Morvern Land Management Plan Scoping Brief

Planning Team

Chris Tracey – Planning

Mandie Currie – Planning

Andrew Gilchrist – Planning

Ian Thomas – Contract Planner

Alastair Cummings – Programming

Sergey Eydelman – Harvesting and Management

Stuart Findlay – Forest Management and Stewardship

George Thorpe – Environment

Jeff Hancox – Civil Engineering

Douglas Cook - Landscape

Introduction and Description

This Scoping Brief will inform the preparation of the Land Management Plan (LMP) which covers the next ten years (2024 – 2033) and will succeed the previous ten-year LMP which ran from 2014 – 2023.

The Brief provides context, LMP objectives and a consideration of key issues and design concepts.

Morvern forest extends over an area of 5,946Ha and lies at the north-western end of the Morvern peninsular. The forest stretches from the shoreline to 410m above sea level. The area comprises three adjacent forestry management areas including Barr, Lochaline North & Lochaline South.

Social Factors

Morvern forest forms the backdrop to the village of Lochaline, which lies at the junction of Loch Aline and the Sound of Mull. The village has a population of around 200 people and has a range of Community facilities and enterprises, including a Hydro scheme at Barr within the LMP area. The village acts as a hub for a wider rural area.

Lochaline Sand Mine is based in the village and has been in operation since the Second World War, it provides high purity silica for optical instruments. Lochaline Harbour is a community owned enterprise which provides a range of facilities. The Calmac ferry runs from the village to Mull and the Sound of Mull is a major ferry route from Oban to the Isles. The village has a Fire Station, Medical Centre and Primary School which serve the surrounding area.

There is a community woodland at Achnaha and the community are currently exploring the potential for woodland crofts within the National Forest Estate.

The Morvern Community Council and the Morvern Community Development Company serve the wider Morvern area including Drimnin to the North of the forest. There are a range of community groups running several other projects for the community including the Morvern Community Woodlands. The community has the capacity to manage complex projects and has a high level of knowledge relating to both land management and local site- specific factors.

FLS are working with the RSPB on a new Native woodland nursery based at Lochaline and with a range of partners on the control of Rhododendron on a landscape scale in Morvern.

There are several core paths and well used local routes through the forest. Many of these have been impacted by windblow. The restoration and creation of circular walking and cycling routes are important to the community and these will be considered where possible, for example using ATV tracks on restock areas that link discrete road networks.

A range of archaeological features have been identified across the site; the Township of Aoineadh Mor at Loch Doire nam Mart is a Scheduled Ancient Monument. Consideration will be given to the scope for enhancing the setting of this feature and linking where possible, other features to the path and road network.

Environmental Factors

The forest occupies a significant area of land at the western end of the Morvern peninsula. The land rises as a gentle slope from the Sound of Mull to a plateau landscape before dropping down a steep cliff escarpment to the North. The concave cliffs and associated ridges are prominent from the north and are characteristic stepped basalt with deeply incised vertical gullies.

The geology is Basalt with igneous intrusions and areas of Schists, Quartz, Feldspar and Granulite. The resulting soils are range from brown earths to peaty gleys & podzols, with pockets of peat on the areas where drainage is impeded. Most of the forest is ideally suited to timber production including productive broadleaves on the lower slopes and Sitka spruce on the mid and upper slopes.

There are various Private Water Supplies within the forest together with a Public Water Supply. The number of supplies means that the whole of the seaward side of the forest is effectively a sensitive catchment.

Catchments for the Savary River & Abhainn Shalachain drain the forest to the Sound of Mull with smaller burns draining the eastern end of the forest. To the North the Barr River flows into Loch Teacuis and a number of burns drain into Loch Doire nam Mart & Loch Arienas, and ultimately into the River Aline.

Mean annual temperatures in this region are about eight degrees centigrade, and while snow is less prevalent than in eastern Central Scotland, this region is exposed to rain-bearing westerly winds. While the average annual rainfall is at least 1700mm, the highest annual rainfalls occurs nearby, north-west of Fort William, where rainfall reaches over 4000mm a year. There can also be ‘cloudbursts’ of sudden, high rainfall.

