Forestry and Land Scotland
Coilltearachd agus Fearann Alba

West Region

Aros Park

Land Management Plan

We manage Scotland's National Forest Estate 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.

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Promoting Sustainable Forest Management
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Plan Reference No: ******

Plan Approval Date: ******

Plan Expiry Date: ******

Forestry and Land Scotland
Coilltearachd agus Fearann Alba

FORESTRY AND LAND SCOTLAND
Application for Land Management Plan Approvals in Scotland

Forestry and Land Scotland - Property

Region:	West
Woodland or property name:	Aros Park
Nearest town, village or locality:	Tobermory
OS Grid reference:	NM 511 540
Local Authority district/unitary Authority:	Argyll & Bute Council

Areas for Approval in hectares	*Conifer*	*Broadleaf*	*Peatland Restoration*
Clear felling	*10*	*1*	
Restocking (including legacy RS)		*53*	
Natural Regeneration			
Selective Fell (CCF)			
Thinning (amenity)	*72*	*100*	

Note: restock includes areas felled under previous Plan

1. I apply for **Land Management Plan** approval for the property described above and in the enclosed Forest Plan.
2. * ~~I apply for an opinion under the terms of the **"The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017" for road building /quarries /afforestation /deforestation** as detailed in my application.~~
3. I confirm that the initial scoping of the plan was carried out with FLS and SF staff in 23/05/2024.
4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the SF agreed must be included.
6. I confirm that agreement has been reached with all of the stakeholders over the content of the forest plan and that there are no outstanding issues to be addressed. Copies of consultee endorsements of the plan are attached.
7. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed …… Regional Manager

Signed …… Conservator

Region: West

Conservancy:

Date :

Date of Approval: ……

Date approval ends: ……

Aros Park - Land Management Plan 2025 – 2035

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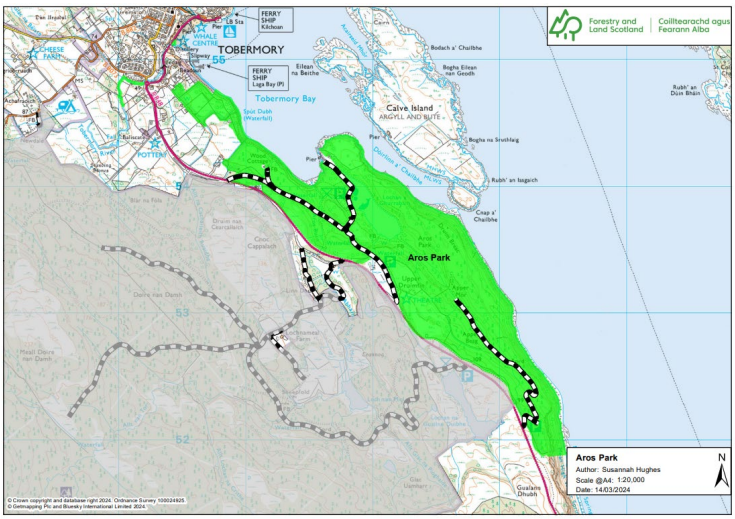
1 Regulatory Requirements

1.1 Summary of Proposals

Aros Park LMP is single woodland in the north-east of the isle of Mull with distinct characteristics that separates it from the majority of FLS' landholding on the island (see Map 1). It was historically a Victorian Estate complete with formal gardens and large house; however what remains now is a network of footpaths within the northern wooded area which is predominantly recreation-focused. The southern area comprises a site of special interest (Sound of Mull cliffs) with adjoining buffer zone, previously planted with productive conifers. The entire area is a plantation on ancient woodlands site and as such, since 1996 this southern area has been undergoing restoration by FLS back to broadleaves.

Objectives

- Support and enable investment in facilities and access for both locals and visitors to the isle of Mull.
- Continue to manage policy woodland silvicultural system
- Continue to work with the community on facilitating and progressing opportunities for community involvement in the forest given its close proximity to Tobermory.
- Work with the community to protect the important Victorian heritage of Aros Park Estate.
- Improve SSSI (Sound of Mull Cliffs) to ensure move towards improving condition, and restore broadleaf Plantations on Ancient Woodland Sites (PAWS) including the SSSI buffer; develop and implement a plan to reduce and contain Rhododendron ponticum
- Facilitate solutions for management of herbivore impact to support species diversity and ground vegetation as well as encouraging natural regeneration.



