

Ponga Silva Southland Forests

Ponga Silva Ltd

**Forest Stewardship Council®
Forest Management Plan**

For the period March 2022 – March 2027



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1. What is this Plan?

About this Plan

This **specific** forest management plan provides details about the Ponga Silva Southland Forests:

- (i) Castle Downs
- (ii) Hokonui
- (iii) Monavae
- (iv) Pinnacle Pine
- (v) Rugged Hills
- (vi) Waitane

It is to be used in conjunction with the **standard** forest management plan, which outlines the typical management applied to the Forest Stewardship Council (FSC®) Group Scheme estate forests.

Where the forests are managed in a different way than described in the standard forest management plan, this is detailed within this plan, which takes precedence.

Foundation Principle

Ponga Silva Ltd is committed to adopting the Forest Stewardship Council (FSC®) Principles and meeting the FSC® Criteria relevant to forest management.

Ponga Silva Ltd is committed to the PF Olsen FSC® Group Scheme **NC FM/COC-000190** processes and associated documents.

Ponga Silva Ltd seeks FSC® certification, to ensure that their forests are managed in an environmentally appropriate, socially beneficial and economically viable manner and to obtain the best access opportunities to the local processing market which is seeking to source FSC® certified logs.

2. The Forest Land

Location and access

Forest access and location of the forests in relation to potential markets is listed in the tables below and shown in Map 1.

Distances from forest to log markets

Potential Market or Export Port	Distance from Forest (km)	Log market
Niagara Winton	40 – 70 km	Domestic
Niagara Kennington	70 – 80 km	Domestic
Daiken Matura	30 – 90 km	Chip
South Port Bluff	75 – 105 km	Export

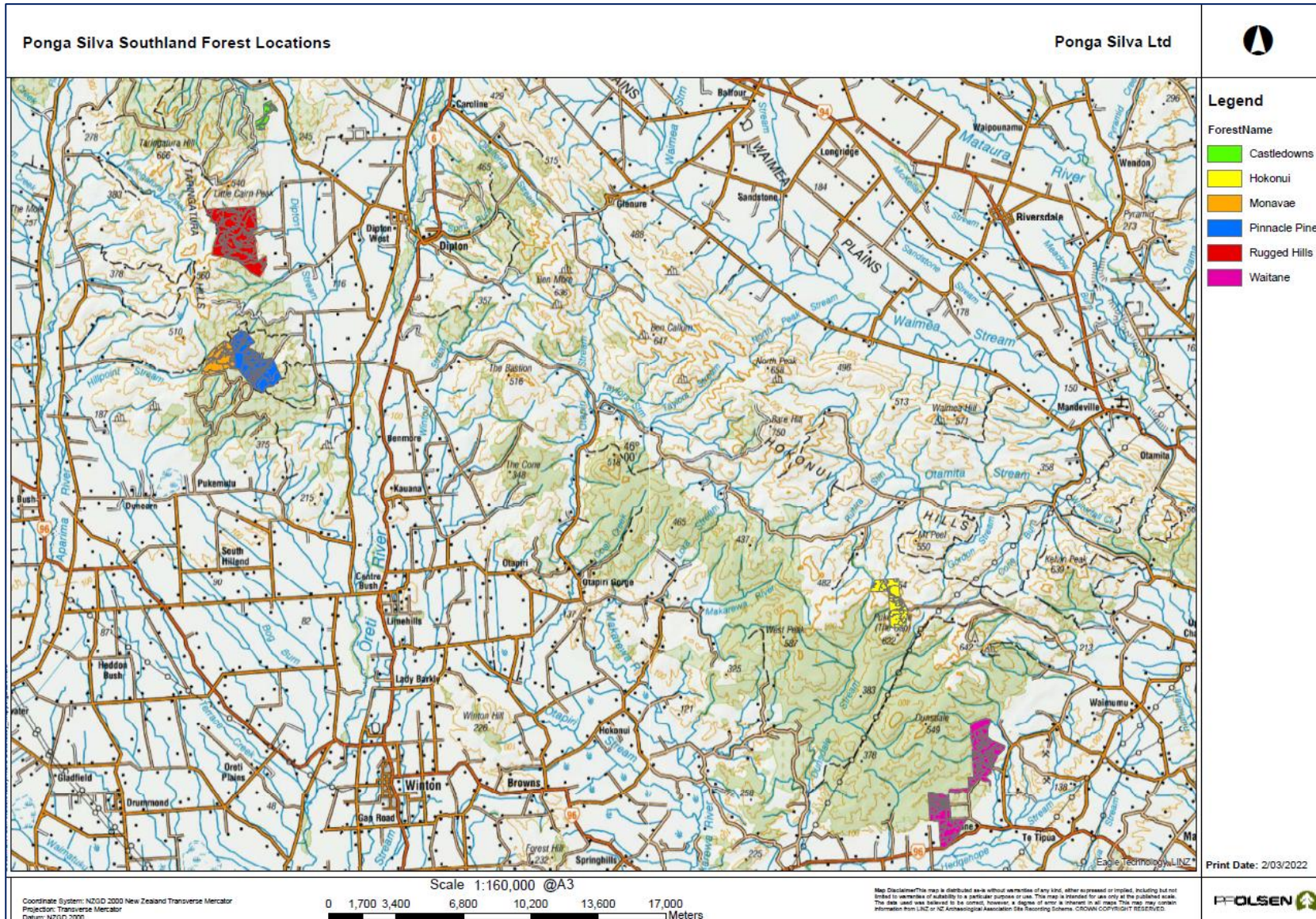
Forest locations

Forest	Location
Castle Downs	Hamilton Burn-Dipton Road, approx. 11 km NW of Dipton
Hokonui	Bushy Park Road, approx. 26 km west of Gore
Monavae	Dipton Flat Road, approx. 15 km SW of Dipton
Pinnacle Pine	Tangitarua Road, Dipton Flat Road, approx. 14 km SW of Dipton
Rugged Hills	McDonald Road, approx. 9 km west of Dipton
Waitane	Lawrence Road, from State Highway 26, approx. 13 km west of Matura

Topography

Topography allows for a relatively equal mix of hauler and ground-based harvesting. It is described in the table below for each forest.

