



Forestry and
Land Scotland
Coilltearachd agus
Fearann Alba

South Knapdale

Long Term Plan (LTP)
2026 – 2036

We manage Scotland's national forests and land to 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. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.



The mark of
responsible forestry

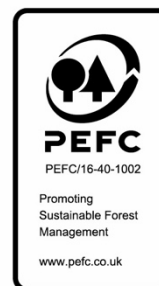


Table of Contents

South Knapdale	1
Long Term Plan (LTP)	1
2026 – 2036	1
Table of Contents	2
A. Description of Woodlands	4
A.1 Property Details and Declaration	4
Declaration	5
A.2 Location and Background	6
A.3 Existing Schemes & Permissions	6
A.4 Stakeholder Engagement	7
A.5 Long Term Vision and Management Objectives	10
A.6 General Site Description	13
A.7 Woodland Description	20
A.8 Plant Health	21
B. Analysis of Information	24
B.1 Constraints and Opportunities	24
B.1 Constraints and Opportunities	24
C. Management Proposals	29
C.1 Silvicultural Practices	29
C.2 Prescriptions	29
C.3 Environmental Impact Assessment and Permitted Development Notifications	55
C.4 Tolerance Table	56
D. Production Forecast	57
Maps	57
Appendices	58

Version History

Version	Date	Comments

A. Description of Woodlands

A.1 Property Details and Declaration

A.1 Property Details			
Property Name:	South Knapdale		
Grid Reference: (e.g. NH 234 567)	NR 8006 6465	Nearest town or locality:	Tarbert
Local Authority:	Argyll & Bute Council		
LTP plan area (hectares):	4161ha		
Applicant Details			
Regional Manager:	Andy Hunt		
Planner:	Anatua Martin		
Organisation:	Forestry and Land Scotland	Position:	West Region
Primary Contact Number:	07584106290	Alternative Contact Number:	N/A
Email:	Anatua.martin@forestryandland.gov.scot		
Address:	Whitegates, Lochgilphead		
Postcode:	PA31 8RS	Country:	Scotland
Approval - to be completed by Scottish Forestry staff:			
LTP Reference Number:			
Plan Period: (ten years) (day/month/year)	From:	To:	
Operations Manager Signature:		Approval Date: (dd/mm/yyyy)	

Declaration

I hereby apply for a permission to fell the trees described in this application and I certify that:

- I am authorised to sign legal contracts on behalf of Forestry and Land Scotland.
- I undertake to obtain any permissions necessary for the implementation of the approved Plan.
- I have made the necessary checks with the local planning authorities regarding Tree Preservation Orders and Conservation Areas.
- I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which SF agreed must be included.
- I hereby acknowledge that Scottish Ministers may process any of my personal data contained in or relating to this application in accordance with the terms of Scottish Forestry's Privacy Notice.
- Where applicable and appropriate I have submitted an EIA screening opinion request form for operations contained within this application under the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 for road building /quarries /afforestation /deforestation.
- I have read and understand this application fully and, to the best of my knowledge and belief, the information given in this application is complete, true, and accurate.
- I accept that any false or misleading information provided in this application constitutes an offence and may result in any felling permission based on this application being revoked at any time.
- I have read and understand Scottish Forestry’s Privacy Notice.

Do you give consent for Scottish Forestry to access your land? Delete as appropriate.		YES			
You are not obliged to give us consent to enter your land, however if we are denied access to your land, and cannot carry out an assessment because of this, we may reject your application.					
This consent is for access to assess this application as well as monitor compliance with any subsequent approval, where applicable					
Signed:				Date:	
Print:					

A.2 Location and Background

The South Knapdale Long Term Plan (LTP) covers a total area of 4161ha, incorporating three forest blocks:

- Coulaghailtro ~1604ha
- Torinturk ~1458ha
- Meall Mhor ~1099ha

The South Knapdale area of Argyll is located north of the Kintyre peninsula and south of the Crinan Canal. The area of the LTP extends no further than the northern shores of West Loch Tarbert at its lower extent and Artilligan Cottage at its upper extent. The B8024 envelops the LMP area, linking it to Tarbert and the A83.

Since the previous plan, Inverneil forest block has been incorporated into the Knapdale LMP as it borders the Knapdale Forest block.

It is recognised that accessible areas of the Torinturk forest block are locally known as the Achaglachgach Woods. However, for consistency throughout this Long Term Plan, the area is referred to as the Torinturk forest block, in line with the naming convention used for the other plan areas, namely the Coulaghailtro forest block and the Meall Mhor forest block.

See Map 1 Location.

A.3 Existing Schemes & Permissions

The purpose of the Long Term Plan (LTP) is to outline felling and thinning proposals over 20 years with the first 10 years (2025-2035) in detail along with restocking proposals for the whole plan area. This first 10-year period is particularly important because it relates to the part of the LTP that requires specific approval from Scottish Forestry (SF), including operations which may require screening for a determination on whether Environmental Impact Assessment (EIA). Where plans include woodland creation, deforestation, roads and quarries, an accompanying Screen Opinion Request will be submitted to SF. Longer term management of South Knapdale is included in the plan but to provide an indication of the direction of travel and to provide context.

The plan will be reviewed after five years to ensure the objectives set out in the LTP are still appropriate for the management of the forest in the current conditions. All operations, both planned and completed, will also be reviewed to ensure they are still necessary to achieve the stated objectives.

The management of the woodland is certified and will always adhere to the UK Forestry Standard (UKFS) and the UK Woodland Assurance Standard (UKWAS).

This LTP has been produced in accordance with a range of government and industry standards and guidance as well as recent research outputs. A full list of these standards and guidance can be found on our website.

Table: Existing Schemes & Permissions		
Type	Ref. No.	Details
LMP	033/W/S/12(4)	Expired 20/08/2022
FPA	FPA-13110	For 5 coupes in Meall Mhor block. Expires 13/03/2030
SPHN	STH22_0873	Compliance expired 31/08/2024
SPHN	STH25_0626	Compliance date 31/08/2027
SPHN	STH24_0450-0452	Compliance date 31/08/2026
SPHN	STH23_0582b	Compliance date 31/08/2026
FPA	FPA-13657	1 coupe and felling within quarry area in Torinturk

A.4 Stakeholder Engagement

A full record of comments raised during public consultation is available in Appendix I.

A key outcome of the consultation process has been the strengthening of the plan through constructive engagement with local communities, conservation groups, neighbours and other stakeholders. Feedback helped refine proposals for felling phasing, PAWS restoration, protection of watercourses and the marine environment, habitat connectivity, deer management, invasive species control and operational planning. The process also established positive working relationships with local groups, creating opportunities for ongoing collaboration. As a result, the plan is better informed by local knowledge and achieves a stronger balance between sustainable timber production and environmental enhancement.

Significant issues raised by FLS staff:

Within the Coulaghaitro forest block key issues raised by staff: how to access and restructure approximately two thirds of the block, comprising largely even aged first rotation conifer woodland. Discussion focused on developing a sustainable roading and harvesting strategy that would enable current timber extraction while future proofing access infrastructure and establishing a more diverse and resilient forest structure for subsequent plan periods.

Within the Torinturk forest block, key issues raised by staff: how to balance PAWS restoration and coastal rainforest expansion with the phasing of timber harvesting in an area containing a local community, including a former forest village, that has experienced little operational forestry activity

for many years. Discussions focused on delivering long term habitat restoration objectives while managing operational impacts and maintaining effective engagement with local residents.

Within the Meall Mhor forest block, key issues raised by staff: how to manage large areas of inaccessible, even aged Sitka spruce and poorly performing crops on peaty soils. The north-south overhead powerline corridor was identified as a significant constraint, fragmenting several forest coupes and affecting future forest design and harvesting. Separate discussions focused on enhancing and buffering the SSSI and improving habitat connectivity across the block.

Table: Public Engagement Summary	
Scoping – Main points 1 st public consultation	FLS response
The first consultation highlighted strong support for enhancing the environmental value of the plan area alongside sustainable timber production. The main themes raised were: Strong support for PAWS restoration, coastal rainforest recovery, native woodland expansion and invasive species removal. Widespread interest in improving habitat connectivity and creating a continuous coastal rainforest corridor along West Loch Tarbert. Recognition of the need to balance commercial forestry and environmental conservation. Support for protecting ancient woodland, coastal hazel woodland, riparian habitats, SSSI areas and native wildlife. Concerns regarding deer impacts, clearfelling, water quality, riparian habitats and slope stability. Requests to minimise impacts on Torinturk village and protect local heritage features. Support for maintaining and improving walking and cycling access, with suggestions for additional recreational and interpretive facilities. Recognition of the area's high environmental value and support for expanding native woodland and rainforest habitats.	The LTP will deliver PAWS restoration, native woodland expansion, invasive species control and improved habitat connectivity. Ancient woodland, coastal rainforest, riparian habitats and SSSI features will be protected and enhanced. FLS acknowledged concerns regarding deer, wildlife, water quality and clearfelling, with measures proposed to minimise impacts. Existing walking and cycling access will be maintained. FLS welcomed community involvement and partnership working in restoration and conservation activities. Overall, FLS confirmed that environmental enhancement and woodland restoration will be delivered alongside sustainable timber production.

Table: Public Engagement Summary	
Overall, respondents were broadly supportive of the plan direction, with a strong emphasis on rainforest restoration, habitat connectivity, wildlife conservation and the protection of sensitive environmental features.	
Draft proposals – Main points 2 nd public consultation	FLS response
The second consultation generated significant interest in the environmental aspects of the plan, particularly within the Torinturk area and around West Loch Tarbert. The main themes raised were: Support for a more restorative approach to forestry, with greater emphasis on rainforest restoration, biodiversity and native woodland expansion. Concerns about the scale and impacts of clearfelling, particularly on woodland habitats, wildlife, landscape character and the wider environment. Strong interest in protecting the West Loch Tarbert marine environment, including water quality and sensitive marine habitats. Support for expanding and connecting the coastal rainforest corridor, promoting natural regeneration and retaining native woodland. Recognition of the need for deer management and increased native planting, especially around watercourses. Requests for improved communication and engagement regarding forestry operations and felling activities. Strong support for collaborative working between FLS, local conservation groups and the community. Queries regarding timber transport and operational impacts. Generally positive feedback on the consultation process and opportunities for engagement. Overall, respondents broadly supported the plan objectives but sought greater emphasis on environmental restoration, protection of the marine and	Consultation feedback informed changes to the proposals, including revised PAWS restoration areas, extended felling phasing and natural regeneration as the preferred restocking approach. FLS committed to restoring PAWS, expanding native woodland, improving habitat connectivity, and managing invasive species and deer impacts. Concerns about clearfelling, water quality and impacts on the marine environment were acknowledged, with environmental safeguards and monitoring proposed. Ongoing collaboration and communication with Action West Loch, local communities and stakeholders will continue throughout implementation of the plan. Clarification was provided on haulage, transport and operational matters, with commitments to minimise impacts where possible. Overall, consultation helped refine the plan, strengthen environmental safeguards and establish a framework for ongoing partnership working.