This region is, on average, the windiest in the UK, with frequent areas of low pressure passing over the area, especially from December to February, when mean speeds and gusts of wind are at their strongest. Therefore, while the forest is generally accessible all year round, both thinning and felling programmes need to take into account rainfall levels that may cause significant water run-off, and possibly landslips on unstable slopes. In addition, parts of the forest are exposed directly to westerly winds, which are likely to influence the stability of Continuous Cover Forestry (CCF) and the timing and sequence of felling proposals. The complex landform to the North provides shelter from the prevailing winds, but in extreme wind speeds may lead to the creation of destructive vortices.

There are a number of designations impacting on the LMP area, these include:

* Sunart SAC
* Sunart SSSI
* Morvern Woods SAC
* Drimnin to Killundine Woods SSSI

While the area of any designated sites within the LMP area are small, the LMP will use design to protect the SAC and SSSIs and seek opportunities to enhance them e.g. species choice in the vicinity of the boundaries or the ongoing Rhododendron control measures delivered in partnership through the Atlantic Woodland Restoration Project.

The forest is home to a range of iconic species including Pine marten, Otter, Red squirrel, Golden eagle and Sea eagle.

Red and Roe deer occur in the forest within the march deer fence. Control is facilitated by the good road network and ranger tracks on new restock areas. The maintenance and replacement (as required) of the march deer fence is essential for the creation of a diverse forest structure. Natural regeneration of native broadleaves, and the establishment of areas of alternative conifers such as Douglas fir indicate that the concept of a march deer fence and good internal control can deliver and is preferable to numerous fenced enclosures across the forest.

The Sunart Local Landscape Area covers the most northern part of the LMP area, at Barr. The most significant visual impacts are generated from the A884 running along the southern margin of the forest, and from Mull and the Sound of Mull. The Naturescot Landscape Character Assessment categorises most of the forest as Stepped Basalt Landscape with the main sensitivity relevant to the LMP being land uses that mask landform.

The North end of Barr is adjacent to the Sunart Conservation designations and the Ancient Woodland Sites and remnant woodland in this area are a priority for restoration and expansion. Mapping and assessment of the areas of Plantation on Ancient Woodland Sites (PAWS) are being undertaken to identify the most appropriate areas for restoration and this may lead to a change to the restoration area compared to the currently mapped PAWS area.

The standard forest design process of restructuring to increase diversity, link native broadleaved areas in the forest and the surrounding landscape and the enhancement of riparian zones with open ground and native broadleaved buffers, will provide many environmental benefits.

As mentioned above, FLS are working with the RSPB and other partners to deliver environmental benefits linked to the Atlantic oakwoods.

Most of the deep peat areas within the forest were retained as open ground during the establishment of the forest. Ways to increase the resilience of these areas will be considered. Within the wider forest, clearfelling is likely to occur on areas of good growth, which are unlikely to be deep peat. Areas of checked crop on deep peat will be assessed as candidates for deforestation and peatland restoration, or creation of native woodland, peatland edge habitat.

Economic Factors

FLS operations are expected to be financially self-sustaining at a regional level so continued production of commercial species is a necessity.

Morvern Forest has a number of features which mean that it is an important producer of timber at a National scale, these include:

* Large scale of the forest
* Internal road infrastructure and transport links, particularly by sea (not so good by land)
* Good soils and climate for high volume/Ha timber production
* A fairly diverse age class, facilitating sustained production, although this has been impacted by significant felling of larch coupes due to infection by P ramorum.

Morvern forest is also important at a local and regional level in terms of supporting employment and industry in the Fort William area.

In addition to the direct economic significance of the Morvern forest, production of high volumes of sustainable timber creates several significant climate change benefits that also have a positive downstream economic impact. The high growth rates of Sitka spruce, in particular, captures a very high rate of carbon/Ha/annum. The output of sawn timber can replace energy intensive materials such as steel and concrete, and the carbon stored in timber is often captured in products for long time periods.

