

Land Management Plan Brief
Lochaber Forest District
LMP Unit : Glen Hurich 030/519/150
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It's important to keep people informed about management proposals affecting their local forests.

Forestry Commission forests are independently certified as being responsibly managed. We're regularly audited against the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification.

Keeping in touch with our stakeholders is an important part of the standard. We welcome comments on these proposals.



The mark of responsible forestry



Description

The Glen Hurich Land Management Plan (LMP) area consists of 4, 400ha and lies in a mountainous area on the fringes of West Lochaber, bounded by Loch Shiel to the West and the mountains of Ardgour in the East. The forest is predominately Conifer plantation forest and is located 8.2miles north west of the village of Strontian. A single track, minor road leads from here, high over the Bealach Fèith Nan Laogh to the township of Polloch, the main settlement in this remote glen.

Glen Hurich itself is a long sinuous glen running east to northeast .The smaller Gleann an Dubh Choirean which forks away from the main glen to the east also forms part of the management area. The land, formerly a sheep farm, was purchased from the Board of Agriculture in 1927 and much of the conifer plantation woodland is planted on steep ground up to an elevation of 500m in places. The forest boundary is deer fenced on the high march with neighbouring Cona Glen estate however there are sections elsewhere which are porous and some obsolete. There are also elements of internal fencing throughout the forest.

Glen Hurich lies within the Loch Shiel National Scenic Area (NSA). The open hill ground forms part of the Moidart and Ardgour Special Protection Area (SPA) for its bird interest. Loch Shiel on the western end of the Glen is an SSSI.

The felling of the first rotation crop is underway and associated second rotation restocking is in progress. There remains a proportion of standing first rotation crop on the west side of the glen, consisting entirely of conifer. This contains an element of wind damage which is not significant at present.

There are 325ha of PAWS/AWS designations to the forest with significant and scattered broadleaf components notably in the riparian zones and on the shores of Loch Shiel, Poll Loch and Loch Dubh Leathad (Doilet). There is opportunity to link these remnants.

The upland zone of Glen Hurich forest extends from between 250-800m. Although commercially planted to an altitude of 500m in places, the form of the crop and its yield class vary. Associated difficulties in economic harvesting are likely to present further challenges. There is conservation potential in these upland parts of the forest where fragments of montane habitat exist, mostly outside the fence and in difficult to access locations.

The productive zone of the forest is predominately conifer and, alongside fragments of native woodland, contains an assortment archeological remains from previous land use. There are numerous watercourses, lochans and riparian features spread throughout the glen floor and on the surrounding hillsides. The River Hurich is a notable watercourse which spills into Loch Doilet the largest fresh water body within the LMP area and which in turn feeds into Loch Shiel. This fresh water body is protected under an SPA (Special Protection Area) and the general area covered by a NSA (National Scenic Area) designation.

Climatically the forest is in one of the more mixed locations of Lochaber FD due to its topography. The DAMS score (a measure of exposure to wind) is variable increasing with altitude. At the mouth of the Glen at Poll Loch and to Loch Dubh Leathad the scores are 10-12 and 14-16 on the floor of Glen Hurich. With the right ground conditions thinning could be possible in these areas. The lower slopes see an increase in DAMS to 16-18 with the upper slopes 18-20. On the open hill and above the tree line this again rises to 22+. At present there is not significant windblow in the forest. This may change as the remaining first rotation crop is opened up and where green edges will be difficult to established due to the blanket nature of the plantation.

The aspect of the main forest is Westerly with moderate-steep slopes. There is no issue with moisture deficit and the steep sides of the surrounding mountains create micro-climates on the Glen floor and forest.

The soils of the forest are classed as very poor nutritionally and further consideration will have to be undertaken on supplementary fertilisation of second rotation crops.

