

ENVIRONMENTAL MONITORING REPORT: 2024

Introduction

A diverse range of environmental monitoring programs are undertaken nationally by Forest360 Ltd. Not all information/results from monitoring undertaken are described in this report but are available on request from our regional offices. This document updates, and describes the range, and type of environmental monitoring undertaken.

Monitoring Strategy

Forest360 is committed to monitoring its operations and estate as part of our continuous environmental improvement. Monitoring is a valuable tool which ensures information is collected and assessed to evaluate change and progress toward desired outcomes. Several of our Forest Estates in the North Island are managed and certified under the Forest Stewardship Council® Certification (FSC)

What Forest360 Monitors

Forest360 undertakes environmental monitoring in the following areas:

- Estate information
- Regulatory/Voluntary compliance
- Chemical usage and pest control
- Biological control
- Storm events and response
- Rare, threatened, and endangered species
- Ecological values
- Areas identified as having High Conservation Values (HCVs)
- Stream health
- Forest health and biosecurity
- Social and economic aspects of our forest management.

Monitoring Programmes

1 Estate Information

Forest360 regularly updates changes to the profile of the estate. These changes are reported annually in the Estate Plan and in our Area Statement (Table 1 and 2). Monitoring and updating these details reflect the changes in estate profile from harvesting, replanting, and any other land management changes.

2 Regulatory and Voluntary Compliance

Forest360 monitors compliance against regulatory requirements defined in the company's Environmental Management System (EMS). These include the New Zealand Forest Owners Association (NZFOA) Forest Road Engineering Manual (2020) and Forest Practice Guides (2020) and the National Environmental Standard for Commercial Forestry. We are constantly updating our EMS to ensure we comply with current environmental and best practice requirements. Additionally, operational audits

are regularly completed by staff to ensure contractor operations are meeting contract and operational specifications.

Table 1: F S C area under Forest360 Ltd. Management: 30 Oct 2024

Forest360 FSC Managed Forests				
FOREST	Region	Tenure	Council	Area
RFL Metro				
Valley View	Upper Hutt	FR	GW	919
Mangaroa	Upper Hutt	FR	GW	149
Akatarawa	Kapiti	FR	GW	39
Puketiro	Porirua/UH	FR	GW	1190
Hukinga	Upper Hutt	FR	GW	120
Mangatukutuku	Kapiti	FR	GW	188
Whakatikei	Kapiti	FR	GW	157
Pakuratahi East	Upper Hutt	FR	GW	175
pakuratahi West	Upper Hutt	FR	GW	359
				3296
RFL Wairarapa				
Stoney Creek	South Wairarapa	FR	GW	1109
Tauanui	South Wairarapa	FR	GW	142
Hiwinui	South Wairarapa	FR	GW	120
				1371
Rangatira Estate				
Cooks Road	Rangitikei	FH	HRC	119
Cain & McKay	Rangitikei	FH	HRC	443
				562
SNI Estate				
Craig Dean	Rangitikei	FH	HRC	1940
Waipuna	Wairarapa	FH	GW	191
Mt Erin	Rangitikei	FR	HRC	243
				2374
Ingka Estate				
Hawera 1	Taranaki	FH	TRC	701
Hawera 2	Taranaki	FH	TRC	631
Kenderdine	Whanganui	FH	HRC	452
Purangi	Taranaki	FH	TRC	161
Mt Marsh	Tararua	FH	HRC	237
				2182
Total ha				9785

3 Chemical Usage

Our chemical monitoring system records annual usage within the estate. We record the use of all herbicides, vertebrate toxins and insecticides and the area and location of application. This process assists meeting certification requirements regarding the use of those pesticides designated as prohibited, highly restricted, or restricted. Ernslaw currently uses one pesticide, and one herbicide identified as restricted under the FSC® pesticides policy (Table 3). Forest360 is currently not using any prohibited, or highly restricted pesticides or biological controls to manage pests.

Table 3: Chemicals used within FSC Forest Estate in 2024.

