

# Farm Forestry - Working with your contractor

This factsheet provides guidance for landholders and forest managers on getting started in farm forestry.



## Should I apply for a Private Native Forestry Plan?

In NSW there are many different types of forest. Timber production in native forests is mainly practiced in medium and tall open eucalypt forests as well as Cypress pine forests in western NSW.

There are around 50 commercial native timbers which are commonly harvested. Preferred timber species include Coastal Blackbutt, Spotted Gum, Tallowood, Ironbark, River Red Gum and White Cypress Pine - with different mills having different timber preferences and requirements.

Not all native forests are suited to timber production. Before deciding whether to undertake private native forestry it is worth doing a basic assessment of the attributes of your farm forest.

Some questions to consider:

- Is my property located in an area where forestry is practiced?
- Is there evidence that timber harvesting has occurred there in the past?
- Is my property large enough to support a forestry operation?
- Is my forest producing merchantable timber?

Local Land Services (LLS) staff are available to help answer these and other questions and are a good starting point if you have limited forestry experience.

There are also lots of useful resources available on the [LLS PNF resources webpage](#).

## Requesting a Private Native Forestry Plan

Before any harvesting can occur, the property owner(s) must contact LLS and apply for a Private Native Forestry Plan (PNF Plan). LLS works with landholders to guide them through the approval process. For further information contact your nearest [LLS PNF office](#).

As the landowner, you can specify the area that you would like the PNF Plan to cover. The PNF Plan will remain valid for 15 years so it is worth giving the matter careful thought.

Once assessed and approved by LLS, the PNF Plan includes a PNF Plan map, and accompanying information. The map shows the extent of the PNF approved area, important habitat and environmental protections and areas where forest management can occur.

Once a PNF Plan has been obtained, all forestry operations must be undertaken in line with the PNF Codes of Practice for your region. [The PNF Codes of Practice](#) outline the operating standards and environmental protections to ensure forestry is sustainable in the long term. This includes the exclusion of forestry from sensitive areas such as rainforest, old growth forest, steep slopes, riparian zones, and other key landscape features that are excluding from harvesting under the PNF Codes of Practice.

Under the PNF Codes, a Forest Management Plan must be developed and approved by LLS before forestry operations can commence.



Figure 1: Forest assessment

## Assessing your forest

Once LLS have provided you with an approved PNF Plan your next step will be to get to know the attributes of your forest to help you develop the Forest Management Plan.

Knowing about the forestry types on your property and their growth status will help align your forestry operations with your forest management objectives.

On most properties there will be a range of forest types and trees of different size, age and shape. Many trees will be unsuitable for harvesting because they will be too small, in poor condition, or are important habitat for wildlife.

Getting a general feel for the forest types and the mix of tree ages and sizes will help you to determine the type of forestry operations that are appropriate.

For more information refer to the guidelines on the [LLS PNF Resources webpage](#).

Once a harvesting contractor is engaged, they will also be able to provide you with a more detailed forest assessment, where they will identify the main timber products your forest can produce and the likely income that can be generated, by considering the quality of the standing timber and the likely yield.

Assessment of standing timber involves measurement and visual examination of individual trees. Trees approaching maturity that are healthy and vigorous and of good form will usually be the main source of timber (sawlogs). Young trees (regrowth) can be thinned for pulpwood however the market for this product is limited. The timber in old trees tends to be high in defect and is often best retained for habitat.



Figure 2: Marking a recruitment tree

When assessing standing timber not all trees need be examined, just a sample.

There are five main types of logs, listed in descending order of value:

1. Elite logs (poles, piles, girders and veneer)
2. High quality logs (compulsory sawlogs)
3. Fencing timber (round and split)
4. Low quality sawlogs (salvage logs)
5. Pulplogs (chip logs, firewood fuelwood)

Elite and high-quality logs attract the highest prices and so can be transported greater distances than low quality logs and pulplogs.

Classifying standing timber into log products requires a degree of knowledge, skill and experience as it involves estimation of log diameter and length, straightness, and internal defect, which is why it is best that this is undertaken by an experienced forestry contractor.

Past disturbances like bushfires, droughts and windstorms all have an influence on timber quality. For example, a forest that has been subject to wildfire or impacted by forest pests are likely to have more defective timber. Trees with defective timber will likely show signs of this such as lumps and bumps on the stem, hollows and dead limbs or a poorly formed crown.