Table: Public Engagement Summary	
freshwater environment, and ongoing collaboration with local communities and conservation groups.	

A.5 Long Term Vision and Management Objectives

Vision

Productive forests that produce a sustainable supply of sawlog timber, while developing conservation area networks and promoting Natural Capital. ASNW will be protected and native woodland areas expanded. Species diversity will improve through restocking with alternative conifers where conditions are suitable, as well as with broadleaves. Restoring PAWS of high ecological value; connecting habitats through riparian zones and the rainforest corridor; and protecting the SSSI and priority open habitats will help to improve biodiversity and build resilience.

Management Objectives		
Number	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
1	Maintain sustainable production of sawlog timber, focusing production in areas with suitable growing conditions and access.	Deliver a significant quantity of sawlog timber throughout the plan period through the implementation of the proposed felling and restocking programme.
2	Improve forest resilience by increasing tree species, tree age and structural diversity, through coupe design and restocking.	Deliver increased species and age class diversity through the implementation of the proposed felling and restocking programme, improving forest resilience, habitat diversity, and structural variation.
3	Protect rainforest habitat and restore high and medium ecological potential PAWS.	Restoration of PAWS through natural regeneration where a suitable native broadleaf seed source is present. Increased resilience, extent and protection of rainforest habitat through improved habitat connectivity, restoration of adjacent PAWS areas, and the ongoing control

Management Objectives		
Number	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
		and removal of invasive non-native species. Continued invasive species removal within Torinturk in partnership with Argyll Countryside Trust (ACT), Our Rainforest Futures and Action West Loch (AWL), supporting native habitat restoration and long term forest resilience.
4	Strengthen native broadleaves along riparian zones.	Successful extension of riparian buffers and associated native broadleaf habitats where appropriate through the delivery of an Environmental Programme. This will include broadleaf establishment and management, invasive species control, and the removal of Sitka spruce and Western hemlock regeneration to enhance watercourse protection, improve habitat connectivity, and support native woodland and coastal rainforest restoration objectives.
5	Where possible, restructure coupe design to fit landform and optimise efficiency of operations, including around utilities.	Secure approval of the Long Term Plan (LTP) coupe structure and successfully implement the proposed felling and restocking programme.
6	Protect Priority Open Habitats.	The condition of Priority Open Habitats has been maintained or enhanced through the proposed management prescriptions, ensuring their long-term ecological value is protected and improved where opportunities exist.

Management Objectives		
Number	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
7	Where possible, improve habitat connectivity through Conservation Area Networks and High Value Conservation Areas, working with neighbours and conservation organisations where appropriate.	Habitat connectivity has been enhanced through the removal of conifers and non-native species from riparian corridors and woodland networks, the expansion of buffer zones, and the creation of habitat linkages across clearfell areas. Successful ongoing collaboration with neighbouring landowners and conservation organisations, including ACT and AWL, has further strengthened ecological connectivity and delivered landscape scale conservation benefits across the wider coastal rainforest landscape.
8	Consult with community, neighbours and local organisations on forest design and long term management plans.	Two well attended public consultation events were held during the scoping and final proposal stages of the plan development process. Attendees included local residents and neighbours, managers of adjacent woodland properties, community action groups, the Community Council, and rainforest and environmental interest groups. Following these events, and subsequent consultation with private water supply (PWS) users, there has been ongoing

A.6 General Site Description

A.6.1 Topography and Landscape

All three blocks of the plan area are within the Plateau Moor and Forest Landscape Character Type (NatureScot, NS). This landscape type is characterised by upland plateau with rounded ridges, craggy outcrops and an irregular slope profile. Narrow glens dissect the uplands and lochs and bog are found in low lying hollows.

Elevation ranges of each block:

- Meall Mhor, from sea level in the eastern coastal edge of the northern area of the block to 484m at the top of Meall Mhor;
- Torinturk, from sea level along the southwestern edge with West Loch Tarbert to 319m at Cruach an Lochan; and
- Coulaghailtro, the elevations range from 40m to 267m at Cruach Lagain in the northern area of the block. Prevailing wind is from the south-west.
-

A.6.2 Geology and Soils

The underlying geology is predominantly metamorphic, with intruded bands of Basalt, Dolerite and Camptonite in Coulaghailtro. Metamorphic rocks on the west side of Coulaghailtro comprise slates, phyllites and mica-schists with some bands of Epidiorite and Hornblende schist. The remainder of the forest area is underlain by Quartzite and Quartzite mica-schist, with a south-west north-east alignment, but not as strongly reflected in the landform as north Knapdale. The landform typically comprises rounded hills, poorly drained plateau and incised valleys.

Soils comprise mainly peaty gleys and flushed Blanket bogs with areas of deep peat.

A.6.3 Climate

Climate change models suggest that the general trend will be towards a significantly warmer climate with higher winter rainfall and lower rainfall in the summer leading to a partial soil moisture deficit during the summer months. In terms of the next rotation these figures have limited impact on species choice according to ESC models and the short rotation of SS across much of the site further reduces the risk of climatic impacts. However, this level of climatic change is likely to interact in the longer term with soil characteristics, and this may have a positive impact on soil structure and widen the range of species potentially suitable for the site. There are also threats to the suitability of SS as a timber species if significant summer droughts become normal. This needs to be reviewed and our response agreed to climate change locally.

The climate data for South Knapdale was obtained from the Ecological Site Classification system (ESC). The results of interrogating this system gave the following data.

The climate data for Coulaghailtro and Torinturk blocks indicate warm, wet and highly exposed conditions; while Meall Mhor is cool, wet and severely exposed. All three blocks are close to the sea and have a low continentality of 4. The annual mean temperature for the region is in the range 10 °C to 11°C, with the prevailing wind direction being west south-west. Climate change predictions suggest that the climate will become generally warmer and wetter, with more extreme rainfall events and storms.

The wind throw risk is measured by the DAMS score for the forest area. DAMS is the Detailed Aspect Method of Scoring. This represents the amount of physically damaging wind that forest stands experience in the year.

Coulaghailtro has an 80/20% split between scores 17-21 in upper more exposed slopes and 14-16 in the lower sheltered areas; Torinturk has a 50% split; and Meall Mhor has a 60/40% split. Across all three blocks there are no scores within the lowest category (0-11).

Each tree species has tolerances for these, and other factors, and they can be used to identify species suitable for the site conditions. The results above will be used to help assist in the choice of tree species for restocking in this plan.

A.6.4 Hydrology

Private Water Supplies

Most properties within the wider LTP area are served by private water supplies (PWS), with PWS infrastructure present within all three forest blocks.

Private water supplies can be abstracted from a stream, spring, well or borehole, and usually consist of a series of pipes and tanks feeding one or more properties. All known supplies within FLS land are mapped (see Maps 20a-c Water Supply Points Confidential) and this information is fed into all worksite planning well in advance of any operations to ensure there is no detrimental impact on the water supply. In addition to the individual supplies, the water catchments feeding into these abstraction points have been identified and mapped for use at an operational level where best practice Forestry and Water Guidance will be rigorously followed.

Any changes to these supplies are discussed with the relevant properties and a plan drawn up to carefully manage the site. This may lead to operational delays but allows a full understanding, especially of complex supplies such as those surface fed from a diffuse source. FLS continually endeavors to identify all supplies and any further points found will be added in to the database to give comprehensive coverage.

Water catchments and protected areas

There are two Scottish Water Drinking Water Protected Areas within the LTP area. At Coulaghailtro, the public water catchment serves the village of Kilberry. The second catchment is centred on Loch Chaorainn Reservoir, located approximately 500m from the nearest point of Meall Mhor forest, with the Scottish Water catchment extending into the south-western area of the Meall Mhor block.

There are three SEPA waterbody catchments within the LTP area, all of which form part of the Knapdale Coastal catchment.

Coulaghailtro

The Abhainn Learg an Uinnsinn/Allt Caorainn borders the south-eastern edge of Coulaghailtro and the north-western edge of Torinturk and is classified by SEPA as being of Good Ecological Status.

Torinturk

The Eas a Chais forms part of the north-eastern boundary of the forest block and is classified by SEPA as being of Good Ecological Status.

Meall Mhor

The catchment of the Abhainn na Cuile/Allt Mòr borders the south-western edge of the Meall Mhor block and is classified by SEPA as being of Moderate Ecological Status.

Any run-off from forest operations, or from watercourses draining the forest, has the potential to affect these catchments and downstream water quality. Forest operations will therefore be planned and implemented in accordance with the UK Forestry Standard (UKFS) and Forests and Water Guidelines, with appropriate measures including riparian buffers, sediment and drainage management, and operational controls to protect the water environment and maintain water quality

Open Water within the Forest Blocks

Coulaghailtro

Lochan Dubh is situated in the north of block. It is a small lochan at 0.86ha.

Torinturk

The open hill land in Torinturk borders Loch a' Chaorainn located outwith the FLS estate on the northern boundary of the forest block. Loch a' Chaorainn is an impounded reservoir.

Meall Mhor

Meall Mhor loch is privately owned fishing loch and is a resting site for red throated divers.

West Loch Tarbert

West Loch Tarbert borders the southern edge of the Torinturk forest block and forms part of the Sound of Gigha Special Protection Area (SPA), designated for its nationally important populations of great northern diver, Slavonian grebe, common eider and red-breasted merganser.