Type	Commercial Name	Active Ingredient	Use
Herbicide	Agpro Glyphosate 360 & 540	Glyphosate	Pre-plant spray
Herbicide	Meturon	Metsulfuron-methyl	Pre-plant spray
Herbicide	Terbuthylezine	Terbuthylezine	Release spray
Herbicide	Valzine	Hexazinone	Release spray

4 Biological Agents

No biological controls were used in the forest estate in 2024.

5 Storm Events and Response

Forest360 monitors storm events to better understand and manage future impacts. The collection of information on storm intensity, impact and required remedial work provides information regarding the capability of forest infrastructure to withstand storm events. The increased frequency and duration of high intensity rainfall affects various forests within the Forest360 FSC estate. To help manage future events Forest360 is reviewing harvest planning, forest engineering and replant practices with an aim to reduce the amount of vulnerable areas exposed at any one time. Measures such as the introduction of catchment harvest constraints, 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 Forest360 forests and the wider catchment.

6 RTE Species Management

RTE species management is required in forest areas where rare, threatened & endangered species are known to be present. The ecological assessments undertaken for each forest outline any RTE species present and provide management recommendations for staff and contractors to manage operations alongside these species. Examples from 2024 include Gecko (Figure 1) and kiwi (Figure 2):

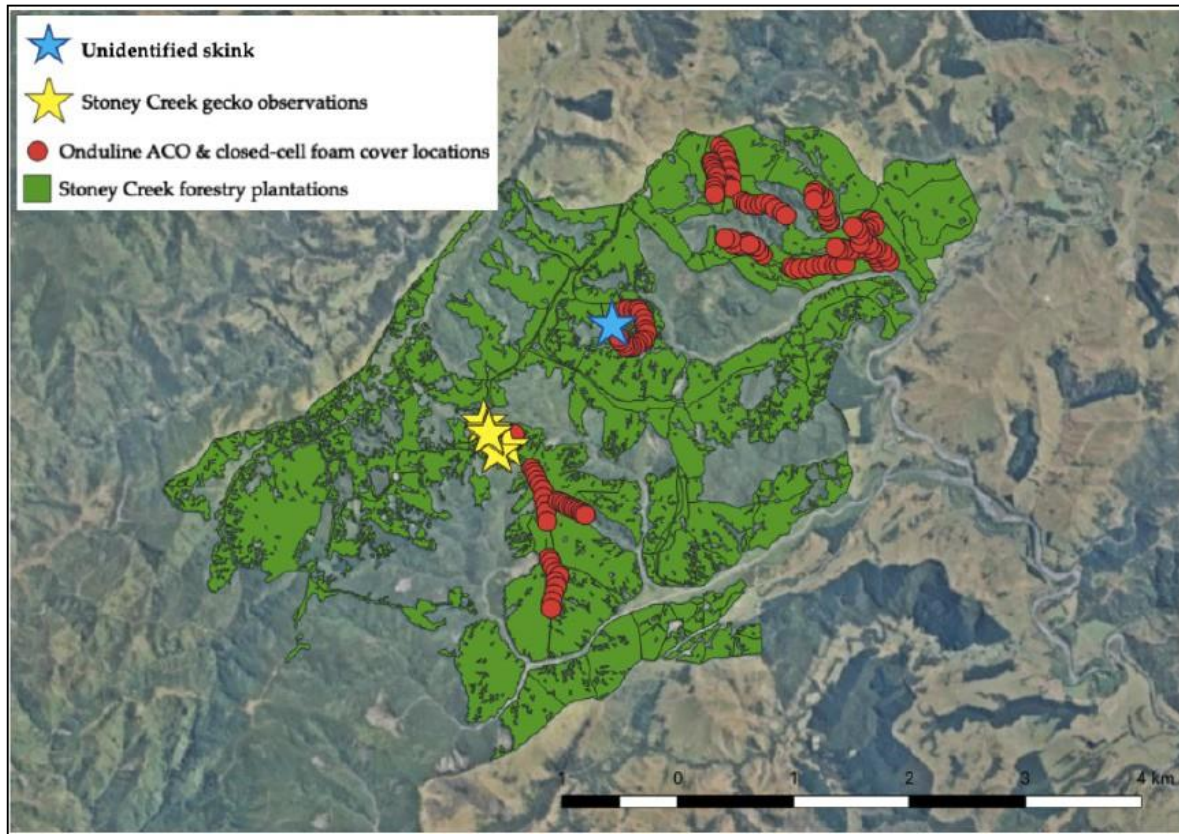


Figure 1. Locations of Gecko & Skinks found during ecological assessments at Stoney Creek (Stoney Creek internal ecological report).