Income from log sales is determined by the average price and yield. If harvesting targets trees with high quality timber will generate a high average price but if the yield is low the income may be modest. Care should be taken when contemplating light selective harvesting as there is a risk that the forest will be degraded by the removal of the best growing trees, leaving behind only poorer quality stems. It is important to ensure harvesting is sustainable by leaving adequate regeneration to sustain future harvesting operations and habitat.

### Accessing forest infrastructure

Whilst accessing your forest, it is also important to consider what forest infrastructure already exists or may be required for forestry operations.

An effective forestry operation will require a network of roads and log loading areas that are suitable for use by harvest haulage trucks.

Most properties have an existing network of roads and tracks. If your forests have been subject to timber harvesting in the past the design of the roads and tracks is likely to be suitable for log haulage.

Harvesting and haulage contractors can advise on minimum road design and specifications for their equipment.

Detailed guidance on the design, construction and maintenance of roads and crossings is provided in PNF Codes of Practice and guides on the [LLS PNF Resources webpage](#).



Figure 3: Forest road

## Arranging the sale of timber

Arranging the sale of your timber is different to selling livestock in that there is no centralised marketplace. It is up to individual landowners to find their log buyer(s).

Timber is mostly sold in roundwood form as logs. Exceptions can include split fencing timber and firewood which are sometimes cut into product in the forest. Logs can be sold at the stump (where the tree is felled), from a log dump or delivered to a wood processing facility.

Arranging a log sale involves a large number of processes including selecting and felling the tree, and extracting, measuring, loading and transporting the log. To undertake these processes, requires specialised equipment and expertise.

Most forest owners opt to sell their logs at the stump and engage forestry service providers to undertake the operational and marketing tasks. The price paid for a log in the forest is called its stumpage price or royalty rate. The stumpage price is a residual price which is derived from the price paid for a log delivered to a wood processing facility, less the cost of haulage, harvesting, marketing, and planning (see diagram).



For high quality logs the common unit for pricing is \$ per cubic metre. For low quality logs and pulp the common unit for pricing is \$s per tonne. For native hardwoods one cubic metre is equivalent to ~ 1.15 tonnes.

The cost of harvest and haulage is a significant component of a log's value often accounting for 40-50 percent of the delivered price for a high-quality log and 75 percent of the delivery price for a low-quality log.

Harvesting costs are also the most variable being influenced by the terrain and the log yield (m<sup>3</sup> per hectare). For example, a high log yielding forest on gentle terrain will have a much lower harvesting cost than a low log yielding forest in rugged terrain.

Log haulage costs are based on distance from the forest to the wood processing mill as well as the quality of the roads along the haulage route which determine the speed at which a truck can travel.

## Choosing a forestry service provider

Unless you plan to harvest your own timber, you will likely need assistance to sell your logs. Choosing the right forestry service provider(s) is important as they will determine how and where your logs are sold.

Most forestry service providers are also log buyers who trade under a variety of names and titles.

Broadly there are four main types:

- Harvesting contractors (logging contractors)
- Wood processors (sawmills, veneer mills, chip mills, pole plants)
- Forestry consultants and timber traders
- Registered professional foresters

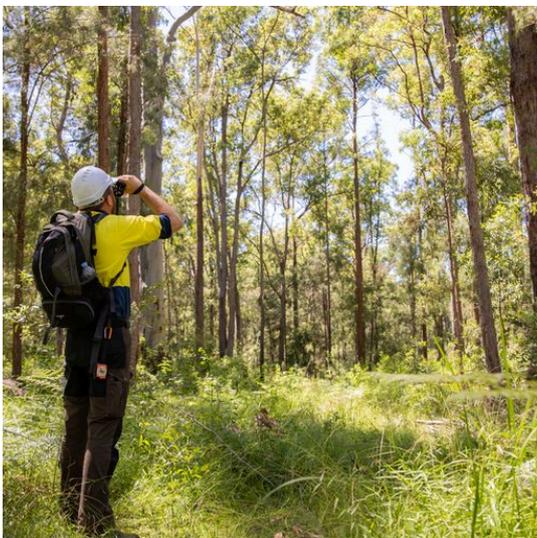


Figure 4: Forest assessment

**Harvesting contractors** play an essential role in the log supply chain as they have the equipment and skills which are needed to assess, fell, extract, segregate and transport timber.

If you choose to sell direct to a harvesting contractor, the usual practice is that they will pay you for the timber that they harvest, and on sell it to a **wood processor(s)** at a higher price to recover their costs for the harvest and haulage operations. If you select this option, it is likely that you will only deal with the harvesting contractor.