Forest	Topography
Castle Downs	Flat to rolling. Extends 180 m to 260 m above sealevel
Hokonui	Rolling to moderately steep. Extends from 400 m to 600 m above sealevel
Monavae	Rolling to moderately steep. Extends from 300 m to 500 m above sealevel
Pinnacle Pine	Rolling to moderately steep. Extends 220 m to 520 m above sealevel
Rugged Hills	Moderately steep to steep. Extends from 180 m to 540 m above sealevel
Waitane	Flat in the south and east, to moderately steep in the north and west. Extends 80 m to 220 m above sealevel



Map 1 . Forest locations

Soils

The soils are predominantly derived from Mesozoic volcanic greywacke. They are generally suited to plantation forestry, with only slight risk of sheet, slip and wind erosion.

Forest	Soil types
Castle Downs	Greywacke, most with loess overlay
Hokonui	Sandstone and greywacke
Monavae	Greywacke, most with loess overlay
Pinnacle Pine	Greywacke, most with loess overlay
Rugged Hills	Greywacke, most with loess overlay
Waitane	Sandstone/greywacke, smaller proportion of loess over alluvium

Climate

Southland:

- Exposed to weather systems arriving from the west and south
- Prevailing winds are westerlies
- Annual rainfall in the western ranges can exceed 8000 mm. In the eastern lowlands and hills, rainfall is 800 to 1200mm/year
- Temperatures are generally cooler than the rest of the country with frequent frosts and snowfalls
- On average, Southland receives less sunshine than the remainder of New Zealand

Legal ownership

The legal description and land area for each forest is shown below. The tenure is freehold.

Forest	Legal Description
Castle Downs	Fee Simple, 1/1, Lot 2 and Lot 7 Deposited Plan 5453 and Part Lot 2 Deposited Plan 4891, 652 ha m2
Hokonui	Fee Simple, 1/1, Section 19 and Section 32 Block I Waimumu Hundred, 1,821 ha
Monavae	Fee Simple, 1/1, Lot 1 Deposited Plan 13028, 1,850,600 m2
Pinnacle Pine	Fee Simple, 1/1, Section 522 Block XXIX Taringatura Survey District, 4,000 ha
Rugged Hills	Fee Simple, 1/1, Part Section 430 Block XXIII Taringatura Survey District, 6,378,184 m2
Waitane	Fee Simple, 1/1, Lot 2, 4 Deposited Plan 418576 and Part Lot 42-43 Deposited Plan 177, 6,376 ha

3. The Ecological Landscape

Ecological District The forests falls within four Ecological Districts:

Taringatura Ecological District

- 1,230.2 ha, 64% of the estate
- Castle Downs, Monavae, Pinnacle Pine, Rugged Hills forests

The Ecological District is described as: *Low hills framing wide flat valleys. Historically tussockland, mostly red. Some podocarp-hardwood remnants in the hills. Silver beech in the eastern foothills. Riverbeds important for bird breeding sites. Green skink recorded near Mossburn. Parts of the ED intensively developed for sheep and beef grazing.*

Hokonui Ecological District

- 197.4 ha, 10% of the estate
- Hokonui forest

The Ecological District is described as: *Rolling Hokonui Hills. Historically podocarp and podocarp-hardwood forest in the south and east, and red tussockland in the north and west uplands. Some forest now displaced by red tussock, scrub, and exotic pasture. Much of the ED is now grazed. Fernbird and falcon present. Green skink present in Hokonui Hills, records of Otago skink in the eastern end of the Hills.*

Gore Ecological District

- 297 ha, 15% of the estate
- 297 ha of Waitane forest

The Ecological District is described as: *Large ED covering the inland plains and downlands. Historically red tussockland, some podocarp and podocarp-hardwood forest. Now, predominantly farmed. Falcon present, plus a range of birds utilise the riverbeds for breeding sites. Green skink present in the Hokonui Hills foothills.*

Southland Plains Ecological District

- 195.8 ha, 10% of the estate
- 195.8 ha of Waitane forest

The Ecological District is described as: *Comprises most of the Southland Plains to the coast. Historically lowland red tussockland, extensive swamps, and some podocarp-hardwood forest. Nowadays, highly modified for farming, with only small remnants of indigenous forest, swamps and red tussock. Birds utilise riverbeds and coast for breeding.*

**FSC®
requirement:
Ecological District**

Ecological Districts that have less than 10% reserve set-asides:

- Taringatura ED: shortfall of 70.4 ha within the Ponga Silva Southland forests. However, other PF Olsen Group Scheme certified forests within Tangitura ED have greater reserve areas, with the ED total collective set-aside area greater than 10%.
- Southland Plains ED: shortfall of 6.3 ha within Ponga Silva Southland forests. No other Group Scheme forests are located in this ED. This shortfall will be offset by plant pest and predator control within HCVF and other high ranking reserves.

Reserve areas by Ecological District

Ecological District Forest areas	Gore		Hokonui		Southland Plains		Taringatura		Grand Total	
	ha	%	ha	%	ha	%	ha	%	ha	%
Castle Downs							56.0		56.0	
Reserve							4.5	8	4.5	8
Productive							51.5		51.5	
Hokonui			209.2						209.2	
Reserve			25.4	12.1					25.4	12.1
Productive			183.7						183.7	
Monavae							165.1		165.1	
Reserve							3.9	2.3	3.9	2.3
Productive							161.1		161.1	
Pinnacle Pine							362.2		362.2	
Reserve							12.9	3.6	12.9	3.6
Productive							349.4		349.4	
Rugged Hills							579.5		579.5	
Reserve							20.4	3.5	20.4	3.5
Productive							559.0		559.0	
Waitane	356.4		2.1		210.7				569.2	
Reserve	58.1	16.3	2.1	100	13.4	6.3			73.6	12.9
Productive	298.3				197.2				495.6	
ED Forest area Grand Total	356.4	16.3	211.3	13	210.7	6.3	1162.8	3.6	1,941.1	
ED Reserve area Grand Total	58.1		27.5		13.4		41.3			
Shortfall by ED	-	-	-	-	6.3 ha	3.7%	70.4 ha	6.4%		

4. Cultural and Social Aspects

Forest history The forest estate was previously owned by Craigpine Timber Ltd, and was previously FSC® certified. PF Olsen Ltd was appointed the forest manager in mid 2021.

Current social profile The predominant land uses surrounding the forests are pastoral farms and plantation forest, with small rural towns servicing the predominantly rural communities. The forests contribute to the social profile of the area. They are privately owned. There is a modest contribution to the local economy by way of added incremental employment.