A range of Priority Marine Features (PMFs) are present within the loch, including native oyster beds, seagrass beds, serpulid reefs, maerl beds, and populations of salmon, sea trout and blue mussels. See Appendix VIII for more detailed information on the marine environment of West Loch Tarbert.

Fish farm

A fish farm is located in the coastal waters of Loch Fyne, offshore from the Meall Mhor forest block.

A.6.5 Windthrow

This region is, on average, the windiest in the UK, with frequent areas of low pressure passing over this area, especially from December to February, when mean speeds and gusts of wind are at their strongest.

The windblow risk is high across much of the operational area and there is evidence of windblow already, notably in Torinturk. Windblow risk informs coupe shape and the need to fell to windfirm boundaries and it constrains areas suitable for thinning.

DAMS scores are high across large parts of the forests (above 17 across most of Coulaghailtro and the western parts of Torinturk and Meall Mhor).

Windblow risk for SS with a no thin green edge (adjacent stands present and no open edges such as felled areas) is low, i.e. predicted 70 – 100 years until > 50% of the stand suffers windblow. However, windblow risk for SS with a brown edge (hard woodland edges, roads and stands with adjacent felled coupes) is moderate to high. High risk (WB in 10-40 years) areas cover the northern and southern parts of Meall Mhor; most of the eastern section and parts of the west of Torinturk and most of Coulaghailtro.

A.6.6 Adjacent Land Use

The majority of neighbouring land comprises private commercial forestry owned or overseen by private forestry management organisations, including Scottish Woodlands, RDS Forestry and Tilhill, together with areas of open hill ground managed as sporting estates. The former forestry village of Torinturk lies within the Torinturk block. In addition, a number of residential properties are located adjacent to the forest, particularly along the southern boundary of the Torinturk block, the western and southern boundaries of Coulaghailtro, and to the east of Meall Mhor.

Within the wider area, tourism and business interests include a caravan park, a range of holiday accommodation, a wedding venue and a fish farm.

A.6.7 Access

Torinturk and Meall Mhor have the most community and visitor use, with Coulaghailtro less so.

Meall Mhor

In Meall Mhor there has been significant infrastructure development in the form of a new electrical powerline running north-south through the length of the block. The powerline access road along its route is used informally by cyclists and walkers. A core path from the A83 to the mast situated on the highest summit, Meall Mor, is also well used.

Torinturk

In Torinturk a core path circular route leads to two Scheduled Monuments: Cnoc Dubh na Leitreach and Diarmid's Grave (also known as the Giant's Grave) and Dun a Choin Duibh (Black Dog).

This area of Torinturk was previously a formal visitor site designed as an entry level experience for members of the public to explore the two Scheduled Monuments detailed above. The Scheduled Monuments remain the focal points of this informal walk and are still maintained to an agreed HES standard.

The majority of the route sits within an interactive zone 20m from the path and a surrounding passive zone. Interactive zones are within the immediacy of the route and passive zones are considered as backdrop or landscape value to the visitor experience and are considered in the creation and management of the coupe.

The site was deformed in 2022, removed from the formal register and is no longer advertised within the range of sites that are presented as introduction facilities. The route is a core path in a remote setting.

Footfall is extremely low in numbers and FLS does not have a responsibility to maintain remote routes like this. However, FLS does try to keep them clear within available means and where practically achievable as outlined on The Scottish Outdoor Access Code.

Since deforming the forest furniture has been removed at point of failure. There are no built constructs on site such as bridges, platforms, or walkways which through failure may lead to route closure. We therefore expect to maintain the route at its current level barring major events which may adversely effect the area.

A.6.8 Historic Environment

There are two Scheduled Monuments within the Torinturk forest block: Cnoc Dubh na Leitreach (NR 8030 6346) and Dun a' Choin Duibh (NR 8043 6408). In addition, a large number of other heritage features are present across the plan area.

Within Torinturk, these include a chambered cairn, former settlement sites, farmsteads and shielings, which are considered to be of regional and local importance. Coulaghailtro also contains a number of heritage features of regional and local significance, including settlements, shielings and sheepfolds. Meall Mhor contains evidence of past industrial and agricultural land use, including charcoal burning platforms, former lead and copper mines, as well as settlements and farmsteads. See Maps 11a-c Heritage.

All known heritage assets will be protected and managed in accordance with relevant guidance and operational procedures.

A.6.9 Biodiversity

A range of species are present across the LTP area, including priority species such as black grouse, pine marten, badger, red squirrel and otters. Fresh water pearl mussels are also present. Forest blocks are used by white tailed eagles and other raptors. Wood ant populations are widespread within PAWS areas. Deer are widely present across the LTP area.

Priority habitats, including blanket bog, ancient woodland and upland heath are found within all three forest blocks, with conservation area networks providing connectivity.

The highest ecological potential for deadwood is found in the established woodland within ASNW, PAWS and riparian areas, also within Long Term Retentions and minimum intervention areas. Areas of lower potential for deadwood will be found in the higher, more exposed areas of conifer crop. Where possible, deadwood will be left at the edge of clearfell coupes, where open to light and where it may link into the Conservation Area Network.

Coulaghailtro

To the south and west of the Coulaghailtro forest block lies the Kilberry Coast SSSI, designated for its Dalradian geology, maritime cliffs, sand dunes, shingle habitats and notable vascular plant assemblages.

Small pockets of ancient semi-natural woodland are present along the eastern edge of the block. Significant areas of open habitat occur to the north, including blanket bog and upland heath, which contribute important ecological value and habitat diversity within the wider landscape.

Torinturk

The Torinturk forest block contains exceptionally rich remnants of ASNW and has strong ecological connectivity with internationally important woodland sites located on neighbouring land to the north-east and south-west. These include Ardpatrik and Dunmore Woods SSSI and Glen Ralloch to Baravalla Woods SSSI, which together form part of the Tarbert Woods Special Area of Conservation (SAC). These designated sites are recognised for their upland oakwood habitats and associated lichen and bryophyte assemblages.

Torinturk forest block forms an important component of the coastal rainforest network along the northern shore of West Loch Tarbert, contributing to a significant habitat corridor that extends beyond the forest block boundary. The ASNW remnants are primarily concentrated along the coastline and watercourses, where they are linked through the forest's conservation area network and associated riparian habitats.

Large areas of Plantation on Ancient Woodland Sites (PAWS) are also present along the coastal zone of Torinturk and extend up along watercourses and adjacent to Lochan Liath. Wood ant populations are widespread in PAWS areas within the block. Much of the PAWS here are second rotation Sitka spruce plantations and unfortunately have relatively limited remnants likely due to comprehensive clearfell operations following the first rotation. Much of the ecological potential is related to connectivity to ASNW remnants rather than extant features within the PAWS areas.

The Torinturk forest block borders the Sound of Gigha Special Protection Area (SPA), which is designated for its populations of great northern diver, Slavonian grebe, common eider and red-breasted merganser.

A range of Priority Marine Features (PMFs) occur within the coastal waters of West Loch Tarbert. These include a significant native oyster population, which is the focus of an ongoing restoration project led by Action West Loch (AWL) and partners; seagrass beds; serpulid reef habitats, which are also subject to restoration efforts; maerl beds; and populations of salmon, sea trout and blue mussels.

These sensitive marine habitats and species are important ecological receptors and will be considered in the planning and delivery of forest operations. Where appropriate, measures to protect water quality, minimise sediment and nutrient inputs, and maintain healthy riparian habitats will contribute to safeguarding the marine environment and support wider catchment scale biodiversity and restoration objectives.

Further information on the marine ecology of West Loch Tarbert, including current restoration and research projects, is provided in Appendix VIII.

Meall Mhor

Meall Mhor contains the Artilligan and Abhainn Srathain Burns SSSI, designated for its deeply incised wooded gorges supporting coastal oak and birch woodland habitats. The eastern part of the forest block contains extensive areas of Ancient Woodland Sites (AWS), which are connected to additional areas of ancient woodland beyond the FLS boundary and the Tarbert Woods Special Area of Conservation (SAC). PAWS are particularly prevalent within the riparian zones, presenting opportunities for habitat restoration and enhancement.

Meall Mhor Loch, a privately owned fishing loch, provides a nesting site for red-throated divers and is an important ecological feature within the block. To the west, there are extensive areas of open ground comprising predominantly blanket bog and upland heath habitats, which contribute significantly to the area's biodiversity and landscape character.