If you wish to control where your timber goes you can sell direct to a wood processor(s). In NSW there are over one hundred wood processing mills with most located east of the Great Dividing Range. The large number of mills reflects the diversity of the market for native timber.

If you sell to a wood processor, try to match your timber to their needs as this will likely generate the best log price. To find a market for all your logs it may be necessary to sell to more than one wood processor.

Wood processors will usually have preferred harvesting contractors that they recommend you choose from. If selecting this option, the usual practice is that you will enter into an agreement with the wood processor(s) for your timber and deal with their preferred harvesting contractor on operation matters. The wood processor will pay you for the timber supplied, and will also be responsible to pay the harvesting contractor for the harvest and haulage of the timber

If you sell to a **Forestry Consultant**, they will usually have preferred contractors for the harvest and haulage and preferred wood processors who they sell to. Consultant's existing networks mean that you won't have to spend time negotiating with individual log buyers.

If you enter into an agreement with a **Forestry Consultant** they will be responsible for the payment of the contractors and the wood processors(s).

When selling directly to a **wood processor** or a **Forestry Consultant** you may be able to negotiate to use a harvesting contractor of your choice, however this will require you to negotiate agreements with both the wood processor/**Forestry Consultant** and the harvesting contractor.

**Registered professional foresters** (RPFs) are people with formal training and qualifications in forestry who are competent to provide technical advice and guidance on the management and harvesting of your forest. RPFs who are not timber buyers are able to provide advice that is independent and unbiased.

Each of the four service provider categories will have their strengths and weaknesses. Some service providers can provide turnkey services while others are quite specialised. Speciality areas include forest assessment, operations, and marketing.

Take time to investigate your forestry service options, by doing so you will be more likely to improve return on investment, environmental and silvicultural outcomes. If you are new to the industry you may be able to find information about service providers from other forest owners, or by checking if there are any Farm Forestry groups in your area.

## Key considerations for harvesting and haulage

Engaging the right harvesting and haulage contractor is critical to effective forest management. Your PNF Plan approval requires all forestry operations to comply with the relevant PNF Code of Practice. Therefore, it is important that you select contractors that understands the PNF Codes of Practice and will ensure all forestry operations are in line with these requirements.

Whether you engage the harvesting and haulage contractor(s) directly or through a third-party there are some key considerations when deciding which contractor to choose (see table).

Even if you are assigned a contractor by the processor/ timber agent, it is important to ensure that these requirements can be met. Further, if you are in a position to be choosing between two different consultants, then the above considerations may also be a useful guide.

Requirement	Additional consideration	Yes / No
Experience operating under the PNF Codes of Practice	Have they operated under the Code relevant to your PNF Plan	
Familiar with the PNF Codes of Practice	Are they willing to operate under the Code on your property	
Processes in place to comply with legal obligations	Are processes in place to ensure compliance with relevant regulations, including WHS and Fair Work legislation? Are all employees aware of their compliance and WHS responsibilities?	
Carry the relevant insurance	This is essential to ensure you as the landowner are not liable if there is an accident	
Hold the relevant qualifications and certificates	Does this extend to all employees operating machinery and equipment	
Have processes to avoid cross contamination	Pathogens, weeds and pests are a risk when moving from one site to the next	
Rubbish management practices and strategies	Are these clearly outlined	
Oil spill policies and procedures	Are these clearly identified?	
References	Can they provide references from other recent jobs they have completed	

You may also wish to consider:

- what type of harvesting operation will they be undertaking; i.e. mechanised or hand felling;
- check that they will mark up the forest for trees to be felled during the harvest and whether they conduct a pre harvest survey of the area;
- how viable is your PNF Plan area for the contractor. i.e. if you are a small harvest area, some contractors may wish to group you in with other properties in the area to reduce the associated costs with harvesting etc; and
- if the contractor you are engaging will be the same for both the harvest and haulage, or if you will hire two separate contractors for these actions.
- what the contractor's management operations are: i.e.
  - are their practices environmentally conscious and minimise the use of fossil fuels where appropriate, by limiting machinery use, or having staff carpool polices?
  - will they ensure the optimal use of timber products by harvesting and selling products which would otherwise be wasted?

Where the cost, quality and capacity of local contractors is equivalent to other non-local contracts, then you should always try to use local good and service providers.

If there are no local service providers, then this may be something you are able to help support or encourage the development of in your area if your operation is large enough.

## Documentation

Once you have determined how you will sell your timber, and who your contractor will be, there are a few other important steps and considerations that should be undertaken before commencing harvesting operations.