Historic and archaeological sites Records from the ‘Archsite’ web resource indicate there are known historic sites near the forests. In 2007, a registered archaeologist undertook a desktop survey and found no sites within or within 1 km of the forests (except Waitane) – refer to the following table.

Forest	Archaeology
Castle Downs	Closest site 1.3 km away (adze findspot)
Hokonui	Closest site 5 km away (adze findspot)
Monavae	Closest site 2.1 km away (adze findspot)
Pinnacle Pine	Closest site 2.1 km away (adze findspot)
Rugged Hills	Closest site 2.2 km away (adze findspot)
Waitane	250 m from boundary is an oven/adze findspot site. 2 km SE of forest boundary is a cluster of seven different sites (ovens, adze findspot)

Associations with Tangata Whenua Ngāi Tahu has statutory acknowledgements and kaitiakitanga. There are 18 regional Papatipu Rūnanga that each have a representative on Te Rūnanga o Ngāi Tahu governing council, which oversees the tribe’s activities. The nearest Papatipu Rūnanga to the Ponga Silva Southland Forests is Hokonui Rūnanga, based in Gore.

Te Ao Marama represents four Papatipu Rūnanga in Murihiku/Southland, including Hokonui Rūnanga. Te Ao Marama is tasked with Resource Management Act responsibilities under the Local Government Act 2002.

Resource rights There are no known cultural interests in the forest estate and no iwi management plans for the rohe.

Neighbours Appendix 2 lists the forest neighbours and their primary activities. Some or all of these parties should be consulted when operations are proposed in forest areas adjacent to their boundaries.

5. Regulations

NES-PF ESC The table below shows the proportion of each forest by the respective National Environmental Standards for Plantation Forestry (NES-PF) Erosion Susceptibility Classification (ESC). None of the forests are zones as ESC orange or red.

Productive plantation area (ha) within each ESC Class

Forest	Low	Moderate	Total
Castle Downs	0.9	55.1	56.0
Hokonui	209.2		209.2
Monavae	164.1	0.9	165.1
Pinnacle Pine	139.6	222.6	362.2
Rugged Hills	127.8	451.7	579.5
Waitane	569.2		569.2
Total	1,210.8	730.3	1,941.1

The forests are located on generally low erosion risk areas. The majority of the forest activities will be permitted activities under the NES-PF, if the permitted activity standards are met.

Council RMA Plans

The forests fall under the jurisdictions of Southland Regional Council, Southland District Council (all forests except part of Waitane Forest) and Gore District Council (part of Waitane Forest).

Southland Regional Plan
Aerial spraying operations are permitted under Rule 6.2 of the Regional Air Plan 2016.
Southland District Plan
All forests zoned 'Rural'
No forests are in Outstanding Natural Landscapes/Features
No identified archaeological sites
District Plan rules apply to clearance of vegetation prior to afforestation
Gore District Council (northern block of Waitane)
Forest zoned 'Rural'
No forests are in Outstanding Natural Landscapes/Features
No identified archaeological sites
District Plan rules apply to clearance of vegetation prior to afforestation

Consents & authorities held

There are no current resource consents or Archaeological Authorities for the forests.

Emissions Trading Scheme

Ponga Silva Southland forests are all pre 1990 forest land. The landowners would have to meet a carbon liability if there was a change in landuse from forestry.

6. How we manage environmental risks

Assessment of environmental risks

Using a broad assessment of risk over the forests, the **potential** for adverse impacts across the range of operations and forest sites is indicated in the Environmental Assessment matrix below (Table 6).

- At risk are the environmental values/issues
- The level of potential risk is rated high ‘H’, medium ‘M’ or low ‘L’, or not applicable ‘NA’
- These ratings indicate the level of care required to minimise the potential for adverse effects, which translate into performance standards in prescriptions.

Risk assessment for key aspects of forest management activities

Forestry Operational Activities	ENVIRONMENTAL VALUES/ISSUES MATRIX											
	Erosion & Sediment	Water Quality	Soil Conservation & Quality	Air Quality	Aquatic Life	Indigenous Wildlife & Threatened Soecies	Native Vegetation	Historic & Cultural Values	Landscape & Visual Values	Neighbours	Public Utilities	Recreation Values
Harvesting	M	M	M		M	H	L	M	M	M	M	M
Earthworks	H	H	H		M	M	L	H	L	L	L	L
Slash Management	H	H	H		H	L	L		L	L	M	L
Stream Crossings	M	M	M		M	M	L					
Mechanical Land Preparation	M	M	L		L	M	L	M	L	L	L	L
Burning	L	M	L	H	L	H	L		H	H	L	H
Planting						L	L	L	L	L	L	L
Tending						L				L	L	
Fertiliser Application		H		L	H	L				L	L	L
Agrichemical Use	L	H	L	L	H	M	M		L	H	H	H
Oil & Fuel Management		H	L		H	L	L			L	L	
Waste Management		L			L	L			L	L		
Forest Protection		L			L	L	L			L		L

Pests and diseases

The Southland Regional Pest Management Plan includes pests that are or may be present within the forests. These pests include:

- Broom (sustained control)
- Buddleia (progressive containment)
- Darwin’s barberry (progressive containment)
- Gorse (sustained control)
- Heather (progressive containment)
- Spanish heath (site-led)
- Wilding conifers (progressive containment)
- Ragwort (sustained control)
- Possum (sustained control)
- Rabbit (sustained control)

The full list of species is found in section 4 of the RPMP:

https://www.es.govt.nz/repository/libraries/id:26gi9ayo517q9stt81sd/hierarchy/about-us/plans-and-strategies/regional-plans/southland-regional-pest-management-plan/documents/Southland_Regional_Pest_Management_Plan_2019_-_2029_-_PDF.pdf

Of note for the forests:

Forest	Specific pest issues
Hokonui	Gorse on roads and boundaries.
Waitane	Gorse on roads and boundaries. Deer and sheep also present.
Rugged Hills	Darwin’s barberry has been removed from the stream bank near main entrance – the site needs to be monitored for re-invasion. Douglas fir spreading from neighbouring forest (Ernslaw One) on western boundary. Pigs present. Spanish heath along roadsides.

Pest control programme

Pest issues specific to the estate are detailed below. Refer to the section on High Conservation Value Forests (HCVF) for specific pest management within the HCVF areas.

