Annual Logging Plan (ALP)

An ALP identifies the area where timber is proposed to be harvested from a Sustainable Forest Management Plan or Permit, and how the harvest will be conducted, including the felling of timber and the construction of roads, tracks, or landings.

An ALP template which includes headings for all required information is attached for your convenience. You are not required to use this template and may format the ALP as you please. However, if key requirements or prescriptions are not included, the Ministry for Primary Industries, Uru Rākau – New Zealand Forest Service may return the ALP and require it to be amended in such a manner as is specified in writing. This will cause delays in the ALP being processed and approved.

An ALP must be submitted and approved by the Ministry for Primary Industries, Te Uru Rākau – New Zealand Forest Service. No harvesting of timber or work for the harvesting of timber may be undertaken until you have received written confirmation your ALP has been accepted and approved.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Further information can be obtained in the following publications.**

Te Uru Rākau – New Zealand Forest Service has available a number of free publications on its website at. <https://www.mpi.govt.nz/forestry/native-indigenous-forests/harvesting-milling-native-indigenous-timber/>.

* *A Guide to Preparing Draft Sustainable Forest Management Plans, Sustainable Forest Management Permit Applications and Annual Logging Plans (Te Uru Rākau – New Zealand Forest Service**, 2019)*
* *Standards and Guidelines for the Sustainable Forest Management of Indigenous Forests (Te Uru Rākau- New Zealand Forest Service, 2019)*
* *Measuring Indigenous Trees and Logs A field Guide (Te Uru Rākau – New Zealand Forest Service**2018)*
* *Estimation of standing volume for indigenous tree species*

Alternatively if you are unsure about any of your obligations e.g. whether you need to include a tree felling list or which SFM prescriptions are applicable to the species you are proposing to harvest, you can call **0800 00 83 33** and ask to speak to a Forestry Officer in the indigenous forestry team at your nearest regional office.

ANNUAL LOGGING PLAN – PART 3A FORESTS ACT 1949

|  |
| --- |
| Ownership details |
| Name(s):  |
| Postal address/Address for service:  |
| Phone: Cellphone:  |
| Email:  |
| **This Annual Logging Plan relates to** (Tick as appropriate and complete plan/permit number):[ ]  A Sustainable Forest Management Plan – No. 4/ /[ ]  A Sustainable Forest Management Permit – No. 5/ / |

|  |
| --- |
| Harvesting details |
| Compartment number or name (if applicable): (Ensure this is marked on the map attached to this application) |
| Harvesting system (tick): [ ]  Single tree or small group [ ]  Coupe felling |
| Logging method (tick):[ ]  Helicopter (identify any landing pads to be cleared and location of landing skids on map) [ ]  Ground based (provide further details below).  |
| If undertaking ground-based harvests, list the machinery to be used including make, model, weight and ground pressure. If logs will be winched to machine, indicate if logging arches or sleds will be used, etc.  |
| **Tracking/Ground based harvest requirements**[ ] All machinery and equipment will be cleaned of soil and seeds before entering the forest area.[ ] Existing tracking and landings will be used and are identified on the attached map. No new tracking will be constructed. Timber will be moved from harvest site to track by winch and/or rope. **Or** [ ] New tracking and/or landings are proposed and are separately identified on the attached map. [ ] Natural drainage patterns will be maintained by constructing or reinstating and maintaining water tables and cut-outs on all tracks. These shall be installed and maintained at no greater than 20 meter intervals on all tracks where the slope is 1 in 5 (12˚) and no less than 60 meter intervals where the slope is between 1 in 5 and 1 in 10 (6˚).  [ ]  Methods such as sniping logs and/or using a skid plate or logging arch are to be used to assist in raising the leasing point of the timber off the ground and /or the timber sliding above the surface of the soil. |
| Special Logging Requirements Specify any actions (e.g. directional felling) or other special measures that will be implemented to protect the forest or protect & enhance flora, fauna, soil or water bodies within the forest. Include any specific actions being undertaken to meet conditions specified in the plan or permit (e.g. retention of habitat trees, pest control etc). |

