand Standard 5.7 2013.

As of December 2023, Forest Enterprises is FSC certified for most of the forest estate it manages on behalf of 6,500 retail investors who proportionally own the forests. Forest Enterprises Limited (FEL) is a licensed manager of forestry Managed Investment Schemes under New Zealand's Financial Markets Conduct Act 2013. Forest Enterprises Growth Limited is the Forest Manager for the forestry investments.

Forest Enterprises aims to follow the mentioned principles for other forest land under its 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 monitoring plan**

Element	Indicators	Rationale	Procedures	Frequency
Crop Yields/ Reconciliation	Tonnes/ha	Efficiency and effectiveness of harvest Accuracy of planning	Volumes from FLITS Compare volumes and grades against inventory predictions	Monthly Full reconciliation at completion of the block
Growth Rates	Increment in tonnes or productivity m <sup>3</sup> /ha	Productivity of the forest	Permanent Sample Plots (PSP)	Annual Bi-annual Tri-annual
Changes to Flora & Fauna	Species presence/absence Regen present Rare, Threatened & Endangered species (RTE)	Biodiversity monitoring	As per agreed forest monitoring plan Contractor and staff reporting	5-yearly Before and after harvest 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 H&S statistics – Loss Time Injury Rate (LTIR)			
Post-Harvest	Waste Soil disturbance	Contract management	Staff visits Post-harvest inspection	Monthly
High Conservation Areas	Weed and pest control Photo points Ecological consultant analysis	Protect and monitor sensitive ecological areas	Weed and pest control visits and monitoring Photo points Ecological consultant analysis	Annually and pest control as required 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) Hunter returns Compliance reports (weeds)	Maintain forests in good condition Comply with Regional Pest Management Strategy	Cooperate with AHB	As required and annually



Wildings	Removal	Good management practice 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:

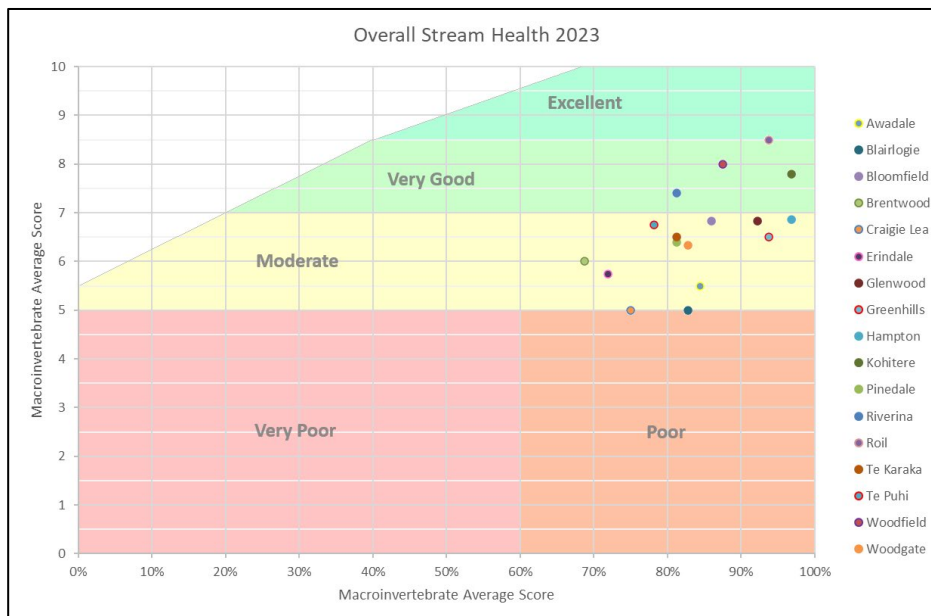
As of December 2023, 13 RTE sightings have been recorded (12 falcon and 1 freshwater crayfish).

- High Conversations Value Areas
  - There are four High Conservation Value sites: Lowlands, Millwood/Glenwood, Clearview, Bloomfield. All are forest remnants and are in good condition.
- Pest control results for FEL Estate are:

Species	Total
Deer	268
Pig	144
Goat	639
Possums	193
Wild Cats	1
Hares	27
Rabbits	12
Rats	3
Total	1287

## Water Monitoring

- SHMAK (Stream Health Monitoring and Assessment Kit) monitoring sites have not been tested for Autumn 2023 due to cyclones and the Spring results are below:



## Forest Health Monitoring

- Existing PSP's (Permanent Sample Plots) have been identified, mapped and monitored. More PSP's are to be established and existing to be remeasured in 2024.