Darwin's barberry (particularly Rugged Hills)

- Survey forests annually
- Remove any found: spray, or cut/paste stump
- Intensive survey around any individuals found

Wilding conifers (particularly Rugged Hills west boundary)

- Survey forest boundary annually
- Removal of any found, in consultation with landowner
- Spray, or cut/paste stump

Broom, gorse, ragwort (particularly gorse in Hokonui and Waitane)

- Survey forest boundary annually
- Based on survey, decide on a timeline to create 10m weed free buffer along boundaries where neighbouring block is relatively weed free
- Control along roadsides as required to maintain access

Possum, rabbit

- Survey forests every 5 years
- Apply control when limits are exceeded
 - Possum: 5% Residual Trap Catch (RTC)
 - Rabbit: level 3 modified McLean Scale

Deer, pigs, sheep

- Control when sign becomes apparent, particularly during the establishment phase of the plantation
- Ground shooting via forest access permit system

Fire

There are fire ponds established in the estate which are recorded in the GIS.

Crop insurance

Not Publicly Available

Public liability insurance

Not Publicly Available

7. Commercial Plantation Estate

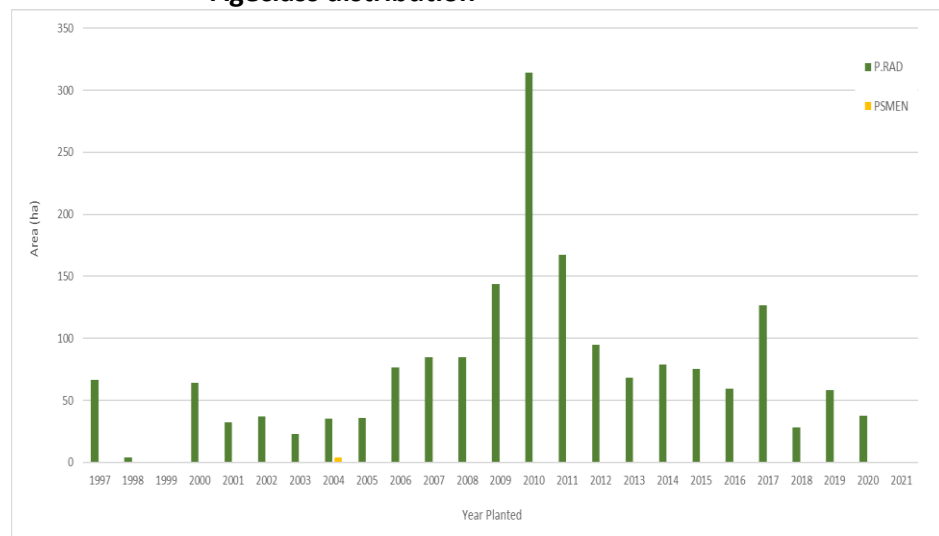
Forest area The net stocked areas have been measured from mapping produced by PF Olsen.

Forest area (ha)

Forest	Gross Forest Area (ha)	Net-stocked Area (ha)	Reserves (ha)
Castle Downs	56.0	51.5	4.5
Hokonui	209.1	183.7	25.4
Monavae	165.0	161.1	3.9
Pinnacle Pine	362.2	349.4	12.9
Rugged Hills	579.5	559.0	20.4
Waitane	569.2	495.6	73.6
Total	1,941.0	1,800.4	140.7

Current crop The predominant plantation species is Pinus radiata. There is a 3.9 ha stand of Douglas fir (PSMEN) planted in 2004 at Hokonui, and an interesting stand of redwood (0.3 ha - planted 1965) at Waitane.

Ageclass distribution



Productivity indices

Productivity indices

Forest	Site Index (m)	300 Index (m ³)
Castle Downs	25 – 27.5	25 – 27.5
Hokonui	17.5 - 20	
Monavae	22.5 - 25	22.5 - 25
Pinnacle Pine	25 – 27.5	22.5 - 25
Rugged Hills	25 – 27.5	25 – 27.5
Waitane	30 – 32.5	25 - 30

Tending

Current crop’s tending regime:

1. Clearwood regime on high index sites. Two or three pruning lifts, and two waste thinning operations
2. Framing regime on lower index sites, with two waste thinning operations (approx. 30% of the current estate)

Likely future tending regime:

1. Lower altitude areas: clearwood regime, three pruning lifts, one or two waste thinning operations
2. Higher altitude areas: unpruned framing regime, one waste thinning operation

Tree nutrition

The soils are not generally prone to be deficient in nutrients for healthy tree growth.

8. Harvesting Strategy

Harvesting strategy

The potential range of harvest age is 25 to 32 years, depending on growth rates, Likely markets and contractor availability.

In the next 5 years, some harvesting is planned in Waitane forest. This may commence in 2024 when the stands are age 27.

Infrastructure

Infrastructure is largely in place throughout the estate, as the current plantation forest are in their 2nd or 3rd rotations. Prior to harvesting, infrastructure maintenance and minor upgrades may be required.

9. Indigenous Biodiversity

Threatened Environments Classification

A reasonable proportion of the reserve areas are present where much of the original indigenous vegetation cover has been lost from Southland.

Reserve areas by Threatened Environments Classification (ha)

Forest	<10% indigenous cover remains	10-20% remains	20-30% remains	>30% remains and 10-20% protected	>30% remains and >20% protected	Total (ha)
Castle Downs	3.8					3.8
Hokonui			14.4		11.1	25.5
Monavae		1		2.9		3.9
Pinnacle Pine	5.8		2.2	4.2	0.8	13.0
Rugged Hills	16.8		0.9	2.7		20.4
Waitane		2.9	32.6		38.4	73.9
Total (ha)	26.4	3.9	50.1	9.8	50.3	140.5

Protected ecosystems

There are 140 hectares of reserves and protected ecosystems within the forests, with a large proportion of that in the higher protection categories (72% full or special).

Protected ecosystem and reserve areas by protection category (ha)

Forest	Special	Full	Limited	Passive	Reserve	Total (ha)
Castle Downs				3.8		3.8
Hokonui		18.3		7.2		25.5
Monavae				3.9		3.9
Pinnacle Pine	2.7	5		2.1	3.2	13
Rugged Hills		9.4		8.9	2.1	20.4
Waitane	40.6	25.4	5.6	2.3		73.9
Total (ha)	43.3	58.1	5.6	28.2	5.3	140.5

Continued on next page...