|  |
| --- |
| Volume to be harvestedThe proposed harvest for each species are listed separately for each forest type.**\*** If the forest is subdivided into compartments and you intend to harvest timber from more than one compartment under this ALP, then please list the volume and species separately for each compartment. This page can be copied if harvesting is proposed from more than 2 compartments.Compartment \* No/Name: Forest Type Name: Standing Tree Volumes to be harvested |
| **Species** | **Standing roundwood volume (m3)** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
| Total: |       |
| Compartment \* No/Name: Forest Type Name:  |
| Standing Tree Volumes to be harvested |
| **Species** | **Standing roundwood volume (m3)** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
| Total: |       |
| **NOTE THAT NO KAURI OR PODOCARP CAN BE HARVESTED UNLESS IT IS LISTED ON THE ATTACHED FELLING LIST**  |

|  |
| --- |
| **Requirement for planting of seedlings for podocarps, kauri, or shade-tolerant or exposure-sensitive broadleaved hardwood species:*****When advised in writing by Te Uru Rākau – New Zealand Forest Service that this is required:***[ ]  At least 5 seedlings, at least 60cm tall, of the same species as the harvested tree shall be planted at each harvested tree site during the term of this Annual Logging Plan.[ ]  felling records shall note which harvest sites require replanting as per the criteria on page 10 and 11 of this ALP. |
| **Harvest Records:**[ ]  Harvest records of standing tree volumes felled shall be kept in accordance with the prescriptions described in this ALP. These records shall be supplied to Te Uru Rākau – New Zealand Forest Service no later than 10 working days following the completion of harvest, or on expiry of the annual logging plan if harvesting is not completed.  |
| **Other Comments or Prescriptions:**  |
| MapAttach any necessary maps showing:1. Compartment boundaries (if any).
2. Location(s) of proposed single trees or small groups that are to be logged.
3. Location of felling coupes.
4. Locations of existing and proposed roads, extraction tracks and landings and they must be clearly labelled as “existing” or “proposed”.
5. All waterways and topography.

Maps should be large-scale topographical maps, i.e. not less than 1:25 000.An enlarged copy of the relevant section of a Topo 50 Series (1:50 000) may suffice.It is recommended that GPS coordinates in New Zealand Transverse Mercator (TM) position format are provided for the harvest sites/coupe location(s) |
| DECLARATIONTo be signed by forest owner(s) or authorised agent. I declare that:* the information contained in this Annual Logging Plan, including any attached felling list, is true and correct and that harvesting shall be carried out in accordance with this ALP; and,
* I understand the sustainable forest management prescriptions and harvesting requirements appended to this ALP form part of my ALP and shall be followed; and
* I am aware that it is an offence under the Forests Act 1949 to contravene any provision of a sustainable forest management plan or permit or carry out any work for the harvesting of timber other than in accordance with an approved ALP; and,
* I am aware it is my responsibility to ensure all persons involved with the felling, harvesting and transporting indigenous timber pursuant to this approval are aware of the details and prescriptions of this ALP; and,
* I understand Te Uru Rākau – New Zealand Forest ServiceInspections may be required for the purpose of promoting compliance with the Forests Act; and,
* I understand that in addition to an approved Annual Logging Plan, I may also require Resource Consent from the relevant District or Regional Council.

|  |  |  |
| --- | --- | --- |
| **Signature:** | **Print name:** | **Date:** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 |

# Part 3A Forests Act 1949 – Sustainable Forest Management Prescriptions and Harvesting Requirements

**Note:** The Sustainable Forest Management Prescriptions or extracts from these prescriptions, in bold italics below, are specified in Clause 10 of the Second Schedule to the Forests Act 1949. They also form Schedule 1 and Schedule 2 of your SFM Plan or Permit respectively. The additional text provides guidance on how Te Uru Rākau – New Zealand Forest Service applies provisions of the Forests Act.