A.6.10 Invasive Species

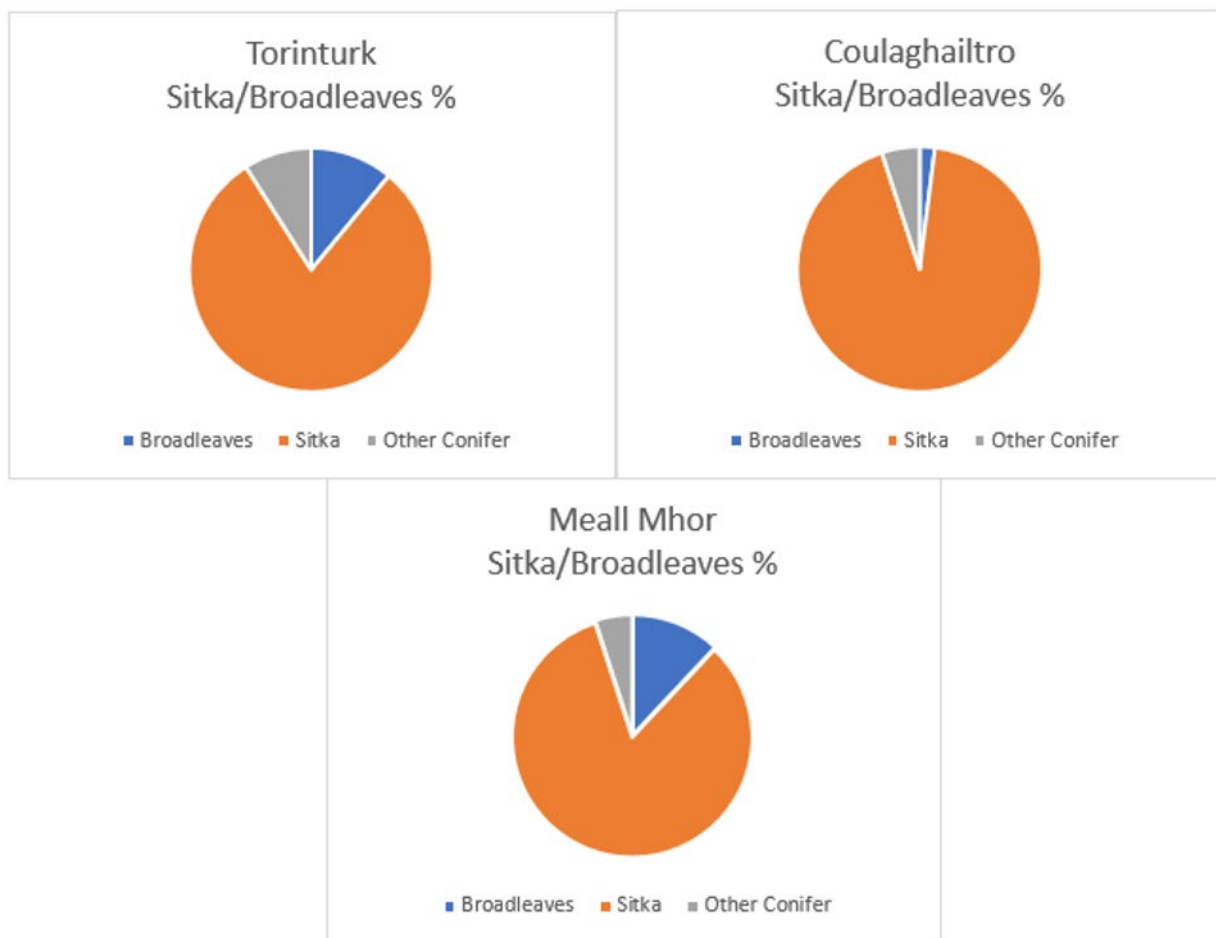
Invasive non-native species are widespread throughout the plan area and represent one of the principal threats to native woodland, PAWS restoration, and rainforest habitats. Identified species include *Rhododendron ponticum*, bamboo, buddleia, pampas grass, skunk cabbage, and Japanese knotweed. Ongoing control and removal programmes will be implemented to reduce their impact and support habitat restoration objectives.

Western hemlock is also present within PAWS areas and poses a significant threat to Ancient Semi-Natural Woodland (ASNW) characteristics. Its removal will be undertaken through the proposed felling programme to promote the recovery and expansion of native woodland habitats.

A.7 Woodland Description

Approximately 70% of the LTP area is under woodland cover, with Sitka spruce (gross) accounting for 86% of the planted species and broadleaves covering 7% of the forested area. The charts shown below demonstrate that Meall Mhor and Torinturk are broadly similar in conifer/broadleaves composition; while Coulaghailtro currently has a more mono species conifer structure.

Timber production remains the core function of all three forest blocks. See Map 2a-c Current Species which shows the existing tree species composition and pattern.



Pie charts for each forest block showing percentage split of conifer, broadleaves and other conifer

A.8 Plant Health

The most serious disease currently in the region is *Phytophthora ramorum* in Larch and the only one subject to statutory plant health notices (SPHN). Larch is no longer a viable tree species for forestry on the west coast. An accelerated programme to remove the existing stands of larch is underway and it is no longer being planted. South Knapdale LTP lies within the RISK REDUCTION ZONE.

Dothistroma needle blight (DNB) affects pine species. Pine stands are being monitored and the worse affected brought forward for harvesting. Only the Alaskan lodgepole pine has resistance and Scots pine can only be planted away from the Caledonian pinewood inventory sites.

Ash Dieback is working its way through the Region with the expectation that at least 90% of the ash will be lost. Pre-emptive felling of ash is not being undertaken in the hope of being able to identify some resistant trees

Table 1 - Area by species

This shows the current and future species composition within the entire plan area. There is a large amount of internal space throughout the plan area. This is partly due to utilities/wayleaves etc but also due to the large areas with very scattered crop due to failures etc. Over 20 years, the open space is increasing because some coupes will be restocked with low density broadleaves with successional open ground but over a longer period, the commercial crop restock should establish at a better crop density and there will be natural regeneration in successional open areas.

Area by species						
Species	Current		Year 10		Year 20	
(Add relevant species groups, or OG/OL)	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	2510	65%	2104	54.5%	1688.3	43.8%
Norway spruce	53.5	1.3%	189.8	5%	314.1	8.1%
Douglas fir	29.1	1%	22.1	0.6%	35.1	1%
Lodgepole pine	45.9	1.2%	140.5	3.6%	229.8	6%
Larches	71.3	1.8%	43.3	1.1%	0	0%
Scots pine	1	0.02%	29.5	0.7%	66.7	1.7%
Mixed/other conifers	24.5	0.6%	10.2	0.3%	4.3	0.1%
Native broadleaves	132.65	3.4%	249.74	6.5%	368.54	9.5%
Broadleaves	86.9	2.2%	74.8	2%	62.9	1.6%
Total woodland ha	2954.85		2863.94		2769.74	
Felled awaiting restock	163.8	4.2%	89.2	2.3%	46.9	1.2%
Internal open	740.65	19.2%	906.16	23.4%	1042.66	27%
Sub total	3859.3	100	3859.3	100	3859.3	100

Area by species						
Species	Current		Year 10		Year 20	
(Add relevant species groups, or OG/OL)	Area (ha)	%	Area (ha)	%	Area (ha)	%
Other land (open hill)	302		302		302	
Total	4161.3		4161.3		4161.3	

Table 2 – Area by age

This shows the woodland area broken down by age class and will show how well the woodland is distributed across the age classes.

Age class (years)	Current	Year 20
	Area (ha)	Area (ha)
0-10	326.4	1084.4
11-20	324.9	449.2
21-30	424	323.4
31-40	354.1	313.1
41-60	1238.4	356.8
61-80	135.6	183.5
81-100	54.4	35.5
100+	22.8	37.8
Total	2880.6	2783.7

B. Analysis of Information

B.1 Constraints and Opportunities

B.1 Constraints and Opportunities		
Factor	Constraint	Opportunity
Species diversity & resilience of the forest and its ecosystems to climate change and other threats	Predominantly Sitka spruce and areas of poor growth. Large areas of inaccessible 1st rotation Sitka spruce.	Continue to diversify age structure and species composition, using site suitable species and stocking densities matched to local soil conditions. Build on the age class diversity already achieved by previous long term plans for this area. This is a key element in building a resilient forest where species choice is limited. Follow latest research guidance in relation to species choice and best practice. Aim for productive use of most of the forest area and select species with high growth rates. Plan new forest roads to access and allow creation of appropriate coupe structure. Mixed broadleaves will be used in riparian buffers.
Roads & haulage	No access to southern half of Coulaghailtro and northern area of Meall Mhor. Degraded existing forest roads in Torinturk.	Look at access options and planned roads to open up same age coupes to restructure. Good access with a timber haulage route. Improve the connectivity of the current road network with sections of

B.1 Constraints and Opportunities

Factor	Constraint	Opportunity
		new forest road; while upgrading and maintaining existing road structure
PAWS & ASNW	Large areas of Plantation on Ancient Woodland Site (PAWS)	Torinturk is exceptionally rich in remnants of ASNW that connect to internationally important SSSI and SAC woodlands to the north-east and south-west on private ground. There is ecological potential to connect high and medium quality PAWS areas to ASNW remnants leading to linkage and enhancement of the temperate rainforest corridor within the forest block. Prioritise ASNW areas, ensuring resources to remove conifers and future regeneration. Sitka spruce and Western hemlock are most prevalent regen. Manage invasive species with ASNW and restoration PAWS areas, particularly <i>Rhododendron ponticum</i> and Western hemlock. Include alternative conifers in restock where soil and climate conditions allow. Establish native broadleaf species where possible by natural regeneration if sufficient seed source. Restore coastal corridor of PAWS. Manage conifer regeneration in native woodland.

B.1 Constraints and Opportunities

Factor	Constraint	Opportunity
		Expand broadleaf riparian zones. Ensure Deer Management Plan written for LTP area.
Herbivore pressure	Herbivore pressures impact growth of natural regeneration and planted trees, potentially limiting the successful establishment of a diversity of species. Some areas are difficult to protect from deer due to geography and cost.	Ensure Deer Management Plan written for LTP area and manage deer numbers to sustainable levels. Identify opportunity to work collaboratively with neighbouring landowners on limiting incursions from deer. Focus resources and attention on the most critical sites.
Historic environment	Two Scheduled Monuments (SMs) are located in Torinturk: Cnoc Dubh na Leitreach, two prehistoric burial cairns; and Dun a Choin Duibh, a prehistoric domestic and defensive dun. All three blocks have a range of undesignated locally important heritage comprising sheepfolds, dykes, farmsteads, shieling huts and enclosures	Planting and restock proposals to ensure appropriate buffers around SMs and heritage features.
SSSI	Artilligan and Abhainn Srathain Burns, located over which is located over two areas of deeply cut wooded gorges of coastal oak and birch woodlands.	Enhance buffers of native mixed broadleaves and removal of invasive species.
Community	Torinturk and Coulaghailtro – backdrop to settlements. Torinturk is a former foresters village and forestry operations hub. Available resources constrain provision that can be made to accommodate community	Improve community liaison and engagement to minimise any areas of conflict and impart a clear description of the plan proposals.

B.1 Constraints and Opportunities		
Factor	Constraint	Opportunity
	requests for new trails and picnic benches.	
Biodiversity	Priority open habitats. Existing non-native broadleaf areas.	Identify, enhance and connect where possible. Retain existing non-native broadleaves in coups that are not near riparian zones, ASNW and areas of PAWS of high ecological value.
Plant health	Areas of inaccessible larch.	Coupe with neighbouring felling and include where possible into phase 1 and phase2 felling plan.
Private Water Supplies	Most properties in the area are served by private water supplies (PWS), with all three blocks having PWS infrastructure.	Liaise with community and ground-truth PWS and update GIS system to create catchments. Where possible map all infrastructure and provide buffers for approved management. Include buffers in any new planting proposals.

Concept

Maps 3a-b Concept illustrates how the plan concept incorporates the important constraints and opportunities into the management objectives.

