Strathardle LMP Summary

Prime Issues Relating to Plan Area

- Age structure of forests is relatively even with large volumes of timber currently approaching rotation age.
- A lack of thinning in late rotation crops has limited options for ongoing management.
- As a consequence of the previous two points there has been significant recent windblow and the potential for further damage in future.
- The forest road network is in need of upgrading to accept heavy plant traffic.
- Phytopthera ramorum infection has been identified in Blackcraig.
- Self-seeding Sitka spruce is dispersing across the neighbouring Forest of Clunie SSSI.

Critical Success Factors

- Productivity is at least maintained, if not enhanced, over the plan period.
- The process of normalising the current even age structure is initiated.
- Conifer component on PAWS areas is reduced in favour of productive broadleaved species.
- Thinning of suitable aged crops is carried out in a timely manner.
- The impact of dispersed seed on the neighbouring Forest of Clunie SSSI will be reduced.
- Herbivore damage is minimised.
- Timely road maintenance is carried out in advance of forest operations.
- The visual appearance of the forest is improved.

Plan Objectives

Primary - Timber production through sustainable forest management.

Secondary – Landscape improvement, PAWS restoration and riparian planting, deer control, historical environment, and community and recreation management.

Proposed Felling

Felling will be carried out in both Phase I (2018-2022) and Phase II (2023-2028) within the Strathardle plan area. The management coupe map (Page 7) illustrates Phase I coupes in red and Phase II in orange. Total felling area within Phase I will be 223 ha and within Phase II will be 137 ha.

Felling will be used to break up the very uniform age-class structure and move it towards a more normalised distribution, respond to incipient windblow, and progress species change and PAWS restoration.

Proposed Thinning

History of thinning in the Strathardle blocks has been variable, often being omitted due to steep ground or wet soils. In many cases stands have progressed beyond a safely thinnable stage and require clear-felling to mitigate the risk of unstable crops. Thinning will take place to develop continuous cover forestry components within the plan area, to maintain the thinning cycle of mid-rotation crops and to initiate thinning in young crops to develop long term stability. The development of a network of rides within crops will also be undertaken during thinning to present varied options for future coupe selection and to provide alternatives to the geometric boundaries presented by the forest road network. An area of around 797 ha (plan thinning extent, page 8) will be assessed and thinned as required within the plan period.

Proposed Restocking

Planned restocking will tackle 3 broad themes: re-establishment of productive spruce-dominated crops to maintain production, reversion to native species dominated stands within areas of PAWS, and the development of a diverse conifer mix along the route of the Cateran Trail. Restocking will take place as soon as appropriate after felling, balancing requirements to protect

against expected pine weevil (*Hylobius abietis*) pressure, maintain site productive potential, and reduce site inputs to control both weeds and weevils. Fallow periods of up to 5 years may be employed where hot planting is not thought to be appropriate, with crop fully established 5 years after that.

Restocking coupes showing target future species composition are illustrated on page 9.

Fig. 1 – Scale of planned felling, thinning and restock during first 10 years of plan.

	Area (ha)
Total Plan Area	2011
Felling Area	349
Thinning Area	797
Restock Area	541

Species Composition

The change in species composition for the Strathardle plan area is illustrated in Figure 3 for the next 30 years. Lodgepole pine proportion is planned to decrease to reduce the effect of *Dothistroma* needle blight and larch proportion will also reduce in response to the risk posed by *Phytothphora ramorum*. The proportion of broadleaves will increase from around 2 to 12 percent as PAWS restoration progresses (see Figure 4).

Additional Information

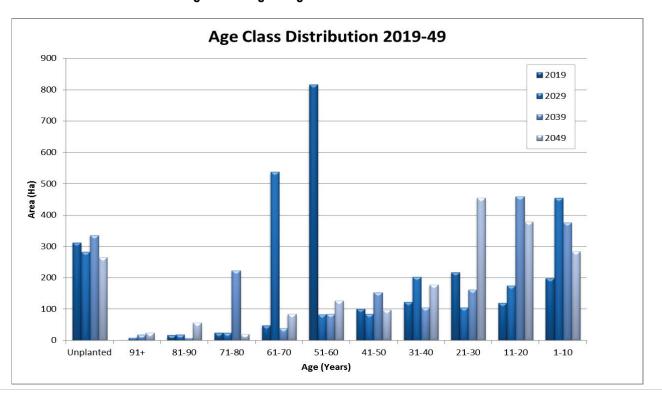
Relevant standards and guidance relating to this LMP can be found here:

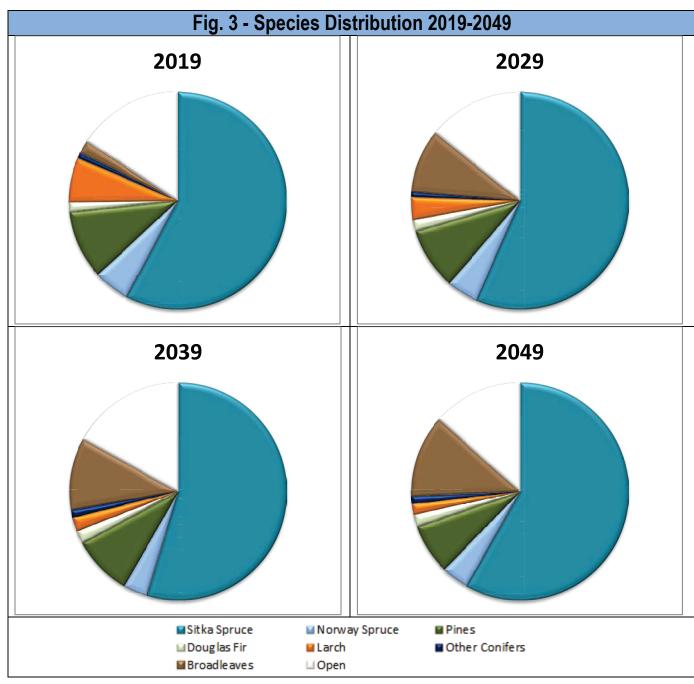
UK Forestry Standard

UK Woodland Assurance Standard

If you would like to request additional information or provide feedback on the planning process please contact Tay.FD@forestry.gsi.gov.uk.

Fig. 2 - Change to age class distribution with time





From the graphs in figure 3 it is possible to see that percentages of commercial crop species will remain relatively stable under the proposals laid out in this LMP, with the majority of forest cover given over to Sitka spruce cultivation (58%).

Areas of larch will be gradually reduced in light of *P. ramorum* risks (currently 7% reducing to 2% by 2039). Larch will not be

Broadleaf cover will increase steadily from 2% to 12% by 2049 as PAWS areas and riparian habitats are converted to native broadleaf planting.

felled out of phase unless a confirmed SPHN is served, in which case an action plan has been created identifying all larch

stands in the plan area and appropriate management actions (see appendix 4).

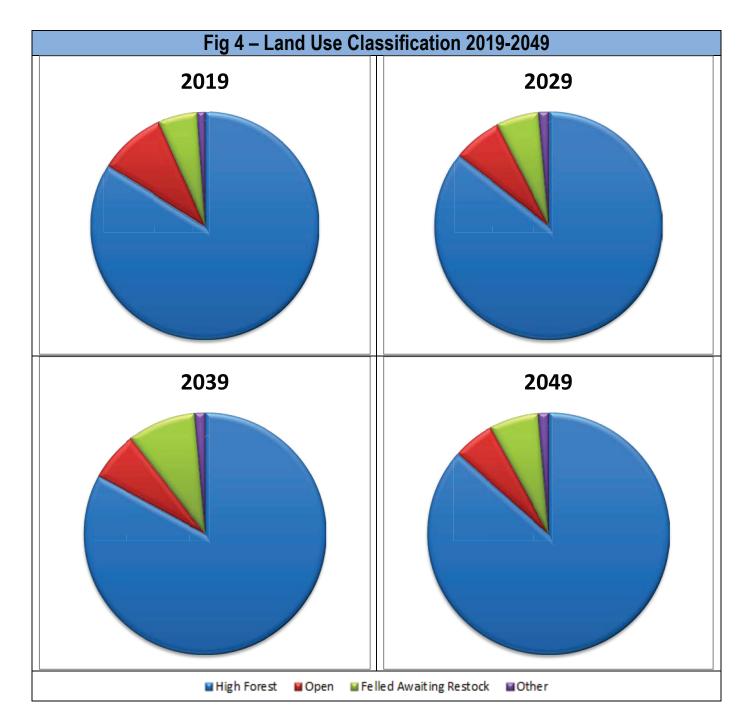


Figure 4 indicates that proportions of forest cover will maintain throughout the planned proposals (ranging from 83-87%).