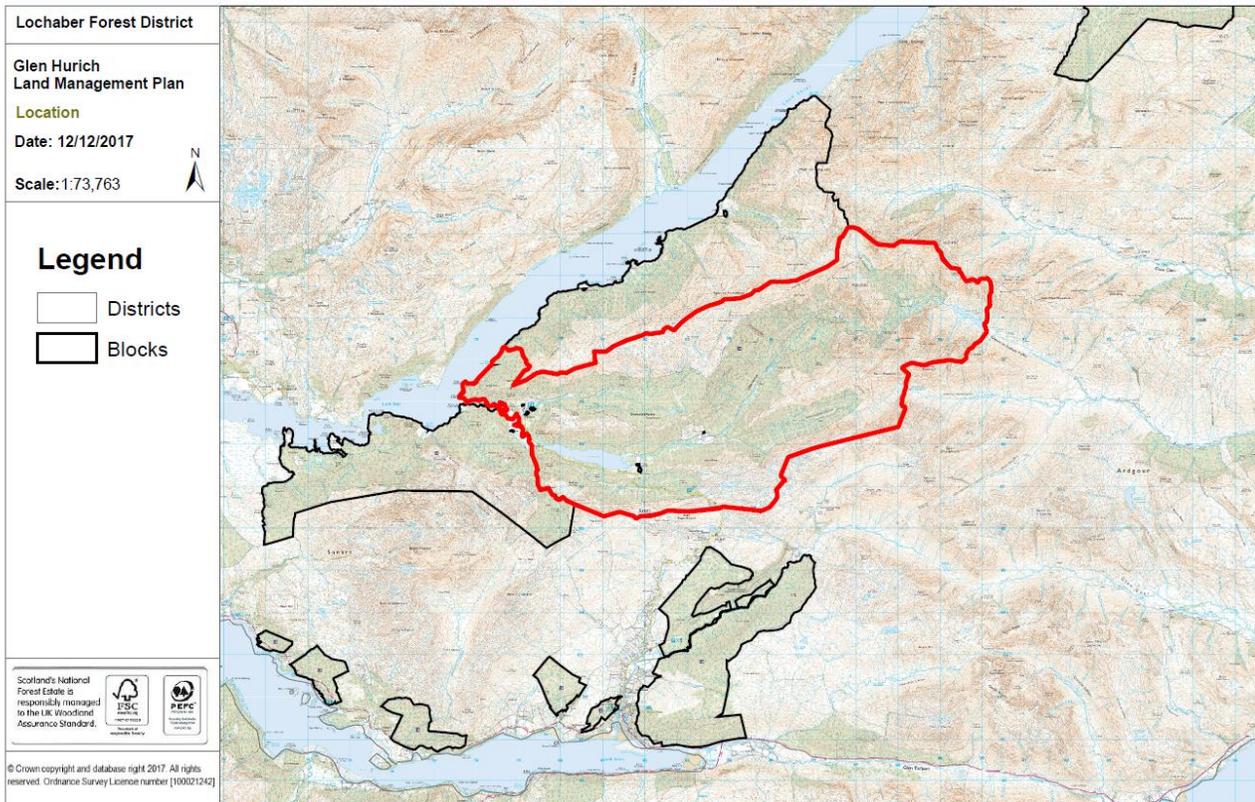
The forest is in the process of restructure and this requires an emphasis on some species diversification whilst retaining a strong core of commercial Conifer. There is requirement to reduce the elevation of the second rotation crop to underpin its economic viability.

This is a revision of the 2007 plan.

Location Map

Forest Enterprise Scotland
Managing the National Forest Estate

Forestry Commission Scotland
Coimisean na Colltaranach Alba



Objectives

- Retain a strong core of commercial conifers in this important forest and assess the quantity that can be economically established. These must be suitable for the site and contribute to supporting the local forest and timber industry. It is important to ensure resilience to climate change as an integral part of this plan in particular relation to storm events, pest and disease attack which should be tested through the planning process.
- Diversify species of conifer through more intimate mixes as part of the restock process. This will be limited through soil suitability and restricted species choices.
- Maintain, link and expand existing native woodland elements. Identify opportunities to utilise broadleaf woodland for wood production. Continue to use native woodland expansion to enhance riparian zones for fisheries protection.
- Recognising the wider landscape context of the forest design and ensure future coupes fit with the landscape and when seen from key viewpoints such as Poll Loch and Bealach Fèithe nan Laoigh.

- Consult and work with local communities and stakeholders

Social Factors:

There is a resident population around Glen Hurich and concentrated within the Polloch village area and which is represented by Sunart Community Council. We will continue to consult with Sunart Community Council and local residents during the planning process.

Access to the forest is informal and can be taken from numerous locations within the LMP area.

Recreation has played an important role within the plan area in the past and as a part of the wider Sunart Oakwood's initiative. Today recreation is mostly local users and centres on the informal walks near Poll Loch, Loch Shiel pontoon and the forest road network. Glen Hurich is part of the Loch Shiel NSA.