Figure 2. Kiwi footprint found in Kenderdine during ecological assessment (April 2024)

7 Naturewatch – Biodiversity in plantation forestry

Flora and fauna observations are uploaded directly onto the i-Naturalist “NZ biodiversity in plantations” These include native species such as the NZ falcon (*Falco novaeseelandiae*), North Island Brown kiwi (*Apteryx mantellipteryx*),

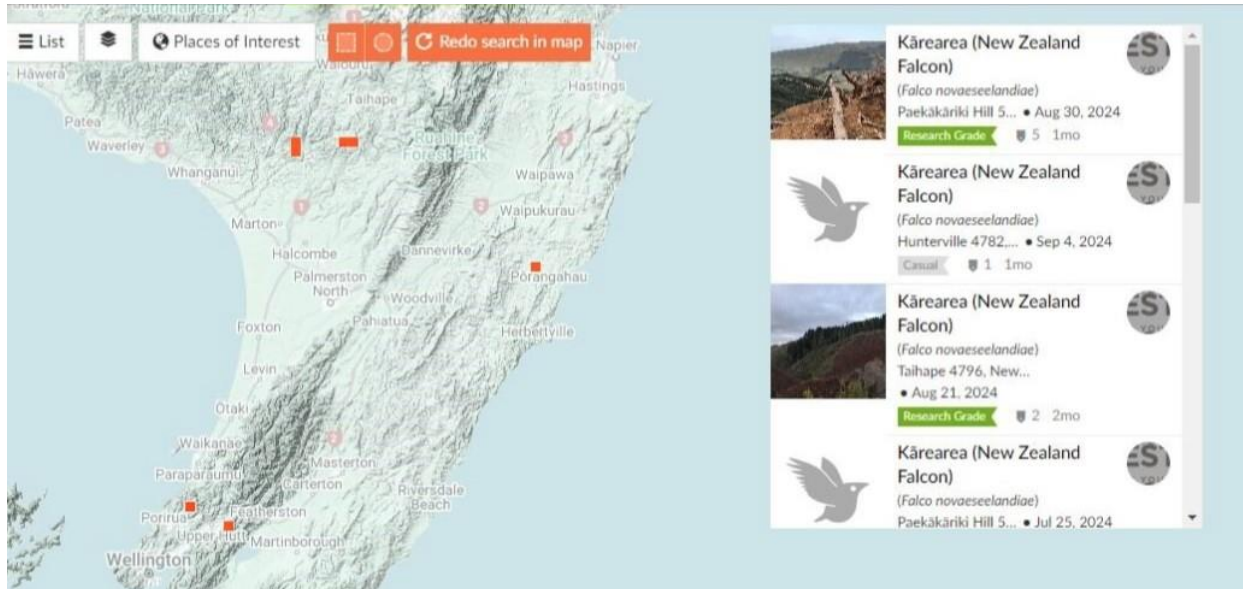


Figure 3: Kārearea, NZ falcon (*Falco novaeseelandiae*), sightings in FSC forests