Summaries of Management Proposals

The felling proposals in the first twenty years of the plan are summarised below:

Felling	Phase 1	Phase 2	Phase 3	Phase 4
Area in ha	17	/	/	/
% of area (not including other land)	10	/	/	/
Volume (Km3)	7	/	/	/

The species composition over the first twenty years is as follows:

Species Group	Current – 2025		Year 10 – 2035		Year 20 – 2045	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka Spruce	19	12	2	1	2	1
Norway Spruce	0	0	0	0	0	0
Larches	0	0	0	0	0	0
Mixed Conifers	2	1	2	1	2	1
Mixed Broadleaves	3	1	4	1	4	1
Native Broadleaves	135	80	152	91	152	91
Internal Open Space*	13	6	12	6	12	6
Restored Peatlands	0	0	0	0	0	0
Forested Area Total**	**172**	**90**	**172**	**90**	**172**	**90**
Open Hill	7	4	7	4	7	4
Agriculture	4	2	4	2	4	2
Open Water	8	4	8	4	8	4
Open Habitat Total	**19**	**10**	**19**	**10**	**19**	**10**
LMP area Total	**191**	**100**	**191**	**100**	**191**	**100**

* Included unplanted land & streamsides, archaeology, deer glades, linear features, recreational areas & quarries
** % is of Forested area, not Total area

The age class composition over the first twenty years is as follows:

Age Class	Current – 2025		Year 10 – 2035		Year 20 – 2045	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
0 – 10 yrs	6	5	30	19	17	11
11 – 20yrs	12	15	6	3.5	30	17
21 – 40 yrs	0	0	12	7.5	6	3

Age Class	Current – 2025		Year 10 – 2035		Year 20 – 2045	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
41 – 60yrs	0	0	0	0	12	7
61+ yrs	107	85	107	70	107	62
Total	**125**	**100**	**155**	**100**	**172**	**100**

Productive Forest Area Statement

PHASE 1

FELLING AREA	*ha*	*ESTABLISHMENT AREA*	*ha*
Conifer	10	Conifer	
Open Space	3	Open Space (including Peatland)	5
Broadleaves	1	Broadleaves – NR	28
		Broadleaves – native planting	14
		Broadleaves – non-native planting	
Existing Broadleaves	3	Existing Broadleaves	
TOTAL	**17**	**TOTAL**	**47**

PHASE 2

FELLING AREA	*ha*	*ESTABLISHMENT AREA*	*ha*
Conifer		Conifer	
Open Space		Open Space	3
Broadleaves		Broadleaves – NR	11
		Broadleaves – native planting	
		Broadleaves – non-native planting	
Existing Broadleaves		Existing Broadleaves	3
TOTAL	**0**	**TOTAL**	**17**

UKWAS Summary for year 50

Description	% of LMP Area[1]
Total current woodland area	90
Natural Reserves – Plantation	0
Natural Reserves – Semi Natural	6
Long Term Retention, LISS, Minimum Intervention	91
Area of Conservation value: designations, AW, PAWS	92
Planned Open/Other	10

Notes

1. The % will total more than 100% as the species and management categories overlap.

Planned Roading Operations

Planned operations 10 year plan period
Road Construction Phase 1 Nil Road Construction Phase 2 Nil

Any forwarder/ATV tracks to be constructed will require local authority Prior Notification (PN) approval and will likewise be submitted to the local authority.

Any unexpired PN's and EIAs are listed in Appendix IX and Approval documents are in Appendix X.

1.2 Activity Summary

1.	2. 1.1 Table of Clearfelling (Phase 1 & 2)										
Coupe No.	**Total Area (Ha)**	**Spp by Ha (SS)**	**Spp by Ha (SP)**	**Spp by Ha (LP)**	**Spp by Ha (NS)**	**Spp by Ha (Larch)**	**Spp by Ha (MC)**	**Spp by Ha (BL)**	**Open Land by Ha**	**Restock Year**	**Monitoring Comments**
70507	17	10						4	3		Multi-part felling coupe; small amount of BL (less than 1ha) may require to be felled to allow access to SS in northern part. Isolated Rp to be removed prior to felling to prevent seeding into newly felled area.

1.3 Table of CCF Felling (Phase 1)											
Coupe No.	**Total Area (Ha)**	**Volume (M^3)**	**Spp by Ha (SS)**	**Spp by Ha (SP)**	**Spp by Ha (LP)**	**Spp by Ha (NS)**	**Spp by Ha (MC)**	**Spp by Ha (MBL)**	**Open Land by Ha**	**Silv.Method**	**Monitoring Comments**
Totals											

1.5 Table of Thinning (Phase 1 & 2)							
Coupe No.	**Total Area (Ha)**	**Species**	**Thin-able Area (Ha)**	**Prescription for Thinning**	**Final Thinned Area (Ha)**	**Final Vol/Ha Removed**	**Monitoring Comments**

1.6 Table of Total Felling for Approved Plan Period										
Method	**Total Area (Ha)**	**Total Volume (M^3)**	**Spp by Ha (SS)**	**Spp by Ha (SP)**	**Spp by Ha (LP)**	**Spp by Ha (NS)**	**Spp by Ha (MC)**	**Spp by Ha (MBL)**	**Open Land by Ha**	**Comments**
Clearfell	**17**	**7000**	**10**					**4**	**3**	**Most MBL not for felling; only upto 1ha**
Thinning	**/**									
CCF	**/**									
	17		**Grand Total of Felled Timber Proposed for Plan Period**							

