Forestry and Land Scotland
Coilltearachd agus Fearann Alba

West Region

Clunes and Loch Arkaig

Land Management Plan

……..

Plan Reference No: ******

Plan Approval Date: ******

Plan Expiry Date: ******

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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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:	Clunes and Loch Arkaig
Nearest town, village or locality:	Clunes
OS Grid reference:	NN 1973 8917
Local Authority district/unitary Authority:	Highland

Areas for Approval	*Conifer Ha*	*Broadleaf*	*Open Space*	*Other Land*	*Peatland Restoration*
Clear felling	*170.64*	*1.83*	*24.32*	*0*	*0*
Restocking (including legacy RS)	*41.51*	*339.17*	*35.34*	*0*	*0*
Selective Fell (CCF)	*62.5*	*89.72*	*251.95*	*0*	*0*
Afforestation	*4.14*	*33.15*	*4.14*	*0*	*0*
Thinning	*180.73*	*12.62*	*62.6*	*0*	*0*

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 on 26/06/2023 with FLS staff and SF staff were invited.
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: ……

CONTENTS TABLE

1 Regulatory Requirements

1.1 Summary of Proposals

- Clearfelling of 196.79ha of conifer crops for economic, plant health and environmental objectives
- Restocking of 416.02ha as native woodland habitat. This includes the legacy felled areas and the subsequent restocking of the above approved fell areas.
- Major beat-up of 87.42ha of two native woodland coupes in Gleann Chia-Aig in Loch Arkaig Forest.
- The creation of 41.43ha of new native woodland on a “ghost wood” area of ancient woodland in Coupe 62073, linking Plantation on Ancient Woodland Sites (PAWS) with an area of Ancient Semi-Natural Woodland (ASNW) and young planted native woodland.
- Low Impact Silvicultural System (LISS) management/felling within 404.2ha of forest.
- Thinning within 256ha of forests for silvicultural, plant health and environmental objective, including within 79ha for halo thinning of ancient woodland features.
- Construction of 2460m of new deer fencing to protect afforestation Coupe 62073 and adjacent restock Coupe 62069.
- Major upgrade/replacement of 8460m of the Clunes and east Loch Arkaig section of the wider strategic deer fence.
- Upgrade of the west Loch Arkaig Forest deer fences - 2800m.
- Construction of 2330m of ATV track in Coupe 62074 to improve deer management access in the wider northern section of Clunes hill.
- Construction of three forwarder tracks totalling 840m to enable harvesting, forwarding and skyline extraction in Coupes 62055 and 62056. (including adjacent LISS Coupes 62052 and 62054).
- The upgrade of 3740m of forest roads in Clunes Forest.
- Closure of Cia-Aig quarry and expansion of LK4 Arkaig quarry of up to 0.32ha.
- The removal of non-native regeneration (NNR) and invasive non-native species (INNS) IN 358ha of native woodland habitat.
- The combined removal of NNR and INNS in combination with birch respacing operations in 87ha of native woodland habitat.
- The restoration of 7ha of hagged blanket bog and the potential restoration of a further 210ha of high elevation hagged blanket bog if funding and access for machines is viable.

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	101.07	95.72	127.65	53.24
% of area (not including other land)	8.4	8.0	10.6	4.4
Volume (Km3)	53,223	49,969.5	31,228*	27,075

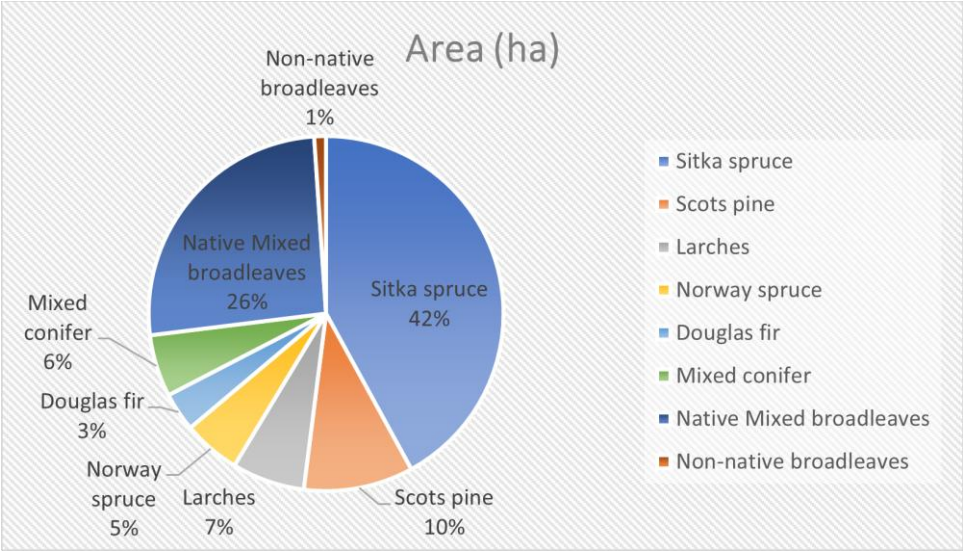
- High proportion of two larger coupes contain SS YC4 (unforecastable)