...continued

Overview of flora and fauna by forest

Forest	Flora	Fauna
Castle Downs	Reserve vegetation is secondary and weedy, generally poor condition. However falls in the <10% TEC class.	No rare / threatened fauna identified, fish and falcon may be present.
Hokonui	One large reserve covers much of the headwater of Dunsdale Stream.	At Risk fish species may be present in the large reserve. Lizards may be present.
Monavae	Riparian reserve is small and degraded with weeds present.	Falcon has been recorded in the forest but not known to use the reserve area. Fish may be present.
Pinnacle Pine	Two areas of silver beech (HCVF3) appear to be the last remnants in the local area. A third area of secondary manuka/five finger scrub is in good condition. Other areas in poorer condition and weedy.	No rare / threatened fauna identified, fish and lizards may be present.
Rugged Hills	Reserves provide riparian protection. Three areas meet full protection criteria. Other reserves are less developed and weedy.	No rare / threatened fauna identified, fish and lizards may be present.
Waitane	Nine reserves fall within full or special protection criteria, with mature indigenous vegetation present.	No rare / threatened fauna identified, fish and falcon may be present.

Rare and threatened species

Lizards

Five indigenous lizard species have been identified within 10 km of the forests. Existing protected ecosystems and reserves will be protected during forestry operations to maintain habitat. Any lizards present will also benefit from predator control operations carried out within the estate.

Kārearea (NZ falcon)

Kārearea sightings have been recorded in several forests (Monavae and Castle Downs). The NZFOA New Zealand Falcon Management Guide: Plantation Forestry, and maintain sightings reporting system is to be followed.

Other Species

Other species may be present within the forests. iNaturalist (Biodiversity in Plantations) will be used to record sightings.

Stream protection and riparian setbacks

The combined length of streams within the forest is 20.9 kilometres. They fall into multi River Environment Classification categories as below, but half into the ‘small, low, dry, hard’ category.

Streams by River Environment Classification class (metres)

REC Class	Med_Low_Dry_Hard	Med_Low_Dry_Soft	Med_Mod_Dry_Hard	Med_Mod_Wet_Hard	Small_Low_Dry_Hard	Small_Low_Dry_Soft	Small_Low_Wet_Hard	Small_Mod_Dry_Hard	VSmall_Low_Dry_Hard	VSmall_Mod_Dry_Hard	Total (m)
Castledowns					643.5						643.5
Hokonui				602.7	481.1		990.8				2,074.6
Monavae					1,552.7				180.0		1,732.6
Pinnacle Pine	474.5				1,379.3			1,196.3		30.0	3,080.1
Rugged Hills	952.7		400.0		3,733.4			666.0			5,752.0
Waitane	3,053.4	750.2	23.9		2,331.9	1,375.3			72.5		7,607.1
Total (m)	4,480.5	750.2	423.8	602.7	10,121.8	1,375.3	990.8	1,862.3	252.5	30.0	20,889.9

Fish

Fish species likely to be within the forests have been identified from the NES-PF Fish Spawning Indicator tool and Freshwater Environments New Zealand.

Forest	Brown trout	Longfin eel	Gollum galaxis
Castle Downs	present	present	
Hokonui	present		
Monavae	present	present	present
Pinnacle Pine	present	present	
Rugged Hills	present	present	
Waitane	present	present	

High Conservation Value Forests (HCVF)

Using ecological assessment data from a 2018 Wildland Consultants Ltd report, two HCVF's have been identified in in Pinnacle Pine forest. Both are likely the last remaining examples of mature silver beech remnants in the Southland region. Refer to Appendix 3 for the HCVF management plan.

Whilst there are other reserves that rate highly, falling in the 'full' and 'special' protection categories, they do not meet the FSC HCVF criteria. They are still afforded full protection from forestry operations and consideration for pest control.

High Conservation Value Forests reserves

Forest	HCVF3 (ha)	Not HCVF (ha)	Total (ha)
Castle Downs		3.8	3.8
Hokonui		25.5	25.5
Monavae		3.9	3.9
Pinnacle Pine	2.7	10.3	13
Rugged Hills		20.4	20.4
Waitane		73.9	73.9
Total (ha)	2.7	137.8	140.5
Total (%)	1.9	98.1	100

Pinnacle Pine HCVF

Geo Unit	Area	HCVF Status	Forest Type	Ranking	Protection Category
PRIF-03	1.0 ha	HCV3	Silver beech/Hard beech/ Hardwoods	16384	Special
PRIF-03	1.7 ha	HCV3	Silver beech/Hard beech/ Hardwoods	16384	Special

10. Other Special Values: Everything but the timber

Recreational usage

The forests are open for recreation subject to safety requirements. Closures will generally apply during times of high fire risk, any *force majeure* or during forestry operations. Access is granted through the PF Olsen forest access permit system.

Public access roads

The forests do contain some unformed public access roads. These routes remain open to the public, subject to any temporary closures as required for safety, as described above. Temporary closures can only be undertaken in conjunction, and with the authority, of the local Territorial Authority.

These unformed public roads are publicly viewable on the Walking Access Commission website¹. Any users are expected to abide by the intent of the Outdoor Access Code² published by the Walking Access Commission, or signage / barriers in place at track or public access points.

Non-Timber Forest Products

There are no FSC® certified non-timber forest products³ arising from the PF Olsen Group Scheme member estate.

¹ <https://maps.walkingaccess.govt.nz/Viewer/?map=b1d1e76a6c754d11b3f3fd9dfce1eb12>

² <https://www.walkingaccess.govt.nz/assets/Publication/Files/Outdoor-Access-Code/0fcf4d2e5b/Outdoor-Access-Code.pdf>

³ In FSC standards, the reference to non-timber forest products is a reference to such products that are able to carry the FSC label. It is not a reference to the presence or absence of other co-products from the forest areas that do not seek to carry the FSC label.