# Sustainable Forest Management Prescriptions & Tree Measurement

1. **All Species**
2. ***The rate of harvest from a forest or a group of forests managed as a unit shall be limited to a level at which the forest can continue to supply an annual or periodic non-diminishing yield in perpetuity, which shall include the harvest of windthrown or dead trees as they become available***.
3. Natural mortality and damage from storm events form part of the forest’s overall production. Recovery of natural mortality, where it occurs, must be incorporated into this ALP, with allowances for retaining habitat trees as may be specified by Te Uru Rākau – New Zealand Forest Service. Failure to take this into account could result in unsustainable levels of harvest
4. In the event a tree of a species approved for harvest is felled to waste or intentionally or unintentionally damaged (including being bore cut or scarfed) it shall be marked with a tree tag or sequential spray paint number and a record kept of its tree number, species standing tree volume and GPS location. This will be recorded by species and it should form part of the harvest volume, whether recovered or not and regardless of its form or quality.
5. **Harvesting Kauri or Podocarps (e.g. rimu, miro, matai, tōtara, kahikatea)**
6. ***Podocarp and kauri species shall only be harvested as single trees or small groups***

***using low impact techniques***.

1. Te Uru Rākau – New Zealand Forest ServiceStandards and Guidelines define the maximum number for a small group as 3–5 trees. The absolute number depends on the density (number per hectare) of the target species and whether they are present in the forest as groups of numerous trees.
2. ***Harvesting (*podocarp and kauri species) *shall, as far as possible, be restricted to the selective removal of trees predisposed to windthrow or early death***.
3. Exceptions are trees retained for habitat purposes (i.e. protection of natural values). The desirable number of habitat trees to be retained will depend on the structure and size and age class distribution of the target species.
4. ***The Secretary may require that the annual logging plan specify trees to be harvested or trees to be retained***.
5. In accordance with (c) above, Te Uru Rākau – New Zealand Forest Servicerequires a felling list specifying all kauri and podocarp species proposed to be felled. A pre-harvest felling list must contain the tree tag number, species, GPS location, diameter at breast height (DBH), merchantable height and standing volume for each tree. Additional spare trees over and above the allowable harvest volume may be included to provide for a level of substitution in the event that some chosen trees cannot be harvested for unforeseen practical or safety reasons.
6. Only the trees specified in the approved felling list attached to this ALP shall be harvested, up to the approved standing volume. If during harvesting operations you discover additional trees, whether green standing, dead standing, or windthrown, you wish to harvest, the tree details (GPS coordinates, DBH, height measurements, and a photo) will be collected and submitted to Te Uru Rākau – New Zealand Forest Service BEFORE HARVEST so an ALP variation may be approved.
7. Heights of each tree shall be checked by measuring after felling and prior to crosscutting. This measured height, together with the measurements of any merchantable top logs, shall be recorded and used to calculate an amended standing tree volume – this will ensure the total approved volume is not exceeded.
8. A record containing the tree tag numbers of trees harvested and the running total of the standing volume harvested by species shall be kept to avoid exceeding the total approved standing tree volume.
9. ***Throughout the term of the sustainable forest management plan (and SFM permit), the character and structure of all parts of the forest shall be maintained*.**
10. Harvests shall be dispersed so that harvest intensity is reduced as much as possible to minimise local impacts. In the case of SFM plans harvest intensity should ideally not exceed 5 percent by volume on any given hectare, and in the case of SFM permits, 10 percent.