1.7 Table of Restocking – including incomplete RS from previous plan												
Coupe No.	**Total Area (Ha)**	**SS (Ha)**	**LP (Ha)**	**SP (Ha)**	**NS (Ha)**	**Other Con. (Ha)**	**Native Mixed B/Leaf**	**Other B/Leaf**	**Open (Ha)**	**Year**	**Restock Method & Density (Restock/NR/Open)**	**Monitoring Comments**
70525	14.0						11		3		5ha: Group plantings after Rp removal 6ha: NR as deer numbers fall	Felled 2005; failed RN on hill; needs ground prep. and continued close monitoring of deer. Upgrade tracks
70526	6.1						6.1		0		NR	Felled 2008; regenerating well but incl. SS
70505	8.7						7.7		1		NR	Felled 2014; RN present but subject to browsing
70509	4.8						4.3		0.5		Track for extraction 3ha: group plantings 1.3ha: NR as deer numbers fall	Recent felling 2019; initial RN but also signs of browsing.
70508	5.5						5.0		0.5		NR	Also felled 2019; starting to regen.

1.7 Table of Restocking – including incomplete RS from previous plan												
70513	2.1						2.1		0		NR	Also felled 2019; starting to regen.
Phase 2												
70507	17.1					2.1	15		1.7		NR	Majority two-part coupe in SSSI buffer with three minor areas of regen within policy woodlands where conifer will be accepted

1.8 Table of New Planting												
Coupe No.	**Total Area (Ha)**	**SS (Ha)**	**LP (Ha)**	**SP (Ha)**	**NS (Ha)**	**Other Con. (Ha)**	**Native Mixed B/Leaf**	**Other MBL**	**Open (Ha)**	**Year**	**Planting Method & Density (Planting/Nat Regen)**	**Monitoring Comments**

1.9 Table of Civil Engineering				
Proposed Activity (Road/Quarry)	**OS Grid Reference**	**Forest/Coupe**	**Description (Length/Area/Construction)**	**Monitoring Comments**
Dam wall leak	NM 517 541		Inspect dam wall: FCE	Ensure meets legislative guidelines
Investigate fish run installation			Fish run has been explored previously	To benefit salmon trying to access the loch past the dam; competing priorities with Loch an Tòrr (Quinish).

1.10 Table of Other Projects				
Proposed Activity	**OS Grid Reference**	**Forest/Coupe**	**Description (Length/Area/Construction)**	**Monitoring Comments**
Wildlife works				
ATV Tracks construction 70508			PNs and construction of multiple ATV tracks or extensions identified	PNs approved
Drone surveys			Thermal (deer)	Primary thermal drone survey undertaken Feb. 25
Environment works				
Drone surveys			Multispectral (invasives)	For SSSI area (aerial photography to assess SSSI buffer area)
Flora survey				25/26 survey, include Baliscate fields
Survey & Assess Rp				Zone 1 (aerial); Zone 2 (spring 2026 Drone); Zone 3 (spring 2027)
Contract Rp removal				Zone 1 (26/27); Zone 2 (27/28); Zone 3 (28/29)
Follow up Rp				Zone 1 (29/30); Zone 2 (monitor); Zone 3 (31/32)
Mink control				Follow opportunities as part of mink control programme.

1.10 Table of Other Projects				
Delivery works				
Deer fencing at Druimfin	NM 519 534		100m	50/50 neighbour contribution
Deer fencing enclosures 70525			3 x exclosures	Fence and plant after INNS work (26/27); ground prep to be decided
Recreation works				
Waterfalls path				Path deteriorating through erosion
Coastal path			Loose handrail needs mended	Extensive works required; funding to be sought in addition to small handrail repair.
Lochan path				Explore options to increase accessibility with community
Play equipment	Around lochan		Annual inspections	
Option on new path	NM 506 547			Explore potential for new short spur for views near Druimfin
Replacement of small bridge	Coastal trail			Exploring options to replace small bridge on path

1.3 EIA Screening Determination

None required

1.4 Other Regulations

Standards and guidance

This land management plan has been produced in accordance with a range of government and industry standards and guidance as well as recent research outputs including those below:

“Securing a green recovery on a path to net zero: climate change plan 2018–2032” (Scottish Government)

“Protecting private water supplies during forestry activities” (Confor); this includes observing the UKFS 50m buffer around abstraction points.

“River Basin Management Plan for Scotland 2021 – 2027” (SEPA)

“Deadwood Management Guidance” (FLS) - supplement to Scottish Forestry Practice Guide: ”Managing deadwood in forest and woodlands”.

“Managing forest operations to protect the water environment” (Forest Research Practice Guide)

“Building wildfire resilience into forest management planning” (FC Practice Guide).