The current stocking of the forest indicates the following areas for broad species/landuse groups:

|  |  |  |
| --- | --- | --- |
| Species Group | Area Ha | % of Forest excluding  Open Hill |
| Felled | 370 | 8% |
| Larch | 125 | 3% |
| Mixed Broadleaves | 21 | 0% |
| Diverse Conifers | 349 | 7% |
| Native Broadleaves | 212 | 4% |
| Integral Open Ground | 1134 | 24% |
| Open Hill | 1080 |  |
| Sitka Spruce | 2591 | 54% |
|  |  |  |
| Total | 5883 |  |
| Total Excl. Open Hill | 4802 | 100% |

These figures are significant, in that:

* There is still a significant area of larch to fell
* The area felled and awaiting restocking is significant
* The area of Native Broadleaves (NBL) is below the UKFS thresholds
* Integral open ground occupies a significant area
* The open hill occupies a significant area
* The area of Sitka spruce is below the maximum UKFS threshold, even allowing for the felled area to be fully restocked with Sitka spruce (which is not the case).

*Notes: Based on the UKFS coming into effect in October 2024. There is significant native broadleaved regeneration across areas currently identified as Open Ground in Barr. Due to the scale of the forest even a 1% change in species group represents a significant area of loss or gain and amounts to 48Ha*.

There are many potential advantages to biodiversity, resilience, and landscape from diversifying the forest structure and the main opportunities for achieving this are by:

* Retaining areas of mixed conifer as Long Term Retentions
* Expanding the area of mixed conifers on sites with potential for Continuous Cover Forestry
* Expanding the area of NBL to create linkages and enhanced riparian buffers
* Map the areas of existing NBL regeneration as part of site monitoring and update the Forest Schedule to reflect this
* Create areas of productive broadleaves and consider bringing existing areas of broadleaves into management to deliver multiple benefits

Operational Access

The forest is well roaded, although some roads are no longer suitable for haulage without upgrade. Within the forested area, long distance / core paths run mainly along forest roads.

Under timber haulage agreement, some of the estates to the West and North also use the FLS road network, to reduce the amount of timber traffic on the public roads

Ranger tracks across restock sites aid restock management/deer control and can link discrete road networks to create more circular path routes for informal recreational use.

Silvicultural Potential

Silvicultural potential is a function of intrinsic site features and the current tree cover.

In Morvern, the range of available species that can be established declines with altitude as a function of exposure and soil quality. At lower levels on good soils species choice extends to most conifer species and a wide range of broadleaves. At higher elevations conifer species are restricted to Sitka spruce, Lodgepole pine and Western hemlock; broadleaf species are limited to Downy birch, willows, Rowan and Aspen. Growth rates also need to be considered as well as whether a species can theoretically be established; healthy, fast -growing trees are more resilient, deliver landscape and biodiversity benefits more quickly and capture more carbon.

Alternative silvicultural systems to clearfelling are constrained over wide areas by the features of the current tree cover and the physical site features. Alternatives to clearfell systems can be non-intervention Natural Reserves or some form of Continuous Cover Forestry (CCF). Long Term Retentions (LTR) are essentially clearfell systems on a long rotation, generally with limited intervention. Many tree species self -thin and Conifer LTRs can be both stable and provide biodiversity and landscape benefits. For instance, Norway spruce retentions provide Red squirrel habitat and raptor nesting sites. On Morvern, the areas suitable for CCF are broadly constrained over many areas by soils, exposure and access, however where sites are suitable for CCF the nature of the current tree cover may preclude this option until the next rotation. Unthinned fast growing crops can become unstable if thinned at a late stage. Over time this situation may change where restocking following clearfelling has been carried out and thinning/CCF management can commence early in the following rotation.

Morvern falls within the Morvern Deer Management Group (DMG) of which FLS is a member. Deer management and control is essential for creating a situation where a diverse range of tree species can be established. Good roads and tracks, a functional march deer fence and local deer control experience can all facilitate good deer control and make the best use of the limited resources of time and money that are available.

Achieving National Priorities Locally

The management of Scotland’s National Forests and Land is guided by Scotland’s Forestry Strategy 2019 – 2029 and FLS’ Corporate Plan (2022 -2025) and is informed by strategies on a range of topics, including land use, economy, climate change, biodiversity and the historic environment.

