

# Forest Enterprises Estate Monitoring Report

For FSC® Certified Forests

April 2020

# Monitoring Strategy

The Forest Enterprises monitoring strategy is aligned with Forest Stewardship Council® Certification, and covers the criteria outlined in FSC-STD-01-001 V5-2 International Standard and FSC New Zealand Standard 3.8 2019 draft.

As at April 2020, Wairarapa Estate Limited (WEL) and Southland Estate Limited (SEL) are under an FSC Certificate, and other forest estates managed by Forest Enterprises aim to follow the mentioned principles.

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 m3/ha	Productivity of the forest	Permanent Sample Plots (PSP)	Annual Bi-annual Tri-annual
Changes to Flora & Fauna, Indigenous Forest Condition	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 (Ranked '1. Potential HCV/F and 2. High')	Weed and pest control Photo points Wildlands Ltd analysis	Protect and monitor sensitive ecological areas	Weed and pest control visits and monitoring Photo points Wildlands Ltd 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

- Plant and pest control are monitored by Forest Enterprises staff (traps, wildings, etc.) and Hunting Permit Kill count results.
- Rare, Threatened and Endangered (RTE) Species: Forest Enterprises issued updated RTE posters and booklets which contain photos of species like to be seen in WEL and SEL. RTE sightings forms are attached to the back of the booklets and is also available through the Survey123 mobile app.
- High Conservation Value Sites: WEL has two identified botanised High HCV Reserves, one found in Glenburn Forest and the other in Dunolly Forest. The Glenburn reserve is monitored by photo points and checking the security of the surrounding fence, both which were completed in February. The Dunolly reserve is monitored by pest control which result in kill counts. Forest Enterprises is currently investigating the location of the traps and from this further monitoring efforts will be reviewed and put in place. SEL has no HCV sites.

## Water Monitoring

- Previous SHMAK (Stream Health Monitoring and Assessment Kit) monitoring sites have been mapped and future sites needing monitoring are under review. A new SHMAK Kit has been purchased to ensure up to date methods are applied.
- Rivers in WEL and SEL are classified in accordance to National Environmental Standards for Plantation Forestry (NES-PF) and Regional Water Plans therefore ensuring appropriate and best environment practices are used.

## Forest Health Monitoring

- Permanent Sample Plot (PSP) data from the previous manager has been handed over and is being reviewed. A new Standard Operating Procedure has been written and further efforts to locate PSP plots for forests with no data are under investigation and the monitoring plan efforts are underway. PSP for all WEL and SEL forests going forward are to be established, mapped and monitored.

## Waahi Tapu and Archaeological Sites

- Previously known Waahi Tapu and Archaeological Sites have been mapped and new identification/notification booklets and posters have been issued to contractors.
- Hapua Forest is known to have many Waahi Tapu and Archaeological Sites which have been monitored during harvest operations. Hapua Forest operations are due to be complete as part of a cutting right.

## 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, to compare data against industry and is aligned with our system and goal of “Zero Harm” by 2020.



**Figure 1. Health and Safety Statistics – Forest Enterprises and Industry, May 2019 to April 2020**

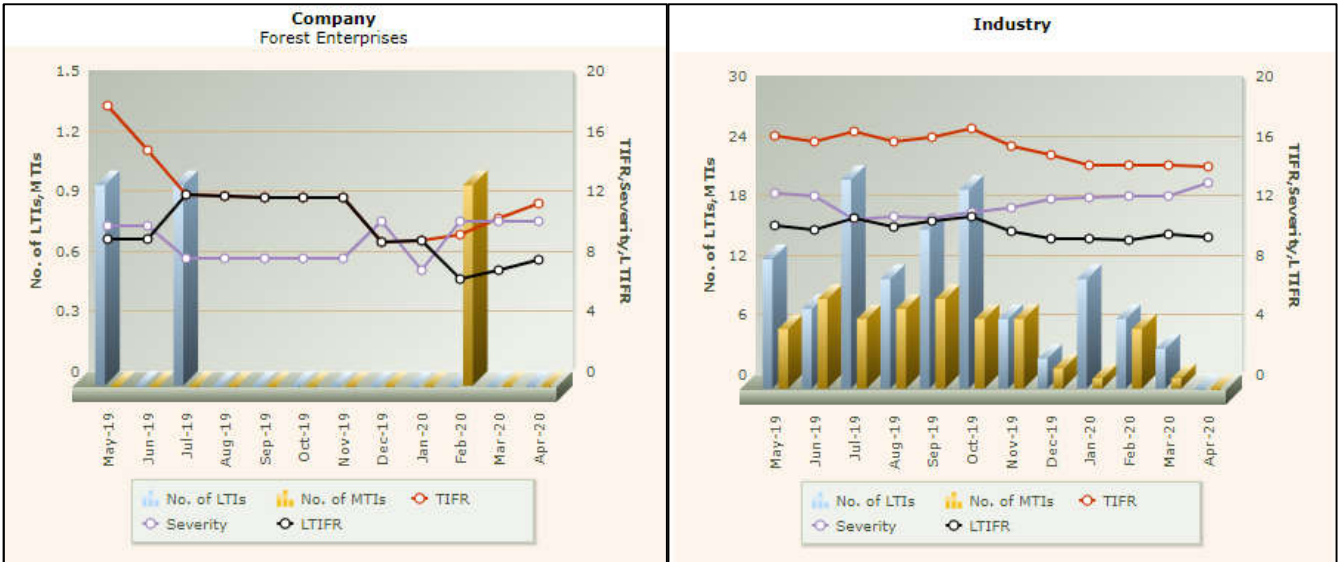


Figure one shows AFLs health and safety statistics for; Total Injury Frequency Rate (TIFR), Lost Time Injury Frequency Rate (LTIFR), and Injury Severity Rate.

- 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 7 lost time injuries occur on a jobsite every 1 million labour-hours worked.
- The Injury Severity Rate is the number of lost work-days 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**

- As the FSC Pesticide Policy transitions from a derogation system to an Environmental and Social Risk Assessment (ESRA) regime (see below), Forest Enterprises continues to maintain FSC standards by joining an FSC cluster group and follow industry best practices (ECoP).

**Figure 2. FSC Pesticide Policy Transition Timeline**