“Strategic guide for the conservation management of open habitats on Scotland’s national forest estate.” (FLS)

“The state of Scotland’s rainforest – research report 2019.”

“Deciding Future Management Options for Afforested Deep Peatland” (FCS Practice Guide 2015)

“Planting and restocking on peat soils” (Standard Operating Procedure, FLS 2021)

“PAWS Guidance” (FLS)

“An approach to prioritising control of rhododendron” (FLS)

“Managing and controlling invasive rhododendron” (FC Practice Guide 017)

“Managing invasive and non-native forestry species” (FCS)

“Priorities for rhododendron control” (FLS)

“Deadwood Guidance” (FLS)

“Forest operations and wildlife in Scottish Forests” (FCS Guidance Notes 31)

“Forest operations and birds in Scottish Forests” (FCS Guidance Notes 32)

“Forest operations and European protected species in Scottish Forests” (FCS Guidance Note34)

“Forest operations and bats in Scotland” (FCS Guidance Notes 35a)

“Forest operations and otters in Scotland” (FCS Guidance Notes 35c)

“Managing forests for white-tailed eagles” (FCS Practice Notes 101)

“Forest operations and badger setts” (FCS Practice Guide 9)

UK Forestry Standard: including Section 6.7 – Forests and Water Guidelines and section: 6.2 – Forests and Climate Change (mitigation and adaptation to improve forest resilience, including risks from wildfire.)

Other Tree Felling in Exceptional Circumstances

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

Felling permission is therefore sought for the LMP 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, services and drains.

The maximum volume of felling in exceptional circumstances covered by this approval is 75 cubic metres per Land Management Plan per calendar year. A record of the volume felled in this way is detailed below and will be considered during the five year Land Management Plan review.

Table of Other Felling				
Date	**Coupe/Area**	**OS NGR**	**Volume**	**Comments**

1.5 Tolerance Table

	Adjustment to felling coupe boundaries	Timing of restocking	Changes to species	Changes to road lines	Designed Open Ground	Wind blow clearance
Scottish Forestry Approval not normally required (record and notify SF)	10% of coupe size	Up to 5 planting seasons after felling (allowing for fallow periods for Hylobius)	Change within species group e.g. Native broadleaves Non-native conifers e.g Sitka spruce to Douglas fir Non-native to native species (allowing for changes to facilitate Ancient Woodland policy) For Caledonian pine woodland – SP to native BL to allow for disease issues	Departures of up to 60m from the centre of the roadline	Increase by up to 5% of coupe area	
Approval by exchange of emails and maps	10-15% of coupe size	5 years +	Change of coupe objective likely to be consistent with current policy e.g. from productive to open, open to native species	Departures of greater than 60m from the centre of the roadline	Increase between 5-10% coupe area. Any reduction in open ground within coupe area	Up to 5 ha
Approval by formal plan amendment may be required	> 15% of coupe size		Major change of objective likely to be contrary to policy e.g. native to non-native species, open to non-native	As above, depending on sensitivity	Increase >10% of coupe area	More than 5 ha

2 LMP ANALYSIS

2.1 Introduction

Aros Park is a woodland of two halves; the policy woodland surrounding the lochan and now demolished Aros House to the north, and an area of previously ancient woodland to the south adjoining a Site of Special Scientific Interest. It is a highly popular area for both locals and visitors to Mull enjoying the varied network of footpaths and has traditionally held strong community links over many generations. Continuing these links, local groups have more recently set up projects within the park. Herbivore browsing and invasive species, most notably Rhododendron ponticum, are a persistent challenge across the park.

2.2 Plan Objectives

- Support and enable investment in facilities and access for both locals and visitors to the isle of Mull.
- Continue to manage policy woodland silvicultural system
- Continue to work with the community on facilitating and progressing opportunities for community involvement in the forest given its close proximity to Tobermory.
- Work with the community to protect the important Victorian heritage of Aros Park Estate.
- Improve SSSI (Sound of Mull Cliffs) to ensure move towards 'Improving' condition, and restore broadleaf Plantations on Ancient Woodland Sites (PAWS) including the SSSI buffer; develop and implement a plan to reduce and contain Rhododendron ponticum.
- Facilitate solutions for management of herbivore impact to support species diversity and ground vegetation as well as encouraging natural regeneration.

Key challenges

- Herbivore control in particular in the buffer zone of the designated site: steep cliff faces complex topography; proximity to main town of Tobermory; prevailing wind direction; and only one-third of the SSSI is on FLS land holding.
- Prevalence of INNS deriving from established Victorian Policy woodlands, primarily Rhododendron ponticum
- Additional island influences: obtaining contractor resource for both felling and Scottish Rainforest INNS (invasive Non-native species) removal and follow-up work.