11. Future Planning

Plan changes & reviews

The next major review date for this plan is March 2027

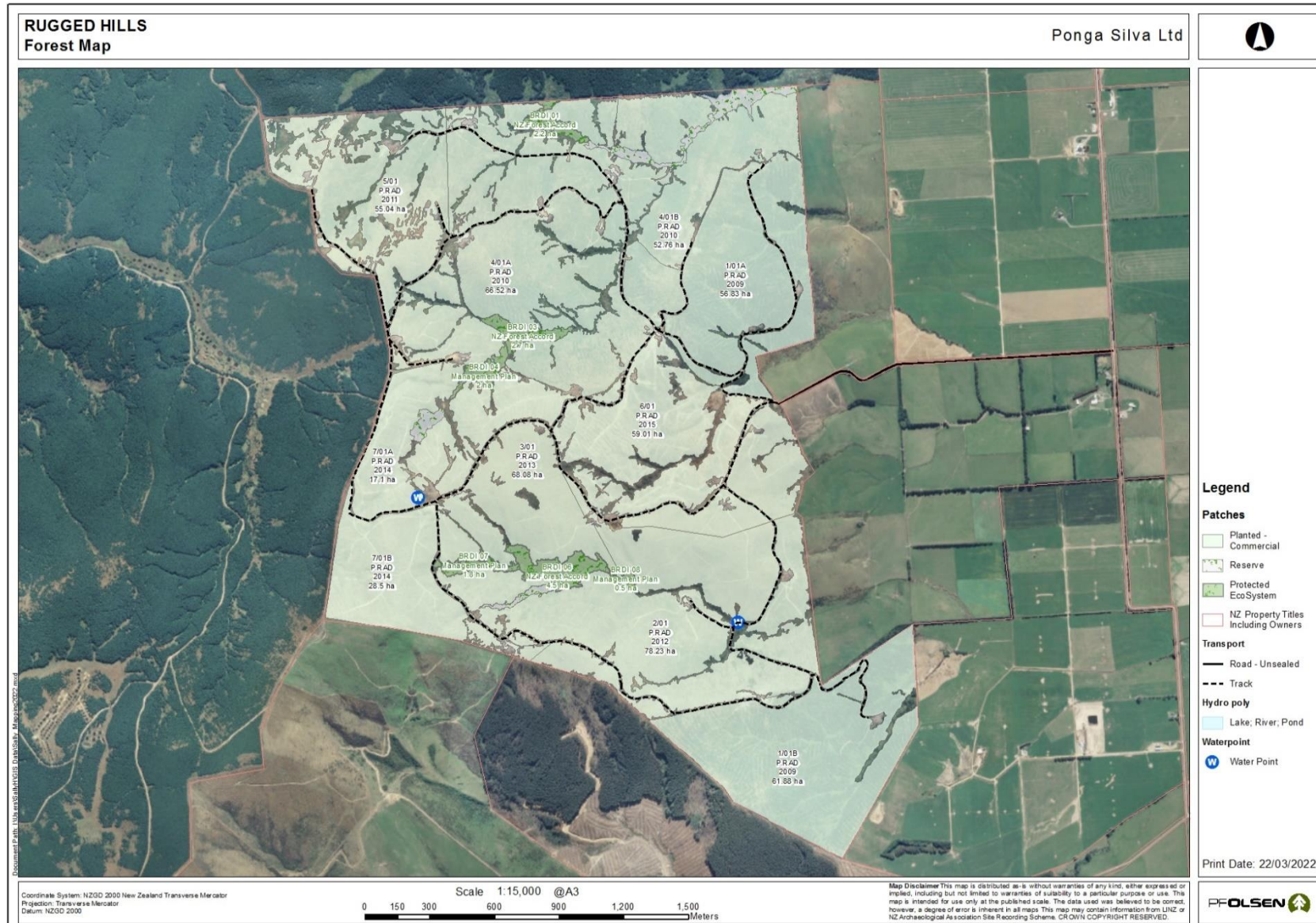
Minor revisions may be made at any time. Any material changes made will be documented below.

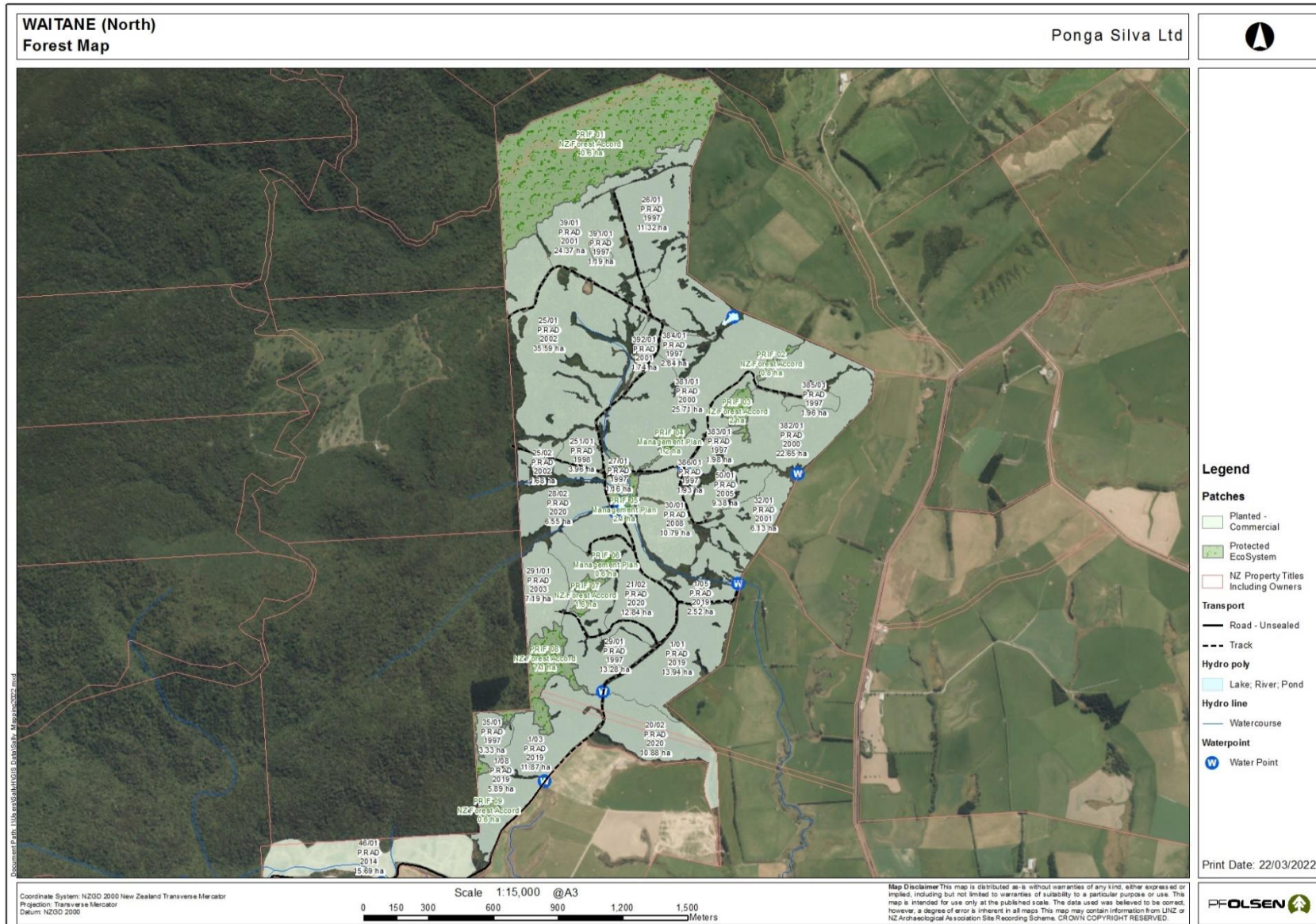
Change	Date	Section/Page
Compiled Appendix 4: Schedule of Ecological Management	8/06/22	Appendix 4