There are three traditional ROW (rights of way) that run through the LMP area, which are long distance and over remote terrain and a bothy located at Resourie. The higher peaks around Glen Hurich LMP area also offer opportunities for enthusiastic and experienced hill walkers. To reach these users often use the forest road network and other informal access routes.

There is fresh water fishing undertaken on Loch Shiel and local angling club has rights on Loch Dubh Leathad (Doilet) and operates a small row boat on that loch under a permit scheme. These activities attract low levels of participants who also fish the local river networks during the season.

Environmental Factors:

The LMP area contains 325ha of important, if fragmented, PAWS designations. These consist of 45ha ASNW and 275ha of PAWS. A further 4ha is made up of open and ground containing veteran trees but not officially designated as PAWS.

The watercourses within the Glen Hurich LMP area have been identified as containing important spawning sites for Salmon and Trout and considered of key significance to the Salmonid fisheries of the wider Loch Shiel catchment. The Polloch River still sees spring and autumn runs of salmon. There are eight riparian management units identified in Glen Hurich Riparian Management Plan 2012 and which cover some 650ha in total focusing on the main watercourses in the Glen bottoms and corries. This management plan has not reached its conclusion and will be reassessed as part of the Glen Hurich LMP with any remaining actions incorporated into that plan.

There are three main fresh water lochans at Poll Loch, Loch Doilet and Lochan Dubh along with innumerable small hill lochs which feed the main the many tributaries and river system which forms a part of the important Loch Shiel catchment.

Operations aimed at improving the riparian zones have cleared back the Conifer line from the two main river bodies of the LMP area at Abhainn Hurich and Allt an Dubh Choirein.

Rhododendron is occasionally present in Glen Hurich and is routinely removed when discovered. A continued monitoring is undertaken as part of the wider FCS policy to control invasive plant species.

In Glen Hurich wildlife co exists with other forest activities with the key interest species being golden eagles, red squirrel and chequered skipper butterfly. Other species such as pine

martin, badger and otter are also present within the LMP area. An emphasis will be on the continued promotion of diverse habitat creation through tree species matrix and sympathetic planning during harvesting operations. Black throated divers are resident on nearby Loch Shiel but out with the LMP area. The open hill ground is part of the Moidart and Ardgour SPA.

Open Bog is present in the LMP area and has yet to be fully assessed. This will be undertaken as part of the LMP revision and as part of the standard restock policy.

There has been human activity in Glen Hurich for millennia. There are scheduled archaeological remains throughout the forest which range from the Mesolithic period to relatively modern activity and linked to agriculture and mining. There was healthy population prior to the clearances and remnants of that previous use of the land are evident in numerous dykes, cairns, ditches and uses associated with that period.

Neighboring land use is largely centered on deer stalking and there are issues with pressure and deer populations within and the LMP area, especially in trying to establish more palatable species. The fences are porous in places and the red deer population is actively managed via Forestry Commission's internal cull programme.

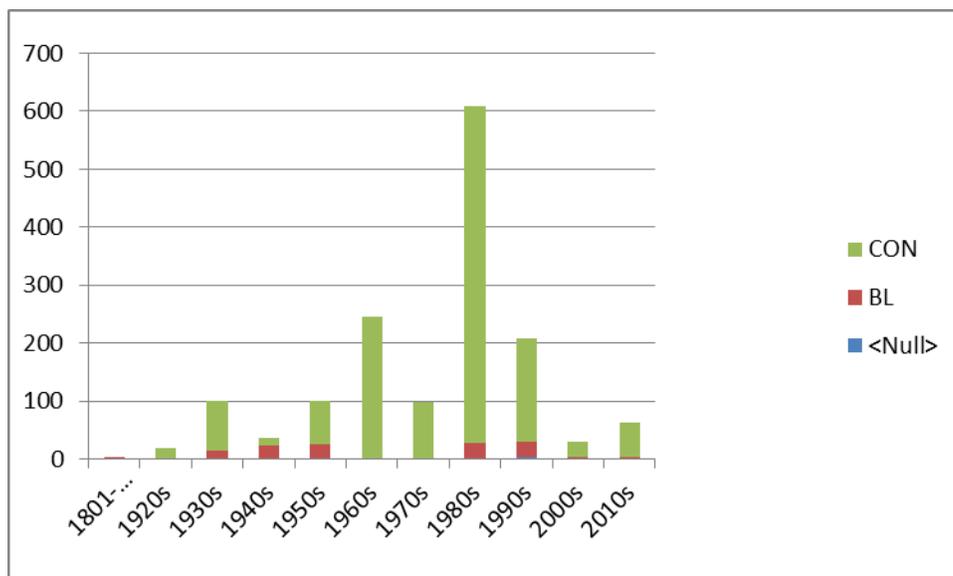
Economic Factors:

The forest is entirely planted with conifer species and Sitka spruce is by far the dominant species making up around 90% of the crop and in pure stands. The remaining crop is made up of larch and an element of other broadleaves.

The forest will supply a significant amount of timber to the LFD programme over the coming decade.

The age structure in the forest stretches over 80 plus years, comprising of first and second rotation crops. These are spread throughout the LMP area where ongoing felling of coupes and subsequent restocking has created a more uneven age structure. However, there are two concentrations of even aged crop in the Glen which give some challenge to restructuring. A large area of 1980s 2nd rotation crop concentrated in the upper portion of the glen and a further even aged area of 1960s 1st rotation crop on the west flank of the forest.

Planting Years-Glen Hurich



There is a road infrastructure to all of the forest excepting a large area of Sitka spruce located on the south facing slopes of Sgorr an Tarmachan above the glen. An assessment of roading requires will be undertaken as part of the planning process. This will include required new roading and upgrade of those in a poor state of repair.

Windthrow is beginning to increase in the forest although not significant at present, this may change as areas of standing first rotation crop are harvested. The density of the crop will make it difficult to retain windfirm edges due to the lack of rides, natural features and green edges in Glen Hurich forest.

The terrain and steep aspects present operational challenges in the extraction of much of this crop and could impact on the economic viability of harvesting in some instances. Careful consideration of potential negative economic factors including roading costs will be undertaken as part of the plan. The potential impact of slope instability also requires further study and assessment.

The extraction of timber from the main glen east of Loch Doilet requires the utilisation of the minor public road for 3.5km and a bailey bridge carries traffic over the Polloch River at NM79316811 near Bailenaseilich. The road was resurfaced recently in agreement with Highland Council. There is no agreement to haul timber over the Bealach nam Feith Laoigh (Polloch hill) and the minor road to Strontian.

Stakeholders & Consultation

Sunart Community Council

Cona Glen Estate

Local Deer Management Group

Historic Environment Scotland

Strontian Angling Association

Scottish Water

Highland Council

Scottish Natural Heritage

SEPA

CONFOR

Scottish and Southern Electricity

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Appendix 1 Achieving national priorities locally

The management of the Forestry Commission Scotland's national forest estate is guided by The FES National Strategic Directions (2013-16). These directions form the basis of the Lochaber FD Strategic Plan (2014-17)

The directions are used as the basis for the development of this Land Management Plan brief

- 1. Healthy**, achieving good environmental and silvicultural condition in a changing climate.
- 2. Productive**, providing sustainable economic benefits from the land
- 3. Treasured** , as a multi-purpose resource that sustains livelihoods ,improves quality of life and offers involvement and enjoyment
- 4. Accessible** , local woodlands and national treasures that are well promoted , welcoming and open for all
- 5. Cared for** , working with nature and respecting landscapes , natural and cultural heritage
- 6. Good value**, exemplary, effective and efficient delivery of public benefits.

The individual forest areas of Lochaber differ in the contribution they make to achieve the different national directions. The following highlights the contribution that Glen Hurich forest can make to deliver these national priorities.

Healthy	<ul style="list-style-type: none">• Achieving a better balance of commercial species through species diversification and by using intimate mixes.• The forest lacks diversity with wind blow and disease posing potential threats to future sustainability. Building in resilience to these factors and climate change is a key driver in these design considerations.• We will select species well suited to the current site conditions while still meeting the plans objectives. Coupe boundaries will be designed to bring down the commercial tree line and restructured to enhance natural features. Rides will be designed to break up the current blanket effect of the forest and create new green edges and open spaces.• Thinning is not possible in the current stands of trees, however, it should be possible in the next rotation provided intervention is undertaken at the correct time.
Productive	<ul style="list-style-type: none">• Glen Hurich is situated in a remote location although there is a direct link to the saw mill at Fort William via the Loch Shiel haul route which links to the A830 public highway near Glenfinnan some 20 miles in length. The terrain is steep and although some harvester/forwarder ground gives straightforward working conditions an element of winch work is likely in many coupes. The current felling plan for the next ten years is an average annual volume to 7cm+ of c11km³ per year. The uneven age distribution of the productive stands currently gives a 3 fold rise in timber production in the period 2037-41. The plan will seek to spread the flow of timber over a longer period.• The principle challenge in harvesting the maturing crop is optimising

the economic return and then to minimise subsequent wind damage to remaining standing crop during the process. A careful consideration, identification and creation of wind firm edges using natural features and the topography is essential when planning coupes.