2.3 Analysis and concept

Objective	Opportunity	Constraint	Concept
Improve SSSI (Sound of Mull Cliffs) to ensure move towards 'Improving' condition, and restore broadleaf Plantations on Ancient Woodland Sites (PAWS) including the SSSI buffer; develop and implement a plan to reduce and contain Rhododendron ponticum.	Rp is one of the largest threats to the Sound of Mull Cliffs SSSI and its planned removal will benefit the restoration of Ancient Woodland sites in the buffer to the SSSI itself.	Rp has been a threat to the Park for many decades and several attempts have been undertake its removal in places, initially in the park itself and later on nearer the SSSI buffer. The large areas involved have prevented its successful containment, combined with changes in staff which would have provided continuity.	INNS plan highlights three zones within the LMP area, with focus initially on surveying then controlling: - SSSI buffer - SSSI - Policy woodland Once the threat to the buffer is reduced and any accessible Rp in the SSSI is identified, attention will then to the Park itself to ensure a robust buffer maintained between northerly and southerly areas.
Facilitate solutions for management of herbivore impact to support species diversity and ground vegetation as well as encouraging natural regeneration.	Herbivore impact is considered to be from a small number of persistent, resident deer making use of the challenging terrain.	The steep cliffs precludes easy access as does lack of track infrastructure for extraction. Combined with proximity to the town and dwellings and prevailing wind direction from SW, herbivore control ins very challenging.	Identify and construct tracks for extraction of deer. Undertake thermal drone surveys to locate persistent resident beasts. Reduced deer numbers combined with selected group plantings should help
Continue to manage policy woodland silvicultural system	Keeping the policy woodland feel of Aros Park from the original estate woodlands with	A high use recreation area, regular inspections required to ensure safe use of the woodlands amongst older	Continue to manage the woodlands in line with the established mixed policy forests.

Objective	Opportunity	Constraint	Concept
	areas of interesting species.	woodlands dating from the 1860s in places	
Support and enable investment in facilities and access for both locals and visitors to the isle of Mull.	Communities may be able to access funding to make identified improvements to existing path network.	Pathwork requires funding and improvements to meet the current and predicted future useage of the park.	Work with communities to access funding improving coastal access especially maintaining the important physical link with the town.
Continue to work with the community on facilitating and progressing opportunities for community involvement in the forest given its close proximity to Tobermory.	Proximity to the town of Tobermory and high visitor numbers both local and tourists provides a valuable destination for the island economy.	Significant investment required in ageing buildings etc to allow their safe use.	Work with communities on any further projects such as the nearly completed renovation of the pier and sawmill opening up the Park to boat visits from Tobermory.
Work with the community to protect the important Victorian heritage of Aros Park Estate.	The Victorian estate is an interesting example of social history in the west highlands including early examples of hydro power.	The cost of renovating and stabilising structures requires additional funding	As and when funding identified, work with the community to continue the protection of the Aros House legacy in the Park.

3 LMP Proposals

3.1 Management

(See Map 5 for Management Proposals)

Clear Felling

There is one remaining multipart coupe to be clearfelled within the park, 70507, with two main areas bordering the SSSI and three smaller areas of sitka spruce (SS) within the policy woodlands to the north. Timeous felling of these SS areas will provide income as well as remove the final threat of seeding invasive SS into the Sound of Mull cliffs SSSI.

Thinning

Selective felling may take place as required around thoroughfares in the forest (forest roads/ tracks/ recreational trails both formal and informal); see Map 6. This permission is applied across the wooded LMP area as the area is all designated as Plantations in Ancient Woodland Sites. Selective fellings are focused on the removal of essentially problem trees that are impacting adversely on site infrastructure, recreation areas, ecologically sensitive open ground and native woodland areas. This would allow for example halo thinning of veteran broadleaved trees, removal of conifers along watercourses to protect ASNW remnants and veteran trees. Thinning can also be used to create an attractive environment to trails and car parks and to open up viewpoints. There is usually no measurable volume removed and fellings may target small, scattered and individual trees in order to achieve the thinning objective. The scale of the operations makes representation of these areas on maps difficult. In general, the approach would be to remove the minimum number of trees to achieve the objective of minimising adverse impacts within these targeted areas. The areas that may be involved have been estimated at 40% conifers and 60% broadleaves (see initial table).

Low Impact Silvicultural Systems (LISS)

There are a number of LISS coupes identified within the areas previously clearfelled of SS as the park continues its transition from commercial conifer plantation to a restored Ancient Woodland (in the south) and policy woodland (in the north. These coupes are identified as Group Selection to allow for removal of regenerating SS as the seed sources comprise neighbouring broadleaves but also residual seed from the previous crop.

Natural Reserves (NR)

The area within the Sound of Mull cliffs is identified as a broadleaf Natural Reserve for Upland Ashwood and has unusual bryophyte communities.

Long Term Retentions (LTR)

There are no LTR's identified within the plan area.