1. **Shade-Tolerant and Exposure-Sensitive Broadleaved Hardwood Species** (e.g. tawa)
2. ***Broadleaved hardwood species shall be harvested only as single trees or small groups using low impact techniques.***
3. ***In creating gaps regard shall be had for the natural regeneration characteristics of the species targeted for logging****.*
4. Te Uru Rākau – New Zealand Forest ServiceStandards & Guidelines define a small group as 3–5 trees (refer to 2. above). However, in the case of exposure-sensitive broadleaved hardwoods a harvest of 3-5 trees is likely to create a gap that is too large to encourage uninterrupted regeneration and recruitment of the target species.
5. In the case of tawa which is exposure sensitive, the maximum canopy gap created by harvesting should be no more than about 0.014 hectares (12 metres x 12 metres), to provide optimal conditions for regeneration. Maximum group size to stay within these parameters is likely to be no more than 2 – 3 trees.
6. The maximum harvest intensity should not exceed 5 percent of standing tawa trees by volume in any given hectare.
7. A pre-harvest felling list may be requested by Te Uru Rākau – New Zealand Forest Service for shade tolerant and exposure sensitive broadleaved hardwood species containing the tree tag number, species, GPS location, DBH, merchantable height and standing volume for each tree, inclusive of top logs. The trees to be harvested shall be selected from this list.
8. If a pre-harvest felling list has not been requested by Te Uru Rākau – New Zealand Forest Service, at every harvest site a record of individual tree details will be maintained including tree number (corresponding to aluminium tag nailed to the stump heartwood or spray paint sequential number painted on the stump), species, standing volume and GPS position. A record in the form of a running total of the standing volume harvested shall be kept to avoid exceeding the total approved standing tree volume.
9. **Beech and Other Light Demanding Hardwood Species**
10. ***Beech and other light demanding hardwood species shall be harvested only in coupes of 0.5 hectares or less***.
11. To provide suitable light conditions for regeneration and recruitment, and to minimise damage from harvesting operations harvest gaps from group and small coupe harvesting shall be at least one tree length wide – about 20 metres wide and covering a minimum area 0.04 hectares, measured between coupe-edge trees (expanded gap).
12. ***Before harvesting any coupe within a distance from a harvested coupe equal to the width of the harvested coupe, regeneration on the harvested coupe must have reached a predominant mean height of 4 metres and a stocking of the harvested species equal to or greater than the forest before harvesting****.*
13. All reasonable steps shall be taken to avoid damage to coupe / gap edge trees. Damaged trees should be recovered and their volume accounted for as part of the harvest approved under this ALP.
14. The maximum harvest intensity should not exceed 10 percent of standing trees by area or volume in any given hectare.
15. If the harvested coupe has the general shape of a square, rectangle or circle, the average width, or diameter if a circle, is easy to determine as is the separation distance required between coupes.
16. If a small coupe, whose area cannot be accurately determined by walking the perimeter with a GPS, has a very irregular shape, measure the longest axis of the coupe and the axis at right angles to this. Take the mean length as the coupe width. For a large coupe where an accurate GPS area is obtainable, divide the area, in m2, by the length of the longest axis to obtain an estimate of the axis at right angles and use the mean of the two lengths as the separation distance.
17. **Replanting requirements:**
18. ***where any podocarp, kauri, or shade-tolerant or exposure-sensitive broadleaved hardwood species is harvested and sufficient advanced growth is lacking, there shall be planted for each tree removed at least 5 nursery-raised seedlings of at least 60 centimetres in height of the same species which seedlings shall, where practicable, be raised from seed collected from the district in which such seedlings are to be planted:***
19. **Assessing regeneration.** the above planting prescription shall be implemented when, within 5 metres of any position along the fall line of the felled tree from stump to crown, the following is not present:
	1. 1 pole of the harvested species; or
	2. 2 saplings of the harvested species; or
	3. 5 seedlings of the harvested species; or
	4. At least 1 sapling and 4 seedlings of the harvested species
20. Where two or more trees of the same species have been harvested in the same area and their fall lines overlap, the above counts shall be multiplied accordingly, as shall be the replanting requirements. This means if regeneration was lacking where two trees of the same species are felled, at least 10 seedlings shall be planted, 5 at each stump.

1. **Definitions:**
	1. A pole is a tree with a DBH greater than 10cm
	2. A sapling is a tree with a DBH of less than 10 cm, but over 1.4m in height
	3. A seedling is a tree greater than 10cm tall but less than 1.4m
2. **Special Logging Requirements**
3. ***All special logging requirements, such as directional felling shall be specified***.
4. Directional felling, or other specific logging methods may be required to minimise damage to the residual forest and may be specified as a condition in the SFM Plan or Permit to which this ALP applies.
5. Directional felling shall be conducted to avoid/minimise felling damage where single tree and

small group harvesting is being undertaken. Similarly, directional felling shall be conducted along beech coupe edges to protect the forest edge.