- The LMP area is climatically suitable for a range of tree species despite the poorer quality of the soils. This choice, however, is reduced by current planting restrictions on choice between key species. Consideration to diversifying species is therefore constrained, however, intimate mixes such as SP/BI, SS/LP and a supplementary application of fertiliser for establishment will be reviewed. An assessment as to any potential effect on riparian areas will also need to be considered in this instance along with species choice. The second rotation crops may offer a lower yield class with a possible loss of soil fertility, however, current infrastructure and roading allows access to a large proportion of the forest which aids their economic viability.
- There is scope for small scale thinning of Birch regeneration and sale of firewood materials in Glen Hurich.
- The area of broadleaf woodland will be expanded as part of the restoration of PAWS to native species. The opportunity to establish this with a view to obtaining some timber will be considered. Regeneration will be achieved through natural regeneration and supplementary planting. This will aid species diversity in the forest.
- Deer management will continue to be an important activity with the Glen Hurich LMP area as the amount of vulnerable woodland increases through restocking and regeneration.
- There are currently no renewable energy development plans for the LMP area.
- Opportunities will be looked at to bring the derelict agricultural lands at Glen Hurich house, Sawmill and elsewhere in the LMP area back into more productive use.
- There are proposed disposals of two small parcels of land and one larger area at Lochan Dubh. These will not affect the overall productivity or viability of the forest.
- Recreation within Glen Hurich forest is limited. There are a number of long distance routes (ROW) which link the Glen Hurich to Glen Scaddle and Cona Glen to the East. These cross remote country and link to hill access routes giving access to the areas numerous Corbett's. A MBA bothy is located at Resourie, deep within the forest.
- The Western part of the forest fronts onto Loch Shiel SSSI at Polloch. This fresh water loch is also protected by an SPA and designated as an NSA (National Scenic Area)
- The importance of the riparian features for fishing interests in the forest is recognised. The design of the woodland will take this factor into consideration
- Much of the forest is situated on steep sided glens and blends well into the wider landscape. Any key viewpoints are from the higher

	<p>slopes and from the West around Loch Shiel and Polloch which offers views into the forest. A monoculture of SS and a high uneconomical tree line in places need addressing through the planning process. Care to ensure the natural contours of the land are planted to compliment the wider landscape and scenic value of the area with coupes fitting the landscape when seen from key viewpoints.</p>
Treasured	<ul style="list-style-type: none"> • The opportunity to protect and expand riparian areas on the Glen floor is recognised. The associated benefits to tree species diversification, fishing and water quality within these zones are an important consideration within this plan. • There continues to be opportunity to further protect, expand and connect PAWS designations in the Glen Hurich LMP area. We recognise the local, conservation and environmental value of these woodlands. The plan will reflect a desire to continue improving the re-establishment of native species through regeneration and planting. • The shore fronts around Loch Dubh Leathad (Doilet) Polloch and Loch Shiel are important features of the Glen Hurich forest. The plan will enhance these natural features through appropriate species choice and sympathetic coupe design.
Accessible	<ul style="list-style-type: none"> • Glen Hurich is a remote forest with good access for the visitor. The forest is used by experienced outdoor enthusiasts and by local people from the surrounding townships and villages. • The local angling association use the forest to access the shores of Loch Doilet and the River Hurich.
Cared for	<ul style="list-style-type: none"> • Previous work around the riparian zones on the River Hurich has removed Conifer from the water's edge. There remains opportunity to further expand and improve this riparian feature along with associated tributaries through the planning process. • Restoration of identified PAWS sites will continue and opportunities to link broadleaf remnants will remain a strong aspiration within this LMP.
Good value	<ul style="list-style-type: none"> • The production of timber will be the principle source of income generation from Glen Hurich with the addition of some venison sales.