Resilience

RESTRUCTURING:

The main purpose of restructuring is to create truly multi-purpose forests meeting a wide range of objectives including enhancing landscape, biodiversity, productivity, community/recreational opportunities whilst protecting and improving the setting of heritage features and restoring priority habitats. Increased species and age class diversity also increases the resilience of the forest. Aros Park is an unusual example as it is generally an old woodland afforested commercially in the twentieth century with a more recent conversion back to broadleaves starting about twenty years ago. As this continues to progress it should enhance many of these features above.

CLIMATE CHANGE:

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. 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. The focus within Aros Park is on the development of broadleaf habitat networks and associated woodland species as the areas cleared of SS continue to follow their conversion back towards ancient woodland.

TREE DISEASES AND PESTS

An increase in the type and scale of tree diseases and pests is increasingly impacting on species choice and forest management.
The most serious disease currently in the region is Phytophthora ramorum in Larch and the only one subject to statutory plant health notices (SPHN). There is minimal larch within the park which is

restricted to occasional single trees (Aros Park LMP lies within Scottish Forestry's RISK REDUCTION ZONE).
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, unless there is a perceived threat to the health and safety of the public. The SSSI designation in Aros Park is for Upland Ashwoods but given the challenging topography and the consequent lack of threat to any members of the public, no pre-emptive felling will be undertaken.

FIRE RESILIENCE

Due to climate change there is an increasing risk of fires across the National Forest Estate (NFE). The proposals within this plan aim to limit the risk through species diversity and age diversity, as well as having open rides. The road network will also provide a barrier for fires and enable access to areas if a fire would occur.

FLOOD RISK

SEPAs flood risk was consulted and although there are very small areas with potential surface water flooding, the only other possible impact is high likelihood of the Aros Burn flooding as it travels down through the park over its network of waterfalls. It is not anticipated that infrastructure will be at risk if this should occur, other than FLS installed bridges.

LANDSCAPE

Aros Park is set within a wider landscape defined by NaturesScot as Stepped Rocky Coastline Landscape Character Type (LCT). Views are primarily from the main public road at Apper Mòr, Tobermory to the north and from the busy ferry lanes in the Sound of Mull. Within this landscape, the Aros Park forest block has four distinct Local Landscape Character Areas (LCA), see map 4:

- Historic Aros Park:
  The core area of former policy woodlands which are mostly deciduous; proposals are to maintain these mixed woodlands and continuing rhododendron control after further surveying. This should not affect the existing character of this LCA.
- Aros Park Coastal Woodands:
  More rugged and remote fringe of dense temperate rainforest and steep ground (SSSI); planned phased rhododendron removal and potential rainforest restoration where required would be beneficial to the local landscape character.
- Apper Mor and Beag Glen:
  U-shaped glen with remaining commercial conifer to be removed followed by restock with broadleaves which will integrate with surrounding native woodland.

- Druim Fionn Ard:
  Small scale settlements and open land of which some is used for grazing; the local landscape character will not be affected by any of the above proposals.

Operational Access

Timber Haulage within the forest area is set out in the following protocols: [The-design-and-use-of-the-structural-pavement-of-unsealed-roads-Revised-2020.pdf (timbertransportforum.org.uk)]

The primary "in forest" route runs to the Apper Mòr entrance to the south of Tobermory and thence onto the public road network. The small pockets of remaining SS within the policy woodland will need to utilise the formal recreation entrance to access the main public road and careful liaison will be required to keep the community informed of planned works.

3.2 Establishment

(See Map 11 for Future Habitats and Species).

Restocking

No commercial conifers will be planted within Aros Park. Broadleaves will be established through natural regeneration (unless where supplementary planting has been identified within SSSI buffer) to achieve a minimum stocking density of 1600ha over a 5 to 10 year period.

Cultivation methods may be employed on a case by case basis to aid the establishment of trees but ground preparation will be minimal to ensure reduced soil disturbance or the need for herbicide treatment.

There are legacy coupes that were not successfully established under the previous plan for a number of reasons including: extra felling due to Statutory Plant Health Notices, Covid restrictions on contractor resource, availability of plants, increased herbivore browsing from a small resident deer population leading to failure of previous establishment attempts. These areas have been identified, assessed and included in the establishment programme and will be carefully monitored as the plan progresses. Whilst some will remain as natural regeneration as the resident deer population is reduced, other areas of supplementary broadleaf planting will be included especially in coupe 70525 with small individually fenced groups. Areas of the hilltops/ridge will be left open which will benefit the Lepidoptera population now thriving, including cinnabar moths.

Woodland Creation

There is no woodland creation planned within Aros Park

Natural Regeneration

Permanent native woodland habitats have been identified for expansion 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 provides less segregated landscapes; less greenhouse gas emissions without the requirement for ground preparation; and there is no potential for plastic pollution compared to the extensive use of tree guards with planting.