- Forest health surveys were done in 2023.

## Waahi Tapu and Archaeological Sites

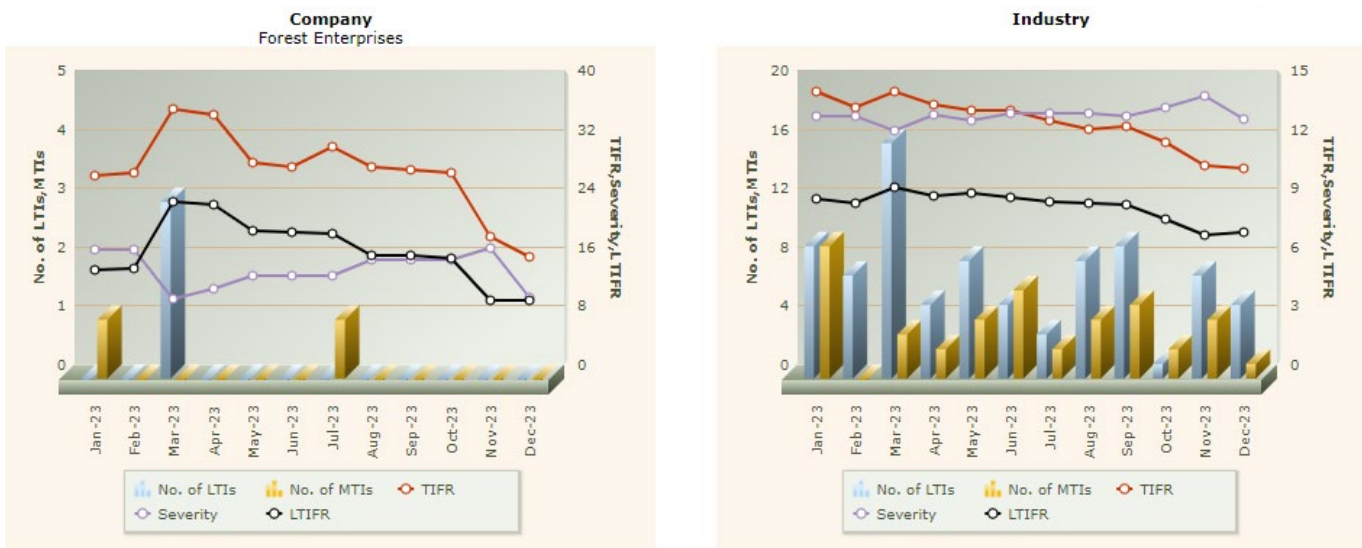
- Waahi Tapu and Archaeological Sites are mapped, and identification/notification booklets and posters have been issued to contractors.

## Health and Safety

Forest Enterprises uses the IRIS (Incident Recording Information System) through the New Zealand Forest Owners Association (FOA) to input all accident and incidents 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 1.** Health and Safety Statistics – Forest Enterprises and Industry, January to December 2023

Figure one shows FELs health and safety statistics for; Total Injury Frequency Rate (TIFR), Lost Time Injury Frequency Rate (LTIFR), and Injury Severity Rate.

- TIFR is calculated using lost time injuries and medical treatment injuries per 1,000,000 labour-hours worked.
- LTIFR calculates the number of lost time injuries per 1,000,000 labour-hours worked. For example, an LTIFR of 7 shows that 3 lost time injuries occurred on a jobsite every 1 million labour-hours worked.
- The Injury Severity Rate is 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 16 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 FEL Estate. Below is the list of pesticides and chemicals used during this year:

Type of Pesticide	Commercial name of pesticide / herbicide	Active ingredient	Reason for use
Herbicide	Glysophate 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	Valzine	75g/L Hexzinone + 425g/L Terbutylazine	Post Plant Release Spray
Herbicide	Terbutylazine	500g/L Terbutylazine	Post Plant Release Spray
Herbicide	Hexagran	750g/kg Hexzinone	Post Plant Release Spray

