

Forest Estate Structure

FSC RA-FM/COC-000190

Productive forest area managed under the PF Olsen Ltd Group Scheme RA-FM/COC-000190

Membership Type	Umbrella Client	Number of Forests	Certified Area (ha)	New Members <i>Y.E June 17</i>	Withdrawn <i>Y.E June 17</i>
Resource	OTPP NZ	65	36,773.50	0	2
	Landcorp	7	4,979.50	0	0
	Tasman DC	6	3,163.40	0	0
	China Forests Group (CFGC)	5	11,643.00	5	0
	Independents	18	3,148.60	0	1
Group	Independents	2	79.00	0	0
TOTAL		103	59,787.0	5	3

Resource members are those for whom full management is undertaken by PF Olsen Ltd under the framework of their FSC systems. Group members manage their own forests but under the oversight and within the framework of the PF Olsen Ltd FSC systems.



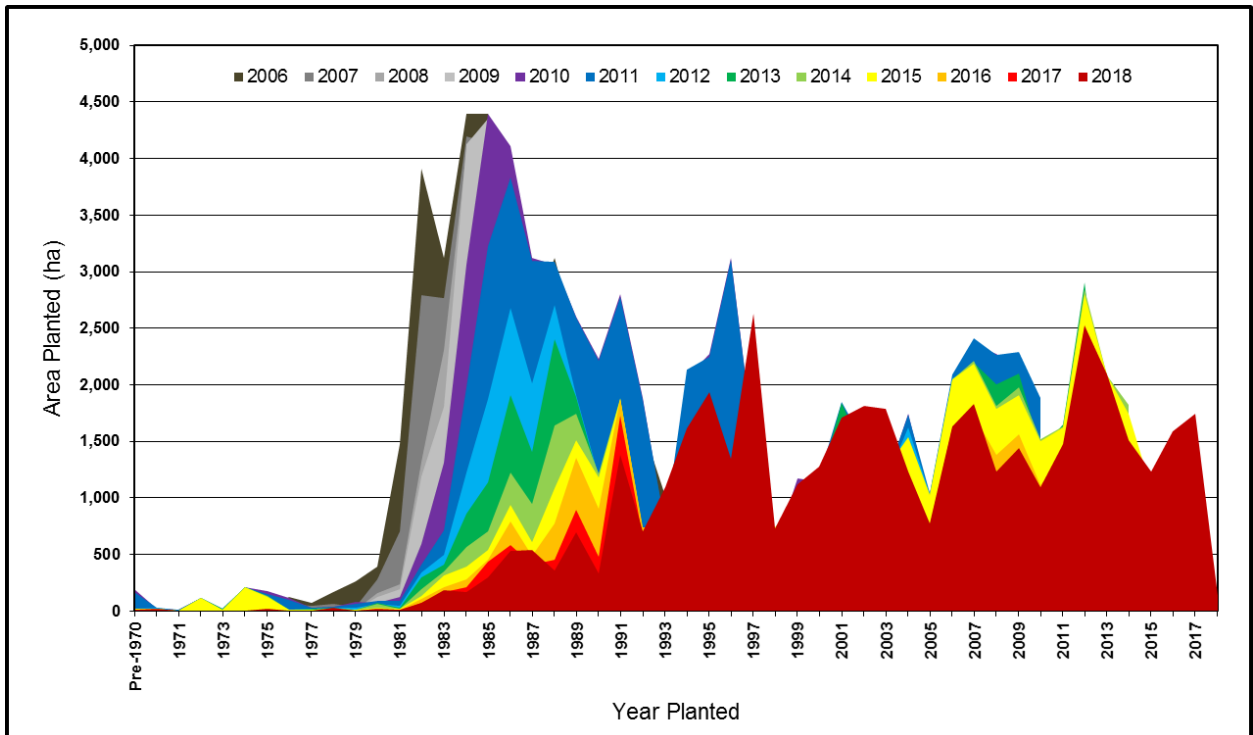
Over the 2017/18 year three forests were withdrawn from the scheme. Forests are typically withdrawn due to changes of manager, completion of harvesting and transfer of cutting rights, or landowners indicating that they will not pursue certification maintenance. During the same period five forests entered the scheme in order to meet their owner’s Overseas Investment Office conditions.