8 Ecological Values

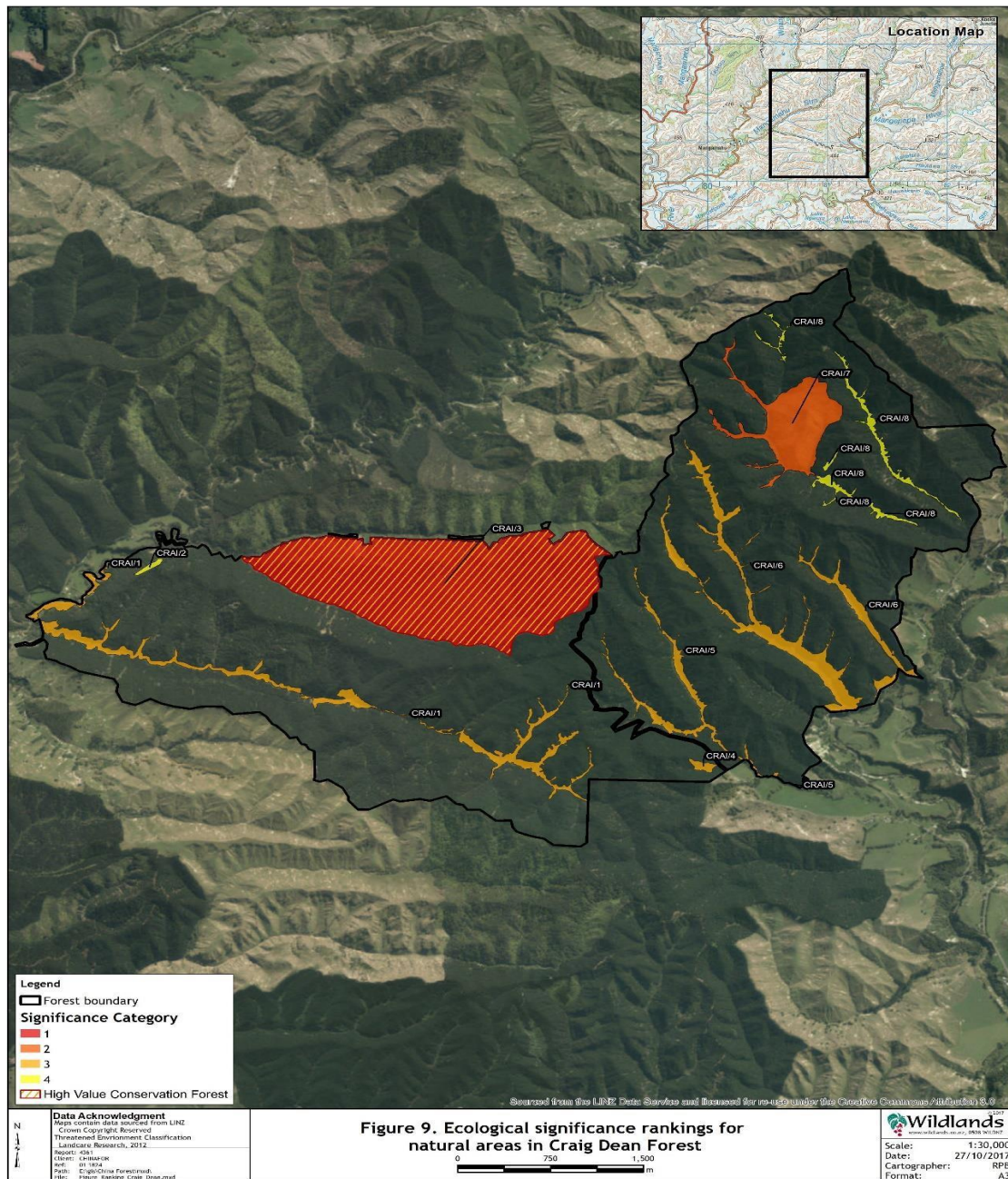
Froest360 currently meets or exceeds the minimum 10% of the total management unit that is to be kept or restored to a natural condition. Any area that may be deficient in some ecological districts, the NZ FSC® National Standard provides an ecological equivalence procedure where percentage shortfalls can occur in specific ecological district/regions (Table 4).

Ecological District	Forests	Total Forest Area (ha)	Reserve Area (ha)	Reserve %
Taranaki North	Douglas* Matau* Purangi	1994	784.7	39.2%
Matemateanga	Hawera 1 & 2 Kenderdine	1641	194.29	11.8%
Eastern Wairarapa	Mt Marsh Waipuna	365	62.2	17%
Rangitikei	Craig Dean Cooks Cain & Mackay Mt Erin	2748	503.8	18.3%
Tararua Wellington Aorangi Eastern Wai	RFL	4909	0	0

9 High Conservation Value (HCV) Forest

Forest360 has had ecological assessments carried out on all its FSC forests by external consultancy to identify and classify HCV areas within its estate. HCV areas need to be appropriately managed to maintain or enhance the conservation values. Currently there is only one HCV area (233ha) in the Estate and is located in Craig Dean. Ongoing specific management is being carried out to maintain the values of this area. Ongoing pest and predator control is a key mgmt. strategy and annual bird population monitoring is occurring with a view to monitoring long term bird population trends.