The Scottish Government has identified three objectives to deliver over the next 10 years:

* Increase the contribution of forests and woodland to Scotland’s sustainable and inclusive economic growth
* Improve the resilience of Scotland’s forests and woodland and increase their contribution to a healthy and high-quality environment
* Increase the use of Scotland’s forest and woodland resources to enable more people to improve their health, wellbeing and life chances

This Land Management Plan will help deliver on these objectives, in line with FLS corporate outcomes, to ensure clear linkages through the planning framework and implementation of national and regional priorities. The Brief is also guided by the National Spatial Overview, which has identified the focus of effort and investment challenges for this area. Key contributions that Morvern forest makes to our Priorities, Aims and Objectives are:

* Ecosystem services and additional public benefits – sustainable timber production; public access – resource well-used by local residents and by visitors.
* Other national commitments – PAWS restoration; Invasive Non-Native Species (INNS); dealing with the potential impact of P. ramorum on larch; carbon reduction and climate change mitigation; forest resilience and peatland restoration; protection of water supplies
* Contribution to financial sustainability – range of softwood; hydro schemes

Draft Land Management Objectives

1. Develop a coherent harvesting programme that incorporates the previous and ongoing removal of larch in response to the spread of P. ramorum; continue to fell larch in line with the FLS larch strategy
2. Maintain production potential of the forest, optimising the flow of conifer sawlog timber and managing suitable areas for broadleaved wood production
3. Build resilience by improving diversity of tree species and age categories; increasing the proportion of alternative conifers, as well as native broadleaves
4. Implement timely thinning and manage LISS / CCF where feasible and compatible with required larch removal
5. Protect ASNW and restore high ecological potential PAWS areas to native woodland; strengthen native broadleaves in riparian zones and develop a network of native broadleaved woodland that will eventually extend through Morvern and strengthen the Atlantic oakwoods linked to Sunart SSSI and SAC
6. Improve visual amenity and landscape impact of the woodland, with a particular focus on the views from Mull and the ferries sailing through the Sound of Mull, as well as from the approach along the A884 from the North
7. Work with neighbours and partners to reduce grazing/browsing pressure from deer and livestock, to protect planted and naturally regenerating trees and to maintain priority open ground habitats in favourable condition
8. Recognise the importance of public access and the involvement of the community In developing the future forest design and be open to exploring options that will realise community benefits
9. Continue to work with Saving Morvern’s Rainforest Project in support of its objectives, notably Rhododendron control and the management of the Atlantic oakwood designated features
10. Design and manage the forest to deliver sustainable carbon management (adaptation, reduction, capture) throughout the rotation, while balancing productivity with resilience
11. Review areas of low YC and wet soils and where peat may be present in discrete areas or in mozaics; restore large areas of deep peat
12. Identify Private and Public water supplies and plan for the protection of water supply sources within the forest

Key Issues Identified for the LMP

The key issues shown have not been ranked in order of importance, and the comments below are intended to aid consultation and discussion. They will likely change along the way as the issues below are explored.

* Disease

Issue:

Felling has been driven in recent years by the impact of Phytophthora ramorum (P. ramorum) a fungal disease of larch. Statutory Plant Health Notices are issued when infected trees are identified, and Forestry and Land Scotland (FLS) are obliged to fell the infected trees and all larch trees within a wide buffer. In practice, wider fellings are required to fell to windfirm edges and to enable the harvesting to be carried out in practical terms. The impact of this has been that large areas have been felled in addition to, or instead of, the areas proposed for felling under the last plan. This has impacted on the forest structure and has created logistical pressures in terms of harvesting and restocking.

Design Concept:

Design felling coupes within the framework set by past and future P. ramorum infections, as well as by the previous Plan. Consider additional roading required to harvest larch. Seek to lengthen rotation lengths in non -larch crops where feasible, to even out timber supply. Consider areas for Long Term Retention to maintain structural diversity. Identify remaining areas of larch and fell. Proactively. Consider the best approach for areas containing young larch or with larch as an element of the stand/ in intimate mixtures.