Over the next year, the Group Scheme will lose the 65 OTPP NZ forests once their management is handed over to Hancock Forest Management NZ. However, PF Olsen have several clients waiting upon admittance to the Group Scheme, including one forest in Wellington (Independent), five forests in Nelson (Nelson City Council), and another 17 CFG forests scattered through the central and southern North Island. Landcorp is also considering ways to increase their certified area.

Age distribution

The age class distribution of forests managed under the PF Olsen Ltd Group Scheme cover the full range from newly planted stands to those ready for harvest. The distribution illustrates a loss in area for stands of harvesting age (as would be expected), but also gains in area from the younger age classes as forests have been added to the certificate register and replanting occurs.

Area by year of establishment – 2006 to 2018 Year End June

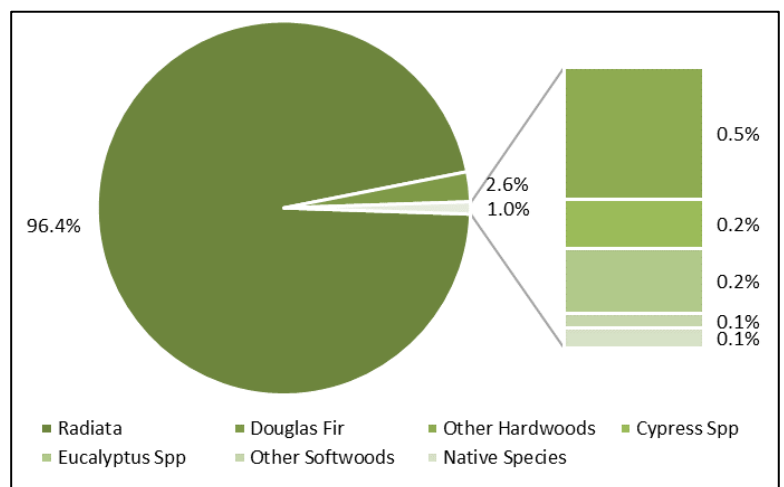


Species mix within the planted managed estate – June 2018

The productive plantation forest is made up of a range of species though the predominant species is radiata pine. This species is ubiquitous throughout most of New Zealand due to its capability to grow rapidly and predictably on a wide range of site types, paired with well-established markets and processing ability.

Productive species composition by stocked area

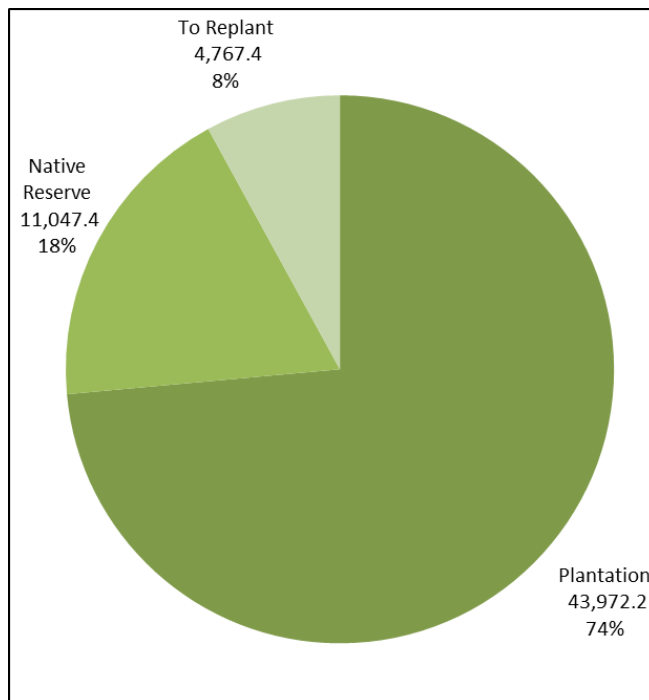
Species Definition	Total Area (ha)	Total Area (%)
Radiata	42,357.4	96.37%
Douglas Fir	1,135.7	2.58%
Other Hardwoods	216.6	0.49%
Cypress Spp	81.3	0.18%
Eucalyptus Spp	106.9	0.24%
Other Softwoods	23.5	0.05%
Native Species	33.2	0.08%
Total	43,954.6	100.00%