## Written contracts

It is strongly advised that you have a written contract(s) with the forestry service provider(s) who have responsibility for the harvesting, haulage and sale of your logs.

Having a contract ensures everyone involved is aware of their responsibilities and provides a reference point if any issues arise. It is important to ensure that fair contracts are used, and that anti-corruption measures are imbedded where applicable.

**Please note:** The information provided below is general in nature and not comprehensive. Advice from a registered solicitor is recommended to ensure that your written contract is valid and covers off on all relevant issues.

It is recommended that operational contracts address the following issues:

**Roles and Responsibilities** – the role and responsibilities of the parties to the agreement should be clearly set out. This should include the responsibilities surrounding the preparation of the Forest Management Plan (FMP) and management of the operation.

**Compliance and reporting** - Having obtained a PNF Plan you have a binding agreement with LLS. It is essential that your actions and that of your contractors and agents comply with that agreement and the requirements of the PNF Codes of Practice. It is important therefore that there is an agreed process for monitoring and reporting on compliance.

Further it is essential that the standards against which performance will be judged are clearly specified together with the roles and responsibilities of the parties and the timing of reporting obligations.

It is essential that there is a clear reporting process to keep you updated on operational matters, especially any issues that relate to compliance with the PNF Codes of Practice. If there are any breaches, you may have to rely on the dispute resolutions conditions of your contract to have these resolved.

There are reporting obligations outlined under the PNF Codes of Practice, so it is essential that you are provided with sufficient information to report:

- the proposed commencement date and estimated duration of forestry operations;
- a map showing the location of the proposed operations, as well as a map showing the location that they occurred after harvest;
- approximate volume of forest products harvested;
- approximate number of hectares where forestry operations occurred; and
- the date that the forestry operations were completed.

If you are going to be present on the property and assist in managing the forestry operations, you must also discuss this with the contractor to ensure all WH&S obligations are met.

**Dispute resolution** – arrangements on how disputes are to be raised and resolved.

**Log specifications, measurement and grading** – the standards to which timber will be assessed, serviced, measured and graded into log products.

**Log price** - the rates that will be paid for the various log products.

**Log sale accounting** – the procedures which keep track of the timber that is being removed from the property. This is usually achieved by ensuring that the haulage contractor keeps a logbook and provides you with the docket for every load that leaves your property. These dockets can form the basis for payments, depending on your payment arrangement.

Each docket should be numbered and outline the date and time the truck loaded, the landholders

name and property details, the name of the harvesting contractor, the product type and species, and the number of logs and volume or weight of the load. Dockets are to be filled out and signed before leaving the log dump.

**Payments** – the terms of payment and how frequently payments are to be made.

**Property Access** – arrangements for access into and throughout the property.

**Hours of operations and routes of travel** – specify the hours of operations, and routes of travel after taking account of local community interests, and any infrastructure limitations. You may wish to consider:

- having a curfew for operating hours, especially when working close to a boundary where neighbours may be affected;
- where relevant, local traffic conditions, i.e. when the school bus is operating, or peak traffic periods;
- what travel route restrictions there may be. i.e. are there any unsealed roads where wet weather and dust may be an issue, or roads and bridges with weight or size limit restrictions which will need to be considered.

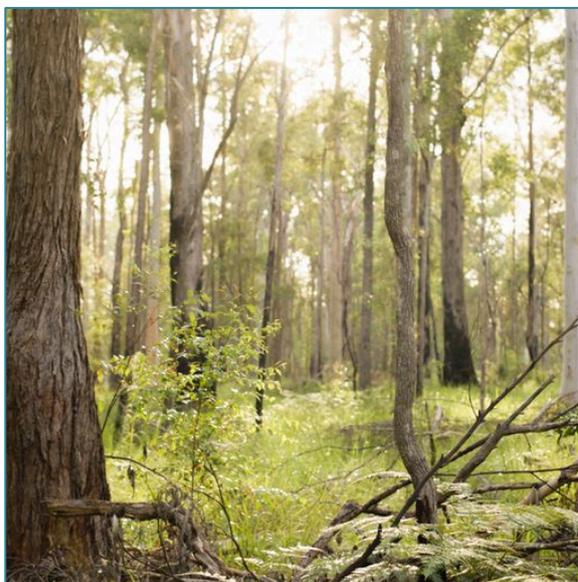


Figure 6: Private native forest

**Timeframes** – for when harvesting operations will commence and be completed allowing for wet weather and market fluctuations.