The main points of the plan concept can be summarised as:

Create clearly defined areas of productive conifer. Within this area design management coupes to reflect landscape and access considerations; and even-out annual volume production as much as possible to support restructuring of the crop. Building on the restructure of the previous plan, continue to harvest as close to MAI as possible and restock suitable sites with commercial species.

Create a buffer of non-invasive productive conifer species between commercial forest and restoration of native woodlands. The introduction of alternative conifer species will increase

the resilience of the forest by diversifying species mix while protecting ASNW, areas of PAWS restoration and temperate rainforest woodlands.

Increase the resilience, biodiversity and connectivity of the forest ecosystem by expanding riparian zones and buffers; restoring coastal corridor of PAWS; maintaining existing open land; and protecting and enhancing priority habitats and SSSI. Restore native woodlands by natural regeneration where possible; and implement effective herbivore management.

C. Management Proposals

C.1 Silvicultural Practices

South Knapdale has predominantly been managed under a clearfell and restock silvicultural system, with limited thinning undertaken in suitable areas. This plan will continue the clearfell/restock approach across most management coupes, with opportunities for thinning considered in younger crops where access and stand condition are favourable. As extensive areas of mature timber across all three forest blocks remain unthinned and are beyond the economic thinning window, clearfelling will remain the principal management system.

Areas of native woodland and mixed broadleaves will be managed under a minimum intervention approach, with selective removal of non-native species and control of invasive species undertaken to support habitat restoration and biodiversity objectives.

C.2 Prescriptions

C.2.1 Felling

Sites proposed for clear felling in the plan period are identified as Phase 1 and Phase 2 management coupes on Maps 5a-c. Refer to Table 3 for scale of felling. Any other planned tree felling (e.g. selective felling, felling of individual trees, or felling of coppice) is shown on Maps 10a-c.

Due to the age of the trees, exposure levels and windblow risk, clear felling will remain the predominant management type across the forest of all three forest blocks during the current rotation. Management (felling) coupes have been designed to provide the best possible fit in the landscape under the circumstances and to produce a steady production of timber volume across the rotation, as far as is possible.

Conventional mechanised harvesting and extraction will be adopted across much of the forest, applying use of brash mats to protect soils and log bridges at watercourse crossing points. Steep slopes will require manual felling and extraction via a skyline winch. Coupe design has been informed by the need to accommodate these requirements.

All felling operations will comply with UKFS Forest and Water guidelines, SEPA and Confor guidance. During felling, precautions will be taken to minimise run-off, including use of buffer zones and avoiding felling during periods of extremely wet weather as far as possible. Forestry drains will be designed and maintained to avoid discharge directly into watercourses; silt traps will be deployed during harvesting.

Native broadleaves and non-native broadleaves outwith PAWS areas, will be retained during felling operations and where possible, any standing dead trees will also be retained for their habitat value, where these do not present a hazard.

Pre-operational checks will be conducted by the FLS Environment team or an Environmental Clerk of Works, to identify features, mark buffers and advise on any mitigations. Operational teams will have responsibility for identifying areas for machine maintenance, fuel storage, welfare and timber stacking areas.

During the 10 years of the LTP lifespan, 28ha of larch will be clear felled, with a further 1.1ha planned for removal during thinning operations. The remaining larch are either accessible or will be felled – to – recycle in the event of an SPHN.

Other tree felling in exceptional circumstances

FLS will normally seek to map and identify all planned tree felling in advance through the LTP process.

However, there are some circumstances requiring small scale tree felling where this may not be possible and where it may be impractical to apply for a separate felling permission due to the risks or impacts of delaying the felling.

Felling permission is therefore sought for the LTP approval period to cover the following circumstances:

- Individual trees, rows of trees or small groups of trees that are impacting on important infrastructure (as defined below*), either because they are now encroaching on or have been destabilised or made unsafe by wind, physical damage, or impeded drainage.

**Infrastructure includes forest roads, footpaths, access (vehicle, cycle, horse walking) routes, buildings, utilities and services, and drains.*

- The maximum volume of felling in exceptional circumstances over the plan area covered by this approval is 75 cubic metres per calendar year.

A record of the volume felled in this way will be maintained and will be considered during the five year plan review.

In places, non-native regeneration, primarily Sitka spruce and Western hemlock have infilled some open spaces and areas of ASNW. These trees need to be felled, to restore habitats and to prevent them seeding into nearby priority habitats. It is expected that natural regeneration of native species will replace these felled trees, excepting managed open ground

[N.B. Trees may be felled without permission if they: are of less than 10 cm diameter at breast height (1.3 m); pose immediate danger to persons or property; are completely dead; or are part of Authorised Planning Permission works or wayleave agreements].

C.2.2 Thinning and Respacing

Exposure levels and poor soils render stands generally unsuitable for thinning. However, thinning may be considered for coupes at lower levels on better soils, where crops are still below the age and size suitable for first thinning.

Silvicultural thinning is undertaken to achieve a silvicultural objective. This may involve the management of Continuous Cover Forestry (CCF) areas or thinning of clearfell crops to improve stem quality. There is usually a measurable output in terms of both timber volume and economic output. The areas shown for this type of thinning are aspirational and implementation will depend on market conditions. See Maps 10a-c.

Thinning will normally be carried out at, or below, the level of marginal thinning intensity (i.e. removing no more than 70% of the maximum MAI, or YC, per year). Higher intensities (no more than 140 % of maximum MAI, or YC, per year) may be applied where thinning has been delayed, larger tree sizes are being sought or as part of a LISS prescription.

Table 4 indicates the potential area.

C.2.3 Low Impact Silvicultural Systems (LISS)

Areas identified for LISS management are shown on Maps 4b-c and Maps 10b-c.

Irregular shelterwood has mainly been selected where there is a conifer/broadleaf mix. The conifer will be removed during thinnings. This incorporates approximately 33ha in Torinturk and Meall Mhor.

One area of 3.76ha in Meall Mhor is a historic peatland restoration site with some Sitka spruce and birch regeneration.

Low Impact Silvicultural Systems such as Continuous Cover Forestry (CCF) and Group Felling are generally accepted to be of greater value for biodiversity. They help to increase species and structural diversity and meet multipurpose objectives because they normally cause less rapid change to the landscape and to the physical environment than clear felling systems.

C.2.4 Long Term Retentions (LTR) / Natural Reserves (NR) / Minimum Intervention (MI)

Stands identified as LTR and Natural Reserve are shown on Maps 4a-c.

Long Term Retention

Stands identified as LTR and Natural Reserve are shown on Map 4a and Map 4c. Long term retention coupes contribute to old growth areas and biodiversity. They are areas of poor growth of minor conifer species. A total of 5.12ha has been identified for Long Term Retention, across 2 coupes in Coulaghailtro:

Coupe	Species	Area (ha)
28070	NF (1964)	0.69
28013	DF (1964), CP (1964)	4.43
	Total	5.12

In these coupes, the trees are beyond their Maximum Mean Annual Increment and will be allowed to grow into old age, to help increase the age range within the forest and improve habitat diversity. However, the trees will be felled eventually and may be felled earlier where there is a risk of windblow or safety concerns.

Natural Reserve

Coupe 27065 (19.1ha) which comprises 11.4ha Sitka spruce, 0.8ha mixed conifer, 0.4ha Birch, 0.2ha mixed broadleaves and 6.3ha open; has been identified as a Natural Reserve (see Management Coupe Map 4c).

Minimum Intervention

Minimum intervention has been selected where there is ASNW or established native woodland where minimal operations are anticipated. Within these areas some works will still take place such as removal of non-native regeneration or INNS; management of dangerous trees and small scale enhancement where appropriate.

Selective felling within minimum intervention coupes will focus on the removal of essentially problem trees that are impacting adversely on ecologically sensitive ground and native woodland and areas. There is usually no measurable volume removed and felling may target small, scattered and individual trees. In general, the approach would be to remove the minimum number of trees needed to remove the adverse impacts that arise from tree cover within these areas.

C.2.5 Restocking Proposals / Natural Regeneration

Planned restocking of felled areas, and proposals for the future habitats and tree species over the whole plan area are shown on Maps 7a-c. See Table 5 for areas, establishment, and mix proportions. Timing of restocking will comply with the plan tolerance table shown in section C.4.

Where required, the choice of ground cultivation technique will consider the short-term benefits for establishment against any long-term side effects on tree stability, access for future forest operations and the environment. There will be a preference for the least intensive technique.

Stocking densities will be at least 2,500 stems per ha (sph) for conifers and 1,600 sph for broadleaves unless justified elsewhere in this plan. If the restock or natural regeneration should fail to reach these levels the site will be beaten-up to the required planting density. This will be assessed at year 3 and year 5 after planting with beat-up by at least year 5.

Provenance zone for this location is 106 (south). A good climatic match as well as provenance is pursued to ensure the most suitable seed source. The Native Woodland Survey of Scotland's measure of Semi-naturalness is used to ascertain the potential seed dispersal distance (60-100m where this is limited and 300m where there is a large seed source).

There are legacy coupes that were not established under the previous plan due to a variety of reasons including: extra felling due to Statutory Plant Health Notices; Covid restrictions on contractor resource and availability of plants; location within extended buffer of powerline construction; excess deer browsing leading to failure of restocking and beatup now required. These areas have been identified, assessed and included in the establishment programme and will be monitored as the plan progresses.

There will be a preference for natural regeneration of native woodland areas. Any non-productive broadleaf planting will be native to the area and will complement existing naturally growing scrub and woodland to give the most ecological value.

Permanent native woodland habitats have been identified for expansion and/or establishment following felling operations. Typically, these areas will include open space as well as native broadleaved woodland. An assessment will be made post felling to confirm the viability of regeneration, but areas that tend to be within 75m of a viable seed source (usually of at least two different species) may be identified as suitable for Natural Regeneration. This is dependent on browsing pressure being reduced to ensure the successful regeneration of trees which is addressed in the Deer Management Plan.

Natural Regeneration is a priority theme promoted in the Scottish Forestry Strategy and where feasible is seen as preferable to planting for several reasons: it offers greater biological and genetic diversity to planting; landscape scale natural regeneration provide less segregated

landscapes; less GHG emissions without the requirement for ground preparation; and there is no plastic pollution compared to the use of tree guards with planting.