Monitoring of Natural Regeneration – a monitoring programme will survey regenerating areas to gain evidence of their success usually by means of a Herbivore Impact Assessment. This will be undertaken at year 5. If Natural regeneration is not going to succeed the area will be transferred to the planting programme. However, if it is felt it can succeed, it will be reassessed at Year 7 to decide whether to plant or whether full stocking is anticipated by natural regeneration at year 10.

PAWS restoration

The multi part felling coupe falls within a large area of PAWS which is undergoing restoration back to native woodland; an ongoing process over the last twenty years.

Riparian Management

Natural regeneration of native woodland along riparian corridors helps to alleviate flood risk by reducing the speed of run-off although there are no habitations downstream with all watercourses feeding into the sea or the lochan. There is the potential for natural regeneration of conifer species within the riparian corridor especially within the policy woodlands. Up to 15% conifer regeneration will be accepted in the riparian corridors unless it is felt to be detrimental to the riparian habitat.

Deadwood

The ecological potential for deadwood is generally found within the LMP forested area. A proportion of woodland will be managed to provide deadwood habitat where it provides the greatest environmental benefit. The highest ecological potential for deadwood is found in the established woodland within PAWS and also within Long Term Retention and minimum intervention areas.

3.3 Open Land

Integral open ground within the forest area delivers a significant part of the forest's ecological value. An area surrounding the old gardener's cottage has been designated as a deer lawn to improve access to deer populations which have been impeding natural regeneration.

Agricultural grazing land around Druimfin includes an adjacent area of Upland heathland open habitat. An additional area of open land adjacent to new housing outside Tobermory has had unusual flora identified including orchids.

The only other area of open land that will remain as its current habitat at the top of the park on the headland overlooking Tobermory.

An area of temporarily open land exists where establishment has not been successful but this plan outlines a detailed prescription to successfully re-establish native woodland by removing *R.ponticum* and lowering herbivore pressure.

There is no detailed soil information for Aros Park but no areas of deep peat have been identified.

3.4 Deer Management

(see Appendix V, Deer Management Plan)

3.5 Visitor Zones and Public Access

Aros Park is the main formal recreation site FLS offers on Mull (see Map 19) and access is enjoyed by a large number of locals and visitors alike. A car park in the grounds of the old estate house is the meeting point for the three routes advertised in the park: The Lochan trail (semi-accessible), the Coastal trail and the Waterfalls trail. In addition, the renovation of the old pier and sawmill on land purchased by Tobermory Harbour Association will be a popular addition to the facilities enjoyed by the

public with the intention of THA running a water taxi service between the town and Aros Park. The coastal trail into the town was originally the route for workers to access the estate grounds where they worked in the 19th Century and is still popular today. There are areas of this trail in a poorer state of repair, and also on the waterfall trail and these have been identified to be improved and any longer term future funding opportunities will be sought.

As well as walkers, the Park is an important meeting place for local community groups such as the Ardura Acorns toddler group, local schools and scouts. A disc golf trail is popular within the park and licences for fishing are important for Tobermory Angling Club who stock the lochan. The Walled Garden has been the subject of local interest and has been leased to the Historic walled garden group, although this group is currently undergoing a change in members. The forest road network provides cyclists and walkers with opportunities to enjoy and explore the wider area offering spectacular views as you climb the hillside. Longer circular informal routes are enjoyed across the park from Tobermory to Aper Mòr and into the neighbouring Aros forest or returning along the off-road pedestrian route parallel to the public road. Although this is in variable condition along the route it passes through the park at various points. This informal access is managed under the Scottish Outdoor Access Code (SOAC).

A number of viewpoints were chosen demonstrating a view of the forest from major publicly accessed routes; predominantly public roads but also from popular or well known vantage points. 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 16).

The rich gaelic heritage of Mull is found in the majority of its placenames; working with gaelic speakers on Mull and at the University of Glasgow, a map was put together showing the names and meanings of places around Mull on FLS land (see Map 18).

Woodland Management in Visitor Zones

A welcome Visitor Zone has been identified in areas where FLS encourage and manage access or where the woodland managed by FLS interacts with popular visitor sites or access routes. Visitor Zones are mapped on Map 13.

In these areas, single trees or small groups of trees will be removed when necessary to protect facilities, infrastructure and trails, or to enhance the setting of features, or to maintain existing views.

Woodland in these zones may also be thinned, or trees re-spaced for safety reasons (including to increase visibility to ensure that sites are welcoming and feel safe). See Map 6 Amenity Thinning. Also where it is necessary to enhance the experience of the forest setting, through the development of large trees, or preferential removal of trees to favour a particular species.

3.6 Heritage Features

There are no scheduled monuments listed under the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS). However, there are a number of unscheduled sites within the Park, mostly relating to the Victorian heritage of the site eg Aros House site including the walled garden.

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 in these heritage areas (open space) are sympathetic to both the features and its immediate environs. Further advice will obtained from the FLS Archaeologist if required.

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)."