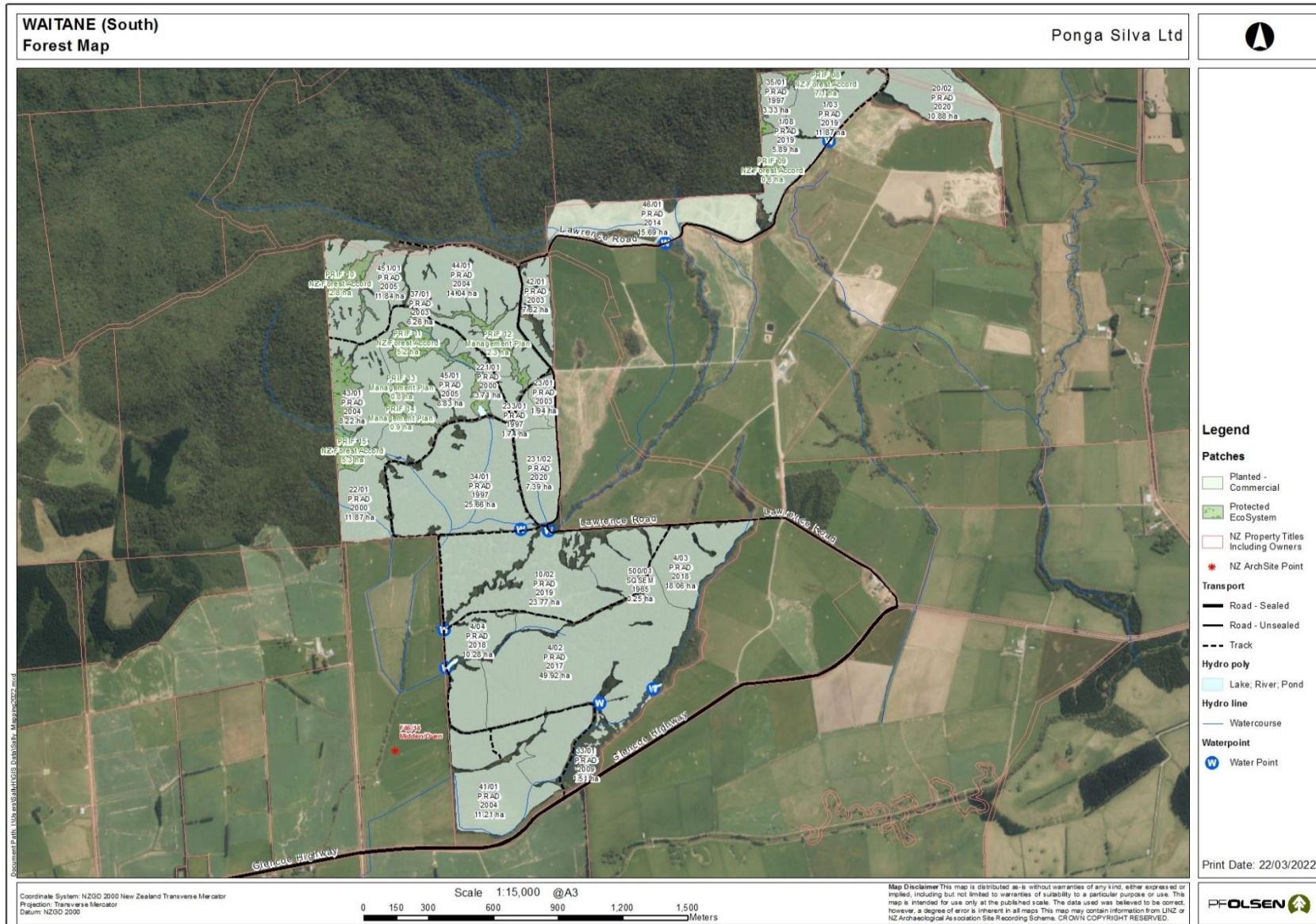
Appendix 1: Forest Maps

On following pages









Appendix 2: Forest Neighbours

Not Publicly Available

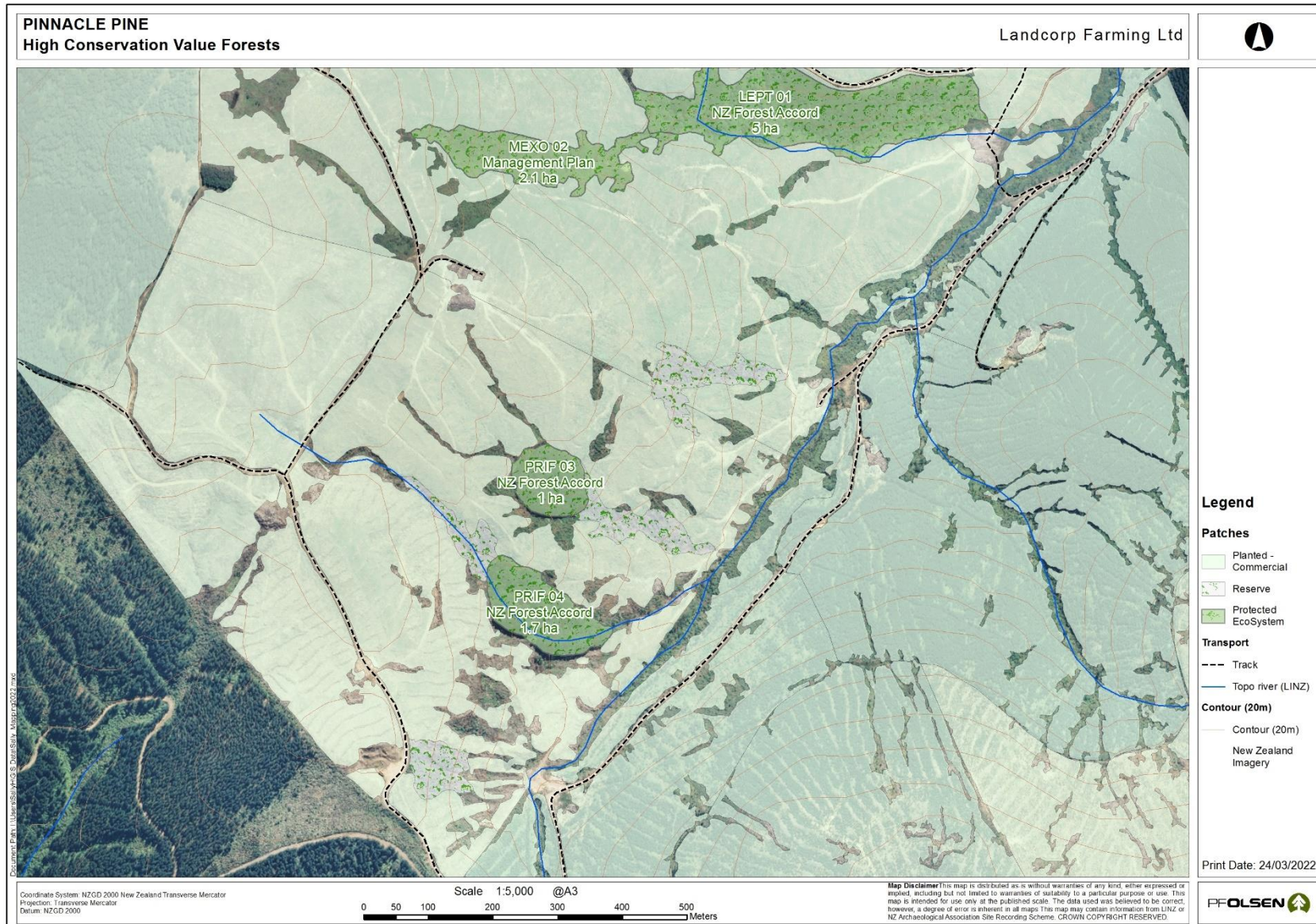
Appendix 3: HCVF Management Plan

High Conservation Value Forest Management Plan Pinnacle Pine Forest - stands PRIF-03 and PRIF-04

PRIF-03 1.0 hectare, coordinates NZTM E1232081.02, N4900160.47

PRIF-04 1.7 hectares, coordinates NZTM E1232066.67, N4899969.65





HCVF class HCV3 - Forest areas that are in or contain rare, threatened or endangered ecosystems

Species composition Tall silver beech canopy over *Coprosma lucida* and *C. rhamnoides*, and *Blechnum procerum*, hounds tongue fern, *C. lucida*, crown fern, shield fern. Also present: totara, soft tree fern, *Myrsine divaricata*, lancewood, wineberry, putaputaweta.

HCVF assessment These two sites appear to be the last remaining examples of mature silver beech remnants in the area.

Work Program

Timing	Activity type	Actions
2022 spring	Vegetation plots	Establish 10m x 10m fenced permanent vegetation plots to exclude browsing animals. Conduct 3- 5 yearly monitoring of vegetation by an ecologist.
Annual	Annual walkthrough check	Forest manager to do annual onsite check of sites. Note any issues including weeds, wilding pines, animal browse.
Ongoing	Pest control	Formalise a pest control plan - possibly using an external contractor. May include both shooting and trapping (with initial and ongoing Residual Trap Catch for possum density).
Annual	Photopoint monitoring	Establish photopoint vegetation monitoring of both sites. Repeat photos annually.

Appendix 4: Schedule of Ecological Management

Date due	Purpose	Activity	Action detail	Date completed
2022 spring	HCVF management	Vegetation plots	In HCVF areas: Establish 10m x 10m fenced permanent vegetation plots to exclude browsing animals. Conduct 3- 5 yearly monitoring of vegetation by an ecologist.	