Coupes being restocked through Natural Regeneration will be monitored and maintained throughout the establishment phase. Should densities not be met by year 5, a beat-up operation will be carried out to achieve the required stocking density and species or, if a further period of regeneration monitoring is proposed beyond year 5 then Scottish Forestry will be notified.

The monitoring for regen will run concurrently with any stated Fallow periods to avoid an additional 3-5 years period in advance of monitoring.

Table 3 – Felling

This shows the scale of felling within the felling phases in the context of the whole LTP. This includes any areas of 'LISS – Fell' (i.e. removal of final overstorey).* (see Map 4).

SCALE OF PROPOSED FELLING AREAS (including LISS final fell areas)												
Total LTP Area:		4161.3	hectares									
Felling	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	Long Term Retention*	%	Area out-with 20yr plan period	%
Area (Ha)	587.4	14	486	11.6	536.8	12.8	494.8	11.8	5.12	0.1	1509	36
Volume	252957		263989		209659		218579					
Coupe numbers (Ph 1 & Ph2)	28074 33.97ha		28082 62.9ha		28075 28.06ha		28006 53.43ha					
	28080 39.85ha		28044 99.52ha		28038 29.99ha		28034 76.28ha					
	28036 39.18ha		26080 63.07ha		28043 50.74ha		28045 93.69ha					
	28079 88.15ha		26068 36.71ha		26086 35.32ha		26025 81.71ha					
	26001 100.59ha		26062 22.08ha		26064 18.69ha		26035 72.86ha					
	26070 27.27ha		26041 69.03ha		26022 32.61ha		26936 19.14ha					
	26069 16.26ha		26037 30.73ha		26060 38.03ha		26061 13.45ha					
	26058 13.07ha		26059 23.41ha		26011 72.42ha		26043 52.14ha					
	26056 42.88ha		27040 78.56ha		27076 114.46ha		27064 32.14ha					
	27069 24.35ha				27021 15.96ha							
	27025 62.61ha				27729 100.57ha							
	27024 23.93ha											
	27034 28.15ha											
	27031 24.62ha											
	27420 22.58ha											

* As all areas of proposed LISS management will have some overstorey trees retained over the next 20 years, no areas of 'LISS – Fell' are listed.

Table 4 – Thinning

This shows the area of thinning over the first 10 years of the LTP (see Maps 10a-c).

Species	Thinning (ha)
Silvicultural Thinning	
SS (coupe 28002)	13.4
SS (coupe 28004)	12.5
SS (coupe 28907)	23.4
SS (coupe 28025)	28
SS (coupe 28020)	37.2
SS (coupe 28022)	18
SS (coupe 28021)	46
SS (coupe 28024)	14.4
SS (coupe 26082)	23
SS (coupe 26067)	15.3
SS (coupe 26005)	18.3
SS (coupe 26077)	14.3
SS (coupe 27028)	13.4
SS (coupe 27029)	6.2
SS (coupe 27814)	13
Sub total	296.4

Species	Thinning (ha)
LISS (Irregular Shelterwood)	
SS/WH (coupe 26013)	0.85
SS/JL/HL (coupe 26431)	2.8
SS (coupe 26021)	0.2
SS (coupe 26057)	1.85
SS (coupe 27037) 20% SS regen in open area	0.75
SS (coupe 27023)	1
Sub total	7.45
Selective Felling (only Minimum Intervention coupes)	
28060	5.58
28072	2.39
26020	2.83
26023	0.45
26042	2.25
26016	0.78
26015	3.41
26014	3.12
26934	0.83

Species	Thinning (ha)
26002	13.3
26010	1.78
26039	3.41
26464	31.3
26049	25.2
26009	1.46
26006	1.35
26007	0.9
26003	1.01
26004	1.18
26012	0.74
26032	2.46
26065	4.92
26038	2.36
26073	14.9
26030	1.22
27033	16.4
27063	57.8
Sub total	203.33
Total	507.18

Table 5 – Restocking

This table provides information on the restocking proposals for the first 10 years of the LTP listed on a coupe-by-coupe basis (see Maps 7a-c).

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
1	28074 (33.97ha)	SS 90%/Open 10% Open ground	32.23 1.74
1	28080 (39.85ha)	SS 40%/LP 40%/Open 20% NMB 70%/Open 30% Open ground	36.04 1.62 2.19
1	28036 (39.18ha)	SS 90%/Open 10% NMB 80%/Open 20% NMB 60%/Open 40% Open ground	28.21 3.84 1.77 5.36
1	28079 (88.15ha)	SS 50%/LP 40%/Open 10% NS 80%/Open 20% NMB 60%/open 40% NMB 70% nat regen/Open 30% Open ground	30.51 36.57 5.4 5.14 10.53
1	26001 (100.59ha)	SS 40%/LP 40%/Open 20% NMB 70%/Open 30% Open ground	83.52 1.26 15.81
1	26070 (27.27ha)	NS 100% NS 90%/Open 10%	13.01 7.97

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
		NMB 80%/Open 20% nat regen	3.12
		Open ground	3.17
1	26069 (16.26ha)	NS 50%/SP 40%/Open 10%	11.85
		NS 100%	0.87
		NMB 80%/Open 20%	1.19
		Open ground	2.35
1	26058 (13.07ha)	NMB 90%/Open 10% nat regen	8.2
		Open ground	4.87
1	26056 (42.88ha)	NMB 80%/Open 10% nat regen	34.87
		BI 100% nat regen	1.61
		Open ground	6.4
1	27069 (24.35ha)	SS 100%	10.83
		SS 80%/LP 20%	5.22
		NMB 70%/Open 30% nat regen	0.89
		NMB 60%/Open 40%	0.83
		Open ground	6.58
1	27025 (62.61ha)	SS 40%/LP 40%/Open 20%	29.17
		SS 50%/LP 40%/Open 10%	22.91
		SS 70%/MC 30%	0.37
		NMB 60%/Open 40%	3.14
		NMB 80%/Open 20% nat regen	1.18

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
		Open ground	5.84
1	27024 (23.93ha)	SP 40%/MBL 40%/open 20%	7.53
		NMB 70%/Open 30% nat regen	14.34
		Open ground	2.06
1	27034 (28.15ha)	SS 40%/ LP 40%/Open 20%	9.33
		NS 100%	6.47
		NS 80%/Open 20%	2.73
		NMB 70%/open 30% nat regen	2.77
		NMB 40%/Open 60%	1.54
		NMB 30 %/Open 70%	1.26
		Open ground	4.05
1	27031 (24.62ha)	SS 80%/Open 20%	13.5
		SP 40%/NMB 40%/Open 20%	7.33
		Open ground	3.79
1	27420 (22.58ha)	SS 40%/ LP 40%/Open 20%	10.3
		SS 100%	6.59
		NMB 30%/Open 70%	1.36
		Open ground	4.33
2	28082 (62.9ha)	SS 90%/Open 10%	46.42
		NMB 70%/Open 30%	10.63
		Open ground	5.85

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
2	28044 (99.52ha)	NS 90%/Open 10% SP 90%/Open 10% NS 100% SP 40%/NMB 40%/Open 20% NMB 70%/Open 30% NMB 70%/Open 30% nat regen Open ground	33.33 14.08 8.03 7.1 13.65 12.84 10.49
2	26080 (63.07)	SS 90%/Open 10% NS 100% NS 90%/Open 10% NMB 80%/Open 20% nat regen BI 90%/MB 10% nat regen Open ground	46.80 6.66 2.63 2.62 0.3 4.06
2	26068 (36.71ha)	SS 90%/Open 10% NS 90%/Open 10% Open ground	28.69 5.57 2.45
2	26062 (22.08ha)	NS 100% NS 90%/Open 10% NMB 80%/Open 20% nat regen NMB 60%/Open 40% nat regen Open ground	6.17 5.57 6.57 0.71 3.06
2	26041 (69.03ha)	SS 90%/Open 10%	56.82

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
		SS 100%	3.78
		NS 100%	1.39
		NS 90%/Open 10%	0.62
		NMB 70%/Open 30%	0.75
		NMB 70%/Open 30% nat regen	0.31
		Open ground	5.36
2	26037 (30.73ha)	NMB 80%/Open 20%	19.37
		NMB 90%/Open 10% nat regen	10.31
		Open ground	1.05
2	26059 (23.41ha)	NMB 80%/Open 20% nat regen	20.85
		Open ground	2.56
2	27040 (78.56ha)	SS 40%/LP 30%/Open 30%	54.24
		SS 20%/LP 20%/Open 60%	17.75
		Open ground	6.57
		Sub total	1073.4
Legacy Coupes	26024 (9.49ha)	SS 100%	7.67
		Open ground	1.82
	27030 (16.25ha)	NS 90%/Open 10%	12.9
		Open ground	3.35
	27032 (10.5ha)	NMB 30%/Open 70%	8.13

Felling Phase	Map Identifier(s)	Species *	Area (ha) to be planted**
		NMB 70%/Open 30%	0.53
		Open ground	1.84
	27030 (16.25ha)	NS 90%/Open 10%	12.9
		Open ground	3.35
	27074 (7.94ha)	SS 100%	6.45
		NMB 80%/Open 10% nat regen	0.22
		Open ground	1.27
	27066 (6.42ha)	SP 40%/MB 40%/Open 20%	3.04
		NMB 70%/Open 30% nat regen	0.56
		NMB 60%/Open 40% nat regen	0.31
		Open ground	2.51
	27075 (4.72ha)	SP 40%/MB 40%/Open 20%	2.54
		NMB 60%/Open 40%	2.18
Sub total			71.57
Total Restocking Area			1144.97

*Establishment is expected to be by planting unless otherwise stated.

**net area to be planted excluding designed open ground

C.2.6 Protection

Management of deer is an underpinning activity essential for the delivery of benefits from Scotland's National Forests and Land. The aim is to manage healthy wild deer populations and manage deer impacts across the estate consistent with the carrying capacity of the land and successful delivery of FLS land management objectives. The FLS Deer Management Strategy directs the priorities for management (copies are available upon request).

FLS have had a positive initial meeting with NatureScot and Action West Loch, to discuss deer populations in the wider landscape and the potential formation of a South Knapdale Deer Management Group.

The Deer Management Plan (DMP) for South Knapdale LTP can be seen at Appendix II.