1. The relevant regional plan will indicate what earthworks and associated activities are permitted and which are subject to rules relating to volume of earthworks, permissible proximity of earthworks to permanent streams and maximum slope restrictions. You must be familiar with these and seek a resource consent from the council where the proposed activity or the scale of the activity is not permitted.

1. **Measuring Tree Volumes – Measurement Standards**
2. Standing tree volume shall be measured to the industry standards defined in the Te Uru Rākau – New Zealand Forest ServicePublication ***Measuring Indigenous Trees and Logs, a Field Guide***. This is available as a hard copy on request or in PDF form on the Te Uru Rākau – New Zealand Forest Service website. Measurement for the compilation of tree felling lists to accompany this ALP or to record and monitor the harvest of any species up to the maximum volume in this ALP, once approved by Te Uru Rākau – New Zealand Forest Service, shall conform to these standards;

or

1. Standing tree volume shall be measured using the methodology specified in the registered SFM Plan document. If the SFM Plan measurement is going to be used this methodology must be appended to this Annual Logging Plan.

Please use this **checklist** to ensure you have completed all the relevant sections and attached all necessary documents to this ALP to avoid any delays:

[ ]  **All sections of the ALP completed**

[ ]  **A felling list is attached (if required by** Te Uru Rākau – New Zealand Forest Service**)**

[ ]  **Map(s) attached showing all details listed above**

[ ]  **All pages of this ALP have been submitted, including the sustainable forest management prescriptions and harvesting requirements**

[ ]  **Declaration on page 7 has been signed by Landowner(s) or owner’s agent authorised by attached letter of authority**

|  |  |  |  |
| --- | --- | --- | --- |
| **ANNUAL LOGGING PLAN: Schedule 1 – Tree Felling List** |   |   | **Date:**  |
| **SFM Plan/Permit #:**       | **Owner:**       | **Contractor/Harvester:**       |
|  |  |  |  |  |  |  |  |  |  |
| **Tree #** | **Species** | **DBH (cm)\*** | **Height (m)\*** | **Top Log(s)\*\***  | **Top Log(s)\*\*** | **Total Standing** | **GPS/map** | **GPS/map** | **Comments** |
|  |  |  |  | **Mid Point Dia.** | **Length (m)** | **Volume m3 \*\*\*** | **Easting** | **Northing** |  |
|         |         |         |         |         |         |         |         |         |         |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
| **No kauri or podocarp, whether standing or not, can be harvested unless it is included on this felling list and it has been approved by Te Uru Rākau. ANY TREE ADDITIONS, WHETHER THE TREE IS STANDING OR NOT, MUST BE SUBMITTED TO TE URU RĀKAU FOR APPROVAL BEFORE THE TREE IS HARVESTED.** |
| **Notes:** |  |  |  |  |  |  |  |  |  |
| \* Standing volume (excluding the volume of Top Logs - see below) should be calculated using the *Tree Volume Equations for the Major Indigenous Species in New Zealand* *NZ Forest Service Technical Paper No 67 (J C Ellis 1979)* - copies of the required tables and equations are available from Te Uru Rākau – New Zealand Forest Service Indigenous Forestry Team. \*\*Calculate the volume of all Top Logs by estimating the centre girth diameter and length and reading from the MPI 2016 booklet - *Indigenous Timber Table of Metric Cylinder Volumes.*\*\*\* Total (standing) volume includes the volume of the trunk as well as the volume of any top log(s). |

|  |  |  |  |
| --- | --- | --- | --- |
| **ANNUAL LOGGING PLAN: Schedule 1 – Tree Felling List Continued** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Tree #** | **Species** | **DBH (cm)\*** | **Height (m)\*** | **Top Log(s)\*\***  | **Top Log(s)\*\*** | **Total Standing** | **GPS/map** | **GPS/map** | **Comments** |
|  |  |  |  | **Mid Point Dia.** | **Length (m)** | **Volume m3 \*\*\*** | **Easting** | **Northing** |  |
|         |         |         |         |         |         |         |         |         |         |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |
|        |        |        |        |        |        |        |        |        |        |