Figure 4: Craig Dean HCV area CRA/3.



10 Stream Health Monitoring

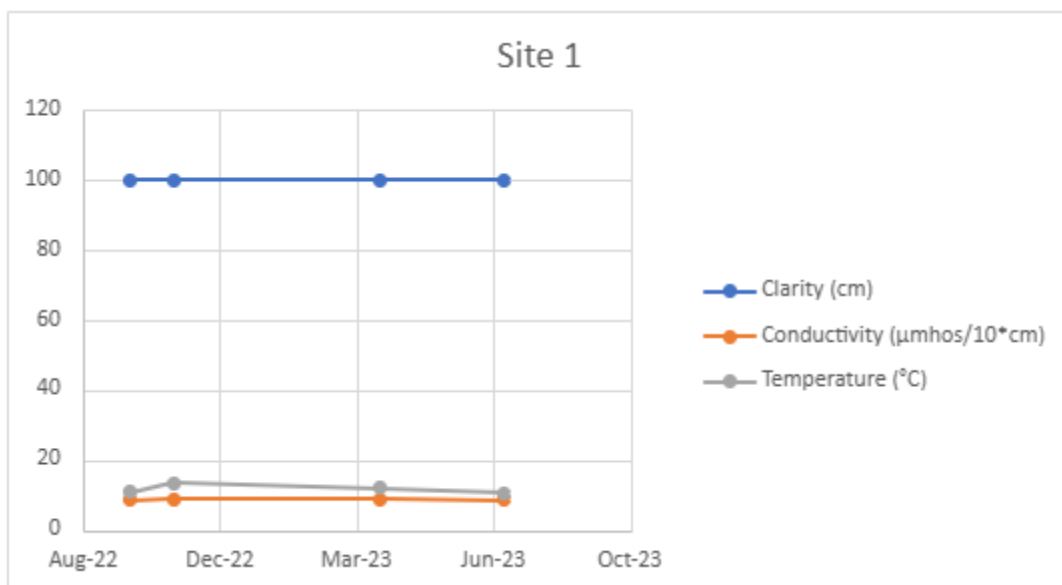
Forest360 conducts monitoring programmes designed to benchmark stream health pre-harvest, during harvest operations, and then through into the next rotation. The program includes various combinations of stream habitat assessment, and water quality measures including Temp, conductivity & visual clarity (cm). eDNA may be added to the testing regime on a 6 monthly basis going forward.

Examples of collected data are represented below (Figures 5 & 6)

Figure 5: Hukinga River (Hukinga Forest) water clarity, conductivity, Temp (2022– 2024).

Site 1 (Downstream / Bridge)			
Date	Clarity (cm)	(μ mhos/10 * cm)	Temp (°C)
Oct-22	100	8.6	10.8
Nov-22	100	8.9	13.4
Apr-23	100	8.7	12
Jul-23	100	8.5	10.4
Oct-23	No harvesting		
Jan-24			
Jul-24	100	8.1	8.5
Sep-24	100	8.4	12.8

Figure 6: Graph Hukinga River (Hukinga Forest) water clarity, conductivity, Temp (2022– 2024).



11 Forest Health/Pest Management

The Forest360 FSC 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, slips, animal browsing, invasive plant species are all recorded, and an appropriate management response undertaken.

12 Social and Economic

Forest360 has a close involvement with the local communities around its forests. Most of our labour force comes from those communities, and we provide support by way of donations, sports team funding, and hosting events and school groups (figure 7). The forests are extensively used for many different recreational activities including hunting, walking, mountain bike clubs.

Forest360 staff actively participate in regional forestry groups and are bound by the NZ Forest Owners Association Code of Conduct (2022), the Log Truck Safety Accord (2021) The Health and Safety of workers in our forests, and along the supply chain is paramount to Forest360, as is a commitment to pay the NZ Living Wage to all workers.

Figure 7: Forest360 staff (*Chris Gibbons*) hosting students from Paraparaumu College on their “Forestry Big Day Out” as part of the “Grow me” Secondary schools engagement programme