C.2.7 Fence Erection / Removal

Within South Knapdale LTP it is expected that for the establishment of trees, deer will be managed via culling. However, for the coupes to be planted/regenerated with broadleaves fencing may be required. This decision will be made jointly by the wildlife ranger manager and the delivery forester. If deemed necessary, this will be maintained for the period required to achieve successful establishment and subsequently removed.

Any fence erection will not impinge on access, and gates will be installed to facilitate this if required. In addition, an EIA Screening Opinion Request and a Landscape and Visual Impact Assessment will be sought if required and markers for birds included where needed.

C.2.8 Road Operations and Timber Haulage

Map 18a-c shows the existing forest road network and any associated quarries, timber haulage egress points, and any local 'Agreed Timber Transport Routes'.

For Coulaghailtro and Torinturk forest blocks the primary "in forest" timber haul route runs from the west side of Coulaghailtro at NR 7117 6591 to the east side of the Torinturk forest block. The timber egress point is at NR 8160 6524 where it joins the B8024. This route is also used by adjacent commercial forest neighbours Scottish Woodlands and RDS Forestry who have road network links onto the FLS estate and onto the public road network.

All three forest blocks require upgrades to sections of the existing forest road network, alongside the construction of new forest roads to support future management operations. New forest road infrastructure is proposed within all three blocks, with the majority of new road construction located within Coulaghailtro, where there is currently no operational access to the southern part

of the forest. The proposed road network will improve access for harvesting, restocking and forest management activities throughout the plan period. The B8024 Kilberry Loop Road – Ormsary – north to A83 Inverneil – is a Consultation Route subject to a Timber Transport Management Plan (TTMP) restricting the hauling of timber on this route. The TTMP effects both Couaghailtro and Torinturk.

Meall Mhor will use one existing access/egress point at NR 8624 7392 onto the A83 which is not subject to a TTMP.

The lengths of planned new roads are given on the map Maps 18a-c and the tables below. These are reflected in the EIA Screening Opinion Request submitted with the plan.

Couaghailtro:

Planned Road	Length	Grid ref	Map
TO18	2010m	NR 7331 6512	Map 18a
TO180	500m	NR 7294 6454	Map 18a
TO181	720m	NR 7278 6418	Map 18a
TO182	1190m	NR 7251 6391	Map 18a
TO1820	840m	NR 7284 6357	Map 18a
TO17	4840m	NR 7455 6449	Map 18a
TO170	860m	NR 7426 6428	Map 18a
Total	10960m		

Torinturk:

Planned Road	Length	Grid ref	Map
TO33	1240m	NR 7727 6512	Map 18b
TO32	390m	NR 7812 6411	Map 18b
TO3	1320m	NR 7832 6422	Map 18b
Total	2950m		

Meall Mhor:

Planned Road	Length	Grid ref	Map
MM1	620m	NR 8337 7230	Map 18c
MM100	2060m	NR 8509 7515	Map 18c
MM103	120m	NR 8543 7585	Map 18c
Total	2800m		

If any forwarder tracks are required, the appropriate approvals and EIA Screening Opinion Request will be sought. The planned forest roads to be constructed will require local authority Prior Notification (PN) approval. This will be submitted prior to construction.

C.2.9 Public Access

FLS welcome responsible public access in accordance with the Scottish Outdoor Access Code.

Where trails are affected by forestry operations, appropriate temporary closures will be implemented and, where possible, suitable diversions provided to maintain access while ensuring public and operator safety. Access to key routes such as core paths and rights of way will be maintained and restored as required after operations. Liaison with the Local Authority Access Officer will continue to be carried out as appropriate.

In Torinturk a core path circular route leads to two Scheduled Monuments: Cnoc Dubh na Leitreach and Dun a Choin Duibh. This is within a deformalised visitor site. Any encroaching vegetation will be removed as necessary and routes will be kept open.

C.2.10 Historic Environment

Maps 11a-c provide locations and information about the historic environment features within and adjacent to the plan area.

These sites will be managed in accordance with the Forests & the Historic Environment Guidelines and will be protected during operations in line with the UKFS. If new sites are found these will be mapped and recorded and protected from operations. Detailed operational workplans will be drafted nearer the period of felling and will include a full range of mitigation measures to safeguard archaeological features. Additionally, the restocking proposals (open space) are sympathetic to both the features and its immediate environs. Further advice will be obtained from the FLS Archaeologist if required.

Our key priorities for archaeology and the historic environment are to undertake conservation management, condition monitoring and archaeological recording at our significant historic assets; and to seek opportunities to work in partnership to help to deliver Our Past, Our Future: the Historic Environment Strategy for Scotland and Scotland's Archaeology Strategy. Designated historic assets and significant heritage features will be protected and managed following the UK Forestry Standard (2023) and UKWAS (2024). Harvesting coupes, access roads and fence lines will be surveyed prior to any work being undertaken in order to ensure that upstanding heritage features can be marked out and avoided. At establishment and restocking, work prescriptions will ensure that relevant heritage features are protected from ground disturbing operations and replanting. Opportunities to enhance the setting of important sites and landscapes will be considered on a case-by-case basis (such as the views to and from a significant designated historic asset).

The Regional Historic Asset Management Plan includes conservation management intentions for those designated historic assets on Scotland's national forests and land. Details of most known heritage features are held within the Forester Web Heritage Data (built using national and regional historic environment records) and included within operational planning to ensure damage is avoided. Designated historic assets and significant heritage features will be depicted on the supporting Heritage Map. West Region's Regional Historical Asset Management Plan works to ensure the historic assets' stable condition or to slow their gradual decay and details the following:

"All scrub vegetation and regenerating trees within the relevant area will be cut off at ground level using appropriate hand or power tools and removed. Bracken encroachment shall be controlled within appropriate areas as necessary through strimming, bashing and / or chemical spraying, as appropriate. Any tree felling, harvesting or thinning work within the relevant area (and including a buffer zone of 20m around it) will be planned and organised to avoid any damage to the historic asset in the course of felling and timber extraction. Scheduled Monument Clearance will be necessary in advance of any forestry works, conservation management, consolidation or repair and development that may cause damage or disturbance within the scheduled area. No replanting will take place within the scheduled area (nor usually within a buffer zone of 20m around it)."

C.2.11 Biodiversity

UK Forestry Standard guidance is to manage a minimum of 15% of the forest management unit with conservation and the enhancement of biodiversity as a major objective.

Opportunities for retaining or creating deadwood will be identified during the planning of all felling, favouring areas with the highest deadwood ecological potential. Valuable deadwood and deadwood areas will be marked on contract maps. Areas of minimum intervention and riparian corridors will offer some of the best opportunities for the development of standing and fallen

deadwood. Where it is safe to do so, standing mature dead trees will be retained as these offer excellent potential for a range of species.

Priority habitats and native woodlands will be monitored in line with UKWAS guidance. They will be maintained and, where possible, enhanced. Management will be programmed in order of priority, including removal of non-native invasive species, through the FLS environment programme.

The land within the plan area is known to be home to protected species. Before operations are carried out, site checks will be undertaken by the environment team to identify any protected species. Mitigation will be put in place to minimise disturbance in line with NatureScot guidance, and if necessary, licences will be sought from NatureScot. The team will also draw from existing data of where species are known to be present and will liaise with Argyll Raptor Study Group when relevant. FCS Guidance Note 31: Forest operations and wildlife protection will be adhered to.

PAWS Restoration & Riparian Management

2021-2030 is the UN Decade of Ecosystem Restoration and FLS is a partner in the Riverwoods Initiative led by the Scottish Wildlife Trust to support restoration of riparian ecosystems. Riparian management is crucial to the health of both individual species and the habitats they rely on; careful adherence to Forest and Water guidelines will be strictly adhered to for any sites.

Natural regeneration of native woodland along the riparian corridors will help to alleviate flood risk by reducing the speed of run-off. There is the potential for natural regeneration of conifer species within the riparian corridor. Ideally this would all be removed but practically up to 15% conifer regeneration will be accepted in the corridor before intervention to remove it.

Where felling coupes fall within a large area of PAWS which is undergoing restoration further adjacent felling may take place before a full 2m height difference has been achieved in some instances where unavoidable. This reduces conifer seed rain back into these areas of restoration, especially of Sitka spruce and Western hemlock trees.

Where possible within PAWS restoration areas, FLS will work collaboratively with neighbouring landowners and key conservation organisations, including Action West Loch and Argyll Countryside Trust (ACT), to support the delivery of shared restoration objectives.

In addition to ongoing knowledge sharing, invasive species control and ant nest location surveys, key themes being explored for future collaborative working include water quality monitoring, ecological safeguards, and habitat restoration monitoring.

Torinturk

Torinturk contains significant areas of PAWS, representing a major opportunity for native woodland and coastal rainforest restoration. These areas are particularly important due to their proximity and connectivity to existing ASNW remnants and neighbouring designated woodland habitats. PAWS restoration will be delivered through the phased removal of non-native conifers, control of invasive species, and the promotion of natural regeneration and establishment of native woodland species.

The priorities for PAWS restoration are to:

- Restore a coastal corridor of PAWS in Torinturk. This is the highest priority conservation action, which will improve the resilience of the coastal ASNW and allow expansion through a combination of natural regeneration and planting, as per local seed sources.
- Manage conifer regeneration in native woodland. Priorities for action are coastal ASNW strip in Torinturk and regenerated area along Loch Liath.
- Expand broadleaf riparian zones. This will improve the resilience of the rich ASNW remnants along watercourses.
- Set conditions for the future restoration of low ecological potential PAWS areas. Restock these areas with Norway spruce to shade out the Western hemlock, ensuring that the Norway spruce is felled before the canopy thins out and it is no longer in the stem exclusion phase.

Wider Landscape of PAWS Restoration

The Torinturk forest block forms part of a wider landscape scale programme of PAWS restoration, coastal rainforest recovery and native woodland enhancement across multiple landholdings. Complementary measures on neighbouring estates, including deer management, woodland regeneration and habitat connectivity projects, are strengthening the coastal rainforest network. Together with proposed restoration within the LTP area, these initiatives will improve ecological connectivity, habitat resilience and woodland recovery, supporting the conservation objectives of the Tarbert Woods SAC and associated SSSIs.