* Native Woodland Expansion and Restoration of Ancient Woodland Sites:

Issue:

Restoration of Plantation on Ancient Woodland Sites (PAWS) to Native Woodland was an objective under previous Plans and this approach will be continued under this Land Management Plan (LMP). There are, potentially, wider areas of conifer woodland with remnant native broadleaves (NBL) which could also be restored. Wider forest restructuring also involves an expansion of NBL, for instance along riparian corridors, and this process can be linked to PAWS restoration areas. The ecological diversity and resilience of the native woodland on site can also be enhanced by linking to existing or proposed native woodland on neighbouring land.

Design Concept:

Survey and review PAWS areas. Restore PAWS area and link to existing NBL and new NBL along riparian corridors. Link to NBL on neighbouring land and expand NBL along the forest margins where appropriate, to improve landscape and link NBL in the wider landscape.

* Water Quality and Drinking Water Supplies.

Issue:

Drinking water supplies and water ecosystems can be impacted by forest cover and forestry operations. Good water quality is essential for Salmon and Brown trout and silt/pollution can affect the marine environment. Measures to buffer and enhance the riparian environment for ecological reasons also benefit water quality and the resilience of the supply.

Design Concept:

The aim is to identify specific intake points for all water supplies served by the forest and to map the associated catchments. This will guide both forest design and operations to safeguard water supplies. The replanting proposal will build on the multiple benefits that riparian enhancement can deliver in terms of water quality, biodiversity and landscape.

* Alternative Silvicultural Systems and Forest Structure

Issue:

Clearfelling is the standard approach for silvicultural management on the West coast of Scotland. Alternative silvicultural systems can increase the structural diversity of the forest.

Continuous Cover Forestry (CCF), in contrast to clearfelling, maintains tree cover in the long term and seeks to regenerate young trees by natural regeneration. CCF has several potential benefits for landscape, ecology and people. On the West coast the exposure to strong winds can limit the application of this method as it can be more vulnerable to wind damage particularly where thinning is delayed. The areas with potential for CCF within the forest are limited.

Natural Reserve areas where interventions are very limited can provide ecological and structural benefits but are unproductive in timber terms.

Long Term Retentions (LTR) are areas where the clearfelling rotation length is extended and this can increase diversity and ecological value. Species groups as diverse as nesting birds of prey or bryophytes can benefit from LTR. Stability and resilience to wind are critical factors in determining the choice of silvicultural system.

Design Concept:

Continue to manage most of the forest as a Clearfell system.

Identify areas with potential for CCF where wind exposure is limited, the soils and slope are suitable and there is good management access. Early intervention in young stands can reduce the risk of wind damage.

Identify Natural Reserves based on current tree cover and anticipated regeneration.

Identify areas of diverse conifers as Long Term Retentions in sheltered locations or where growth rates are slow. Norway spruce can self -thin to create stands of stable specimen trees where the conditions are right.

* Peat Restoration

Issue:

Deep peat is unsuitable for forestry and can be degraded by commercial tree cover. While most of the deep peat on site was unplanted and retained as open ground during the creation of the forest, there may be some areas of deep peat carrying commercial forest cover that would benefit from restoration or restocking with native broadleaved woodland. Where tree growth is good, with high Yield Classes, then commercial crops will continue to be grown.

Design Concept:

Focus peatland restoration on the areas of deep peat correlated with the open ground in the forest. Identify potential deep peat areas within the forested area that may benefit from restoration or restocking with native broadleaves to create peatland edge habitat.

* Deer Management

Issue:

Deer can affect floristic diversity and the establishment of planted and naturally regenerating trees. Effective deer control requires good access and deer fencing bring associated cost, landscape and access issues.

Design Concept:

Maintain the strategic deer fence in good condition and implement deer control within the forest, sufficient to facilitate the establishment of a wide range of tree species and increased botanical diversity. Roads and tracks makes will facilitate deer control and provide additional informal recreational routes.

* Public Access and Community

Issue:

The forest provides various facilities for the community. However, many community aspirations are related to specific small areas of the forest that may not be included in detail within the Land Management Plan, which is relatively strategic in nature. Many aspirations also require funding.

Issues may include paths, timber transport, felling operations, forest crofting opportunities, opportunities for local businesses, timber buying opportunities.

Design Concept:

Seek to identify and accommodate community interests/opportunities within the LMP, where these are aligned with FLS land management objectives and priorities. The LMP can provide supporting evidence for applications for external funding where FLS budgets are constrained.