**Additional works** – any additional works which you would like the contractor to undertake whilst on the property that are unrelated to the forestry operations. It is essential that you ensure that these are lawful activities such as the allowable activities under the Local Land Services Act 2013, the NSW Rural Fire Service 10/50 Vegetation Clearing Code, or through Development Approval from Local Council. You will need to ensure that all relevant approvals are received and made available to anyone undertaking the works.

**Contract Variations** – a clear process for how contract variations can occur should be established.

**Agreement on the exit conditions** – the PNF Codes of Practice detail certain requirements that must occur when a forest operation event has finished. This includes that log landings, portable mills sites, snig tracks and extraction tracks are drained and re-shaped and bark is to be dispersed away from log landings etc. It is important that there is a clear agreement that these obligations will be carried out by the contractor.

**Site remediation** - to ensure that your property is left in a state that you are satisfied with at the completion of operations.

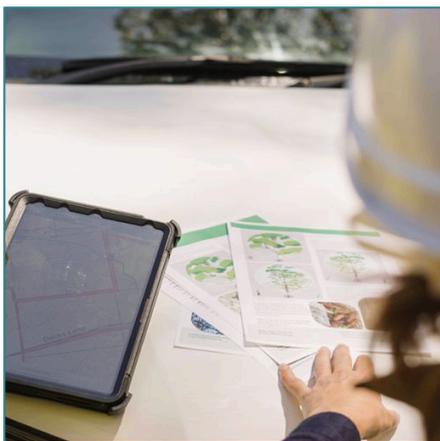


Figure 7: Compliance with habitat requirements

## The Forest Management Plan

Having a Forest Management Plan (FMP) is a legal requirement. The FMP must be prepared before forestry operations can commence and is complementary to the PNF Code of Practice and other standards which specify the general rules of PNF operations.

It is important that you work with the contractor to develop a clear and ecologically sustainable forest management plan for your property.

The FMP should contain site specific, such as:

- where operations can and cannot occur
- the location of roads and log dumps
- the harvesting objective and the silvicultural practices that will be employed to achieve that objective.
- details of any proposed roading with particular attention given to drainage feature crossings.
- the order of works and the location of wet weather areas.
- the process of tree selection and tree marking (for retention or removal) should be specified including the timing
- site specific environmental conditions relating to riparian zones, threatened species records and significant environmental features
- remediation of roads, dumps and tracks

The contractor and all their employees must sign the FMP and have a copy on them whenever they are undertaking forest operations. If you engage a PNF agent or registered professional forester, they may prepare the FMP for you and may also sign it.

Note: If you are seeking to have your PNF operation certified to supply certified timber products, then you will also be required to complete a Certification Plan. It may also be useful to discuss this plan and its requirements with the Contractor where applicable.

## Timing your harvest

Be aware that the market for timber fluctuates and often operates in cycles that are aligned with domestic economic activity. It can be advantageous to make inquiries regarding the state of the log market. In a strong market there is a greater chance of obtaining a premium price for high-quality logs and higher demand for low-quality logs and species which are less preferred.

The season(s) in which you harvest, and haul timber should also be considered. Hauling logs from your property during wetter periods may require investment in road maintenance and gravel that would otherwise not be required.

If possible, don't be in a hurry. The trees on your property have taken many decades to grow and mature and the standing timber in them is not likely to change much from one year to the next.



Figure 5: marked up forest

## We're here to help

**Find us online:** [lls.nsw.gov.au](https://lls.nsw.gov.au)

**Call us:** 1300 795 299 and ask for an officer to advise you on Private Native Forestry

**Email us:** [pnf.info@nsw.gov.au](mailto:pnf.info@nsw.gov.au)

**See us:** drop into your nearest Local Land Services office

## Acknowledgments

Thank you to the NSW Department of Primary Industries, Timber NSW and the Australian Forest Contractors Association for assistance in preparing this Protocol.



## Further information

[Private Native Forestry Codes of Practice:](#)

[Private Native Forestry Plans and Forest Management Plans](#)

[Private native forestry resources](#)

Work Health and Safety for the forestry industry:

<https://www.safework.nsw.gov.au/your-industry/agriculture,-forestry-and-fishing>

[https://www.safework.nsw.gov.au/\\_\\_\\_data/assets/pdf\\_file/0004/52879/Safety-in-forest-harvesting-operations-Code-of-practice.pdf](https://www.safework.nsw.gov.au/___data/assets/pdf_file/0004/52879/Safety-in-forest-harvesting-operations-Code-of-practice.pdf)

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