Meall Mhor

Within Meall Mhor, PAWS areas are more limited and are predominantly associated with riparian corridors and watercourse networks. Restoration of these areas will focus on the phased removal of non-native conifers and the promotion of native woodland regeneration, helping to strengthen habitat connectivity, enhance riparian woodland structure, and support wider biodiversity and water management objectives

C.2.12 Tree Health

The majority of larch has been couped up within the first two phases of the plan. Remaining larch remains accessible. If not accessible it will be felled-to-recycle.

C.2.13 Invasive Species

As outlined previously, the following invasive non-native species have been identified within the plan area: Rhododendron ponticum, Bamboo, Buddleia spp., Pampas grass, Skunk cabbage and Japanese knotweed. Extensive Western hemlock regeneration is present within Torinturk and poses a significant challenge to PAWS restoration and coastal rainforest recovery.

Invasive species removal will be prioritised and delivered as resources allow, focusing on key areas identified by FLS Planning and Environment staff. While complete eradication is not feasible within the plan period, targeted removal will help minimise spread and support restoration objectives.

Designated sites, ancient semi natural woodland, recovering PAWS and priority open habitats will be monitored for invasive species, and if identified, these will be mapped and a plan developed for these to be controlled in order of priority.

FLS are working with local conservation organisations and will continue to explore opportunities to work with adjacent landowners and stakeholders to achieve common objectives.

Torinturk and Coulaghaitro

Invasive species control is being undertaken across the wider landscape by neighbouring landowners and conservation organisations, including rhododendron removal on the Dunmore, Ardpatrik and Carse Estates and landscape scale assessment work around West Loch Tarbert. These initiatives complement FLS invasive species control and PAWS restoration within the plan area, helping to reduce reinfestation risk and support the recovery, resilience and connectivity of the wider coastal rainforest network.

Torinturk PAWS Volunteers

A current volunteer programme, led by ACT and Our Rainforest Futures (an Alliance for Scotland's Rainforest project), supports PAWS restoration within the Torinturk forest block through regular invasive species removal and practical conservation activities. This work demonstrates the value of collaborative, community led coastal rainforest recovery.

Meall Mhor

Recent work has been undertaken within and around the Abhainn Srathain SSSI to remove rhododendron and other invasive non-native species across approximately 40 hectares. This programme contributes to the restoration and enhancement of the site's native woodland habitats and associated biodiversity.

Invasive species control within the SSSI and surrounding areas will remain a management priority throughout the plan period. Future operations will continue to target rhododendron and other invasive non-native species to support habitat restoration objectives, improve woodland condition, and enhance the resilience and ecological value of this important, designated site

C.2.14 New Planting

There are no new woodland creation areas within the South Knapdale LTP.

C.2.15 Wildfire

FLS work closely with the Scottish Fire and Rescue Service (SFRS) to ensure a safe and consistent approach to help tackle wildfires on Scotland's national forests and land. FLS support SFRS in their lead role for fire prevention and suppression through creating annual fire plans, maintaining a duty rota, and providing additional logistical support. FLS's primary objective is always to protect people's health, safety and wellbeing.

The general approach to managing fire risk will be to maintain suitable access to key areas of the woodland for fire control purposes and to avoid management actions which would further exacerbate fire risk, especially where the threat to key assets is particularly high. Fire risk has been assessed in accordance with *Forestry Commission Practice Guide 22: Building Wildfire Resilience into Forest Management Planning*; including consideration of forest management and restocking proposals. Refer to Maps 17a-c.

C.2.16 Other

Soils

Brash mats (or alternative measures) will be used to protect sensitive soils. There will be minimal soil disturbance and machine movement on sites with clayey soils to reduce the risk of compaction or damage to the soil structure. Felling residue will usually be left on site to allow nutrient recycling, with consideration for the practicalities of restocking. Where required, the choice of ground cultivation technique will consider the short-term benefits for establishment against any long-term side effects on tree stability, access for future forest operations and the environment. There will be a preference for the least intensive technique.

Landscape

A number of viewpoints were chosen demonstrating a view of the forest from major publicly accessed routes. Visualisations were then created for these views comparing a current photograph to a 3D version of the forest in 10 and then 20 years time, both as felling coupes and as the proposed restocking. See Map 15a for viewpoint locations and Appendix VI Viewshed analysis and visualisations.

Hydrology

Water supply points

FLS continually endeavour to identify all water supplies and any further points found will be added in to the database to give a comprehensive coverage. A search was conducted using addresses within 2km of the forest blocks but more than 100 m from a Scottish Water mains pipe. The residents of those properties were consulted regarding their water supply type and location by mailshot with explanatory letter, maps and questionnaire.

Subsequently FLS data was updated and water catchment maps created as appropriate. See separate confidential Appendix V and Maps 20a-c (Confidential) and PWS catchment maps (Confidential).

All three forest blocks contain Private Water Supply (PWS) infrastructure and associated catchments. Forest management operations will be undertaken in accordance with the requirements of the UK Forestry Standard: Forests and Water, ensuring the protection of water quality, water resources and associated infrastructure throughout the South Knapdale LTP area.

Water catchments

There are two Scottish Water public water catchments and three SEPA catchments within the plan area. Forestry operations will be carried out in accordance with UKFS and Forests and Water Guidelines, incorporating appropriate riparian buffers, sediment control and water protection measures. Water quality monitoring will be undertaken where appropriate to identify and address any adverse effects.

Utilities, Renewables and other developments

There is currently no renewable energy generation or associated infrastructure present within the LTP area.

A number of overhead electricity lines either pass through or form boundaries to forest blocks within the LTP area. All forestry operations will be undertaken in accordance with relevant guidance and safety requirements relating to electrical infrastructure. Appropriate liaison and coordination will be maintained with the electricity network operators to ensure safe and compliant working practices.

Coulaghaitro

An 11kV overhead powerline runs north-south on the western edge of the block, continuing east-west cutting through the block on its southern edge.

Torinturk

An 11kV overhead powerline runs north-east, south-west on the south-eastern edge of the forest block. This line supplies the former forester village of Torinturk and a spur runs north through the forest block and private land.

Meall Mhor

A number of overhead powerlines pass through the Meall Mhor forest block, predominantly in a north-south alignment. These range from 11 kV distribution lines serving local connections to a 275 kV transmission line forming part of the national electricity network. The construction of the 275 kV line resulted in the creation of several legacy coupes within the forest. The restocking of these areas has been incorporated into this Long Term Plan.

Open land

Integral open ground within the forest area delivers a significant part of the forest's ecological value, providing a diverse range of habitats that support biodiversity, landscape character and ecosystem resilience. Managing this land is an important component of sustainable forest management and will focus on maintaining and enhancing priority habitats, protecting designated features, improving habitat connectivity, and preventing encroachment by trees and invasive non-native species where this would adversely affect open ground interests.

Open habitats, including riparian corridors, wetlands, rocky outcrops and other valuable non-woodland areas, will be managed in accordance with UK Forestry Standard guidance to ensure their ecological condition is maintained or improved throughout the plan period.

C.3 Environmental Impact Assessment and Permitted Development Notifications

Total area (hectares) for each project type and provide details as requested by sensitive or non-sensitive area.

Type of Project	Sensitive Area		Non-sensitive Area		Total
Afforestation	%Con	%BL	%Con	%BL	ha
Deforestation	%Con	%BL	%Con	%BL	0ha
Forest Roads	0ha		0ha		16.7ha
Quarries	0ha		0ha		0ha

C.4 Tolerance Table

	Map Required (Y/N)	Adjustment to felling period*	Adjustment to felling coupe boundaries**	Timing of Restocking	Changes to Restocking species	Changes to road lines	Designed open ground ***	Windblow Clearance****
FC Approval normally not required	N	Fell date can be moved within 5 year period where separation or other constraints are met	Up to 10% of coupe area	Up to 2 planting seasons after felling	Change within species group e.g. evergreen conifers or broadleaves		Increase by up to 5% of coupe area	
Approval by exchange of email and map	Y		Up to 15% of coupe area	Between 2 and 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised		Additional felling of trees not agreed in plan Departures of more than 60m in either direction from centre line of road	Increase by up to 10% Any reduction in open ground within coupe area	Up to 5 ha
Approval by formal plan amendment may be required	Y	Felling delayed into second or later 5 year period Advance felling into current or 2 nd 5 year period	More than 15% of coupe area	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised	Change from specified native species Change between species group	As above, depending on sensitivity	More than 10% of coupe area Colonisation of open areas agreed as critical	More than 5 ha

Note

*Felling sequence must not compromise UKFS in particular felling coupe adjacency. Felling progress and impact will be reviewed against UKFS at 5 year review.

** No more than 1 ha, without consultation with Scottish Forestry, where the location is defined as 'sensitive' within the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

*** Tolerance subject to an overriding maximum of 20% designed open ground.

****Where windblow occurs, Scottish Forestry must be informed of extent prior to clearance and consulted on clearance of any standing trees.

D. Production Forecast

N/A – FLS provide this nationally to Forest Research as per agreement with Scottish Forestry.

Maps

Item number	Title
1	Location
2a-c	Current species
3a	Revised Concept Coulaghailtro and Torinturk
3b	Revised Concept Meall Mhor
4a-c	Management Coupes
5a-c	Phase 1 and 2 felling coupes
6a-c	Future Species & Habitats
7a-c	Phase 1 Phase 2 and Legacy Restock
8a-c	Issues & Constraints
9a-c	Opportunities & Objectives
10a-c	Selective Felling
11a-c	Heritage
12a-c	Soils
13a-c	Priority Habitats
14a-c	HCV & CANs
15a	Landscape Character and Viewpoints: Coulaghailtro & Torinturk
15b	Landscape Character Meall Mhor
16a-c	Environmental Impact maps
17a-c	Fire Resilience
18a-c	Operational Access & Civils
19a-c	Areas of Priority Deer Management
20a-c	Water Supply points (confidential)
21a-c	Conservation (confidential)

Appendices

See accompanying Appendix documents

- I. Stakeholder Consultation Record
- II. Deer Management Plan
- III. FLS information
- IV. Designated sites - Artilligan and Abhainn Srathain burns SSSI draft management plan
- V. Private Water Supplies - **confidential**
- VI. Landscape Character and Visual Assessment
- VII. Conservation – **confidential**
- VIII. Marine Environment of West Loch Tarbert