* Landscape

Issue:

Landscape is an important consideration for both residents and visitors. It has a direct aesthetic and economic significance. Many of the approaches to increase biodiversity or expand species diversity can often be synergistic to landscape in that forest features are developed related to landform and soils (such as riparian woodland or diverse conifers on better soils). Landform is therefore reflected in the forest cover and this enhances the landscape fit.

The North end of the forest falls within the Sunart Local Landscape Area although the footfall in this area or to the North is modest. The most significant landscape impacts are from Mull, The Sound of Mull and the A884 approaching from the north-east. The landscape is generally large scale with finer more intimate features associated with the riparian corridors and the lower forest margin.

The fellings associated with P. ramorum have led to a felling programme where landscape considerations were secondary to legal requirements and best disease management practice.

The past restructuring has created a diverse forest with a wide range of coupe sizes distributed across the forest. The options for future management and coupe design are constrained by this current forest structure and the need to work to windfirm edges. This limits the opportunities for landscaping.

Design Concept:

Strengthen natural features in the landscape at restocking with the emphasis on riparian zones.

With the loss of larch as a species option, consider ways to include more visual diversity and Autumn colour in the forest. This could be achieved using more Birch or Aspen in pure stands related to landform features or in mixture with conifers such as Scots pine and Norway spruce.

Consider ways to diversify the future landscape by designed future coupe boundaries in restock areas[[1]](#footnote-1) and use diverse species and open ground to highlight landform. Respect the large scale of the landscape where appropriate.

* Biodiversity, Designated Sites and Protected Species

Issue:

The forest is home to a wide range of iconic and protected species including Schedule 1 raptors. There are a wide range of designated conservation sites mainly along the margins of the forest. PAWS restoration has been discussed earlier.

Design Concept:

Restore PAWS and expand native broadleaves.

Manage the restocking of areas in the proximity of designated sites to reduce adverse impacts and enhance ecological linkages. Create buffers around ASNW and riparian corridors. Protect key sites used by protected species. Control invasive species where budgets allow, in particular Rhododendron.

Balance the requirements of statutory disease management and the protection of important habitats and sites.

* Timber Production

Issue:

The LMP area is very suitable for production of high volumes of quality timber - with good soils and climate and generally gentle to moderate slopes. The scale of the forest means that it is an important sustainable strategic timber resource contributing to the local and national economy and employment. The internal road network is well established and ongoing transport links by sea or road are available.

Timber not only provides a sustainable timber product, but it also provides a product that substitutes for carbon intensive steel and concrete. The very fast growth rates of Sitka spruce also impart a very high rate of carbon capture across the forest, the significance of which is increased by the large scale of the forest.

Design Concept:

Maintain a critical mass of productive forest with a sustained and steady rate of annual production. Diversify conifer species on suitable soils and sites. Balance reductions in the productive area against other benefits.

* Archaeology

Issue:

A range of features occur across the forest with the Township at Loch Doire nan Mart being a Scheduled Monument.

Forest cover and operations can have an impact on the preservation and aesthetic setting of archaeology.

Design Concept:

Consider ways to enhance the setting of the Township and open views to key landmarks. Improve the setting of unscheduled archaeology and consider open ground linkages to roads and paths where possible, to improve public access.

Stakeholders and Consultation

Scottish Forestry - Highland Conservancy

NatureScot - South Highland Area Office

Highland Council – Access Officer

Highland Council – Roads

Highland Council Archaeologist

RSPB

Scottish Mountaineering Council

Ramblers Association

Scottish Rights of Way Society

VisitScotland

Sustrans

Scottish Water

SEPA

Scottish Wild Land Group

Lochaber District Salmon Fisheries Board

Lochaber Fisheries Trust

Morvern Community Council

Morvern Community Development Company

Morvern Deer Management Group

Neighbouring landowners

Morvolts Ltd

Community members who express an interest in response to the Brief and wish to be updated

1. This involves creating new open rides through restocked areas which relate to landform and can be used as felling coupe boundaries when the restocked areas mature and are felled in 40 years time or thereby. [↑](#footnote-ref-1)