Land cover categories by hectares - June 2018

As at June 2018, the forest and land estate managed under the group scheme certificate is made up of the categories as listed below. On an aggregated basis, the area of indigenous species reserves, and protected areas is substantial at 18.5% of the total land area (see chart to the right).

Productive and area awaiting restocking areas are accurate. Reserve areas are subject to variation as ongoing programmes of assessment and in some cases minor retirement and or



‘setting-back’ from streams leads to redefinition and minor area change. Equally as some cutting rights are completed and the underlying land returned to the owners, some reserves enclosed within may also be returned leading to deductions from the totals on a year-to-year basis.

All native forest reserves are mapped, tagged, classified and information stored in a ‘protected ecosystems’ stand record system such as the example illustrated below.

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PF Olsen Ltd - Terrestrial Ecosystems Reserves Summary							Level 3	Level 3	Ecologica Protection	
Forest Code	Forest Name	GeoUnit	Area	ProtectiveStatus	ProtectiveFunction	ForestTypeDesc	LENZRemaining%	LENZProtected%	Ranking	Category
WAIO	Waiotahi OTPP	WAIO-PRIF-01	173.7	Tasman Accord	Terrestrial Ecosystem	Tawa/Podocarp/Hardwood	25.9	54.3	8192	Full
WAIO	Waiotahi OTTP	WAIO-PRIF-13	0.1	Tasman Accord	Rare Species	Kahikatea/matai/podocarp/HW	7.7	49.4	2048	Limited
WAIO	Waiotahi OTTP	WAIO-PRIF-07	2.3	NZ Forest Accord	Rare Species	Kahikatea/matai/podocarp/HW	43.9	60.2	2048	Limited
WAIO	Waiotahi OTTP	WAIO-PRIF-14	2.9	NZ Forest Accord	Terrestrial Ecosystem	Tawa/Podocarp/Hardwood	94.3	70.9	512	Limited
WAIO	Waiotahi OTTP	WAIO-PRIF-06	1.9	NZ Forest Accord	Riparian Ecosystem	Kahikatea/matai/podocarp/HW	94.3	70.9	512	Limited
WAIO	Waiotahi OTTP	WAIO-SECF-06	0.5	NZ Forest Accord	Riparian Ecosystem	Tawa/Podocarp/Hardwood	94.3	70.9	128	Passive
WAIO	Waiotahi OTTP	WAIO-SECF-08	2	NZ Forest Accord	Riparian Ecosystem	Broadleaved Hardwood Shrub&fermland	94.3	70.9	64	Passive
WAIO	Waiotahi OTTP	WAIO-SECF-09	0.8	Management Plan	Riparian Ecosystem	Broadleaved Hardwood Shrub&fermland	94.3	70.9	16	Passive
WAIO	Waiotahi OTTP	WAIO-SECF-10	3.3	NZ Forest Accord	Terrestrial Ecosystem	Broadleaved Hardwood Shrub&fermland	25.9	54.3	16	Passive
WAIO	Waiotahi OTTP	WAIO-SECF-07	0.3	Management Plan	Non Specific	Tawa/Podocarp/Hardwood	94.3	70.9	8	Passive
WAIO	Waiotahi OTTP	WAIO-SECF-12	0.8	Management Plan	Riparian Ecosystem	Broadleaved Hardwood Shrub&fermland	25.9	54.3	8	Passive