Annual	HCVF management	Annual walkthrough check	In HCVF areas: Forest manager to do annual onsite check of sites. Note any issues including weeds, wilding pines, animal browse.	
Ongoing	HCVF management	Pest control	In HCVF areas: Formalise a pest control plan - possibly using an external contractor. May include both shooting and trapping (with initial and ongoing Residual Trap Catch for possum density).	
Annual	HCVF management	Photopoint monitoring	In HCVF areas: Establish photopoint vegetation monitoring of both sites. Repeat photos annually.	
Annual	ED reserve shortfall	Pest control	Southland Plains ED: shortfall of 6.3 ha within Ponga Silva Southland forests. Offset by plant pest and predator control within HCVF and other high ranking reserves.	
Annual	Noxious weeds	Control Darwin's barberry	Survey forests annually (especially Rugged Hills). Remove any found: spray, or cut/paste stump. Intensive survey around any individuals found.	
Annually	Noxious weeds	Wilding conifer control	Survey forest boundary annually (especially Rugged Hills west boundary). Removal of any found, in consultation with landowner. Spray, pull, or cut/paste stump.	

Annually	Noxious weeds	Broom, gorse, ragwort control	Survey forest boundary annually (especially gorse in Hokonui and Waitane). Based on survey, decide on a timeline to create 10m weed free buffer along boundaries where neighbouring block is relatively weed free. Control along roadsides as required to maintain access.	
5 yearly	Animal pest	Possum and rabbit control	Survey forests every 5 years. Apply control when limits are exceeded: <ul style="list-style-type: none"> – Possum: 5% Residual Trap Catch (RTC) – Rabbit: level 3 modified McLean Scale 	
Ongoing	Animal pest	Deer, pigs, sheep	Control when sign becomes apparent, particularly during the establishment phase of the plantation. Ground shooting via forest access permit system.	