3.7 Habitats & Species

Priority Habitats

There are small areas of woodland priority upland Ashwood adjacent to the SSSI in the south of the park and open upland heathland, another priority habitat, near the theatre. I

Priority Species

There are areas of the forest that are known habitat for bats, otters and schedule 1 raptors which are covered by the European Protected Species regulations and are marked on FLS' mapping system. In addition, prior to any harvesting operations, FLS' workplan process will undertake surveys within the coupe to check for the presence of any protected species. The relevant FCS guidance notes: Wildlife and Forest. Operations 31- 35d will be adhered to if protected species are found to be present.

- White tailed eagles have regularly nested along the cliffs in Aros park for at least the last 10 years.
- Barn owl barrels are sited in several places.
- Various bat species (Daubenton's (LBAP), Pipistrelle (UKBAP, LBAP) are known to use the woodland and surrounding open ground for foraging and roosting. Of particular importance is the maternity roost of Daubenton's bats in a natural tree cavity along the edge of the lochan. This roost will be annually monitored by FLS staff and external organisations.
- Otters are known to use coastal shore and freshwater lochan within Aros Park, however no known holts are recorded.
- Invasive Mink are present within the plan area, with multiple recorded sightings around the lochan.
- Important rainforest species of bryophytes, ferns and lichens are found within the wooded areas of Aros Park, with particular interest within the Sound of Mull cliffs SSSI.
- There have been

There is currently a barrier to Atlantic salmon getting from the sea into the lochan in the form of the dam at the northern end of the loch. Discussions should continue between the Angling club, FCE and environment team about trying to insert a fish run to allow the salmon access upstream which they are attempting and failing to do currently. This may be dependent on resolving any issues with the dam itself first.

3.8 Invasive Species

The following invasive species are been identified as being present within the plan area:

- Rhododendron ponticum: extensive throughout the plan area, predominantly in policy woodlands and the buffer zone to the SSSI.
- Japanese knotweed: a small discrete area identified near the walled garden
- Gaultheria: mostly around the lochan and policy woodlands

Removal work has been undertaken in a number of locations throughout the park with varying degrees of success towards the original goal of eradication (see Map 17). These have run from initial funding in 2000 by Millenium Forests for Scotland Trust up to more recent removal projects before Covid. An overall picture of the extent of invasives will be built up within the different zones of the INNS plan (see Map 18) through aerial photography (and multi-spectral drone analysis. Following their

identification, a plan for further, sequenced removal will be drawn up. This should then be followed up after removal to ensure there is no further recurrence. However the scale of the problem means that eradication of R.ponticum within the whole park is unfeasible and resources will be assigned on a priority basis to areas threatening the SSSI woodlands. This approach is summarised in the Invasive Non-Native Species (INNS) plan – Appendix XI. Any further areas identified will be mapped and included as reports are collected by FLS.

3.9 Water Supplies

Public Water Supplies

The Public water supply for the area comes from the Mishnish lochs, for which the catchment is outwith Aros Park LMP. Some properties at the edge of the park are connected to the water mains and the new harbour development is also getting a mains connection.

Private Water Supplies

Two private water supplies have been groundtruthed within Aros Park, one supplying two private properties to the north and second is a single property piping water from the main lochan. This latter supply may move across to mains water following the extension of the mains from Druimfin down into the THA's sawmill, adjacent to the property.
PWSs 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 Map 15) 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 end up in 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 a comprehensive coverage. A search was conducted using addresses within 2km of the forest but more than 100m from a Scottish Water mains pipe. This confirmed our existing database of water supplies were successfully captured.

Lochan a' Ghurrabain – this is a reservoir dam, currently low rish (latest report, see Appendix XIII).

3.10 Critical Success Factors

Effective deer management strategy	This is key to the successful establishment of broadleaf species especially around PAWS areas and their protective native woodland buffer around the SSSI. Continued sustained population control is necessary combined with a landscape scale approach to deer control across neighbouring land owners.
Successful establishment of both previously and planned felled areas.	A previously felled area has not established successfully, partly due to severe disruption across the island of multiple Statutory Plant Health Notices impacting on programmes. This, coupled with the challenges of a highly migratory neighbouring deer population, especially within the inaccessible SSSI area, and a lack of fencing, has resulted in unsuccessful areas of establishment. This is also challenging due to the additional pressures of contractor resource in an island setting. An agreed path forward between all functions should enable successful establishment across the Park.
Resources to manage the natural regeneration to achieve the required species and stocking	The prevalence of undesirable seed sources coupled with highly invasive R.ponticum means that additional monitoring and work is required during the first decade of natural regeneration sites to ensure the desired woodland habitat is established.
Maintaining popular recreation site	Ensuring maintenance works are planned and programmed alongside the regular inspections of equipment; Visitor Services to continue to work towards production of an Aros Park plan detailing plans and a timeline for improvements to interpretation, signage and facilities.

4 List of Maps