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

Species Group	Current – 2024/25		Year 10 – 2034/35		Year 20 – 2044/45	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka Spruce	417.2	34.6	281.7	22.6	140.2	11.2
Scots pine	99.2	8.2	140.7	11.3	172.7	13.9
Norway Spruce	51.7	4.3	30.1	2.4	21.7	1.7
Larches	65.8	5.5	34.16	2.7	22.89	1.8
Mixed Conifers	89.7	7.4	49.3	4.0	42.7	3.4
Mixed Broadleaves	75.6	6.3	62.9	5.0	54.8	4.4
Native Broadleaves	193.5	16.0	508.8	40.8	638.79	51.3
Internal Open Space*	32.2	2.7	115.24	9.3	141.22	11.3
Felled awaiting restock	180.4	15.0	23.8	1.9	11.7	1
Forested Area Total**	**1205.3**	**100**	**1246.7**	**100**	**1246.7**	**100**
Open Hill	1743.2	97	1701.8	97	1701.8	97
Agriculture/Butterfly Reserve	52.1	2.9	52.1	2.9	52.1	2.9
Open Water	1.2	0.1	1.2	0.1	1.2	0.1
Open Habitat Total	**1796.5**	**100**	**1755.1**	**100**	**1755.1**	**100**
LMP area Total	**3001.8**	**100**	**3001.8**	**100**	**3001.8**	**100**
Forest LU in LMP	**1205.3**	**40**	**1246.7**	**41.5**	**1246.8**	**41.5**
Open LU in LMP	**1796.5**	**60**	**1755.1**	**58.5**	**1755.1**	**58.5**
Total LU in LMP	**3001.8**	**100**	**3001.8**	**100**	**3001.8**	**100**

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

Current species composition pie -chart:



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

Age Class	Current – 2024/25		Year 20 – 2044/45	
	Area (ha)	%	Area (ha)	%
0 – 10 yrs	141.6	15,1	378.6	34.25
11 – 20yrs	153.2	16.3	268	24.25
21 – 40 yrs	251.4	26.8	228.4	20.7
40 – 60yrs	51.5	5.5	98.3	8.9
60+ yrs	341	36.3	132	11.9
Total	938.7	100	1105.3	100

Planned Roading Operations

Planned operations 10 year plan period
Road upgrades CS100 – 1480m Road upgrades CS1 – 2260m Forwarder track construction – 840m ATV track construction – 2330m

The 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 FPAs and PNs are listed in Appendix XVII.

1.2 Activity Summary

(See Map 2a – Approved Fell Coupes Loch Arkaig and Map 2b – Approved Fell Coupes Clunes & Loch Arkaig east and Map 3 - Haulage)

	1.1 Table of Clearfelling (Phase 1)										
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 (MB)**	**Open Land by Ha**	**Restock Year**	**Monitoring Comments**
61028	15.4	10.78	0	0	0.63	1.15	0	0	2.84	2030/31 & 2038/39	Part PAWS and quite large areas of windblow. Affected by the Great Glen Way (GGW). Haulage east is impacted by the Coire Glas development, hence all of this Coupe needs felled to enable extraction to the lower forest road and haulage to Clunes. Take the opportunity to remove non-native species from adjacent LISS Coupe 61031 and from the Allt Dearg MI Coupe 61030 to improve resilience of this excellent ASNW.
62005	2.3	1.29	0	1.01	0	0	0	0	0	2030/31	PAWS buffer. Areas of checked SS & LP from previous crop. Remove all of these species to enable successful native woodland replant. This is a FTR area so much debris expected on site, however, it may be used as brash mat for machine access across current felled site.
62055	40.02	19.1	1.35	3.45	0.21	13.03	1.13	0	1.75	2030/31 & 2038/39	PAWS restoration. Retain as much of the SP crop as possible to enable SP to naturally regenerate in the native restock. Parts of the east and west sections of the site lie within CPI buffers. Extraction to the forest road will be gained along the forwarder tracks as per EIA screening opinion request and operational access proposals.
62069	13.13	10.24	0	0	0	0	0	0	2.89	2030/31	Low SS YC means that much of the volume is non-forecastable. This may be an under estimate of true volume. Remove all non-native species for native restocking. Plant at same time as adjacent afforestation Coupe 62073.
62079	0.82	0.82	0	0	0	0	0	0	0	2038/39	CPI regeneration zone. Adjacent to CPI core areas on outcrops. Remove all SS/ensure NNR seeding threat to CPI area is removed. May entail multiple methods of removal.
62087	25.78	2.26	7.76	0	2.35	9.01	0.29	0	4.11	2030/31 & 2038/39	PAWS. Retain as much of the SP as possible. Only remove SP to enable skyline extraction of non-native crops farther uphill.
62096	3.3	1.33*	339.95	0	0	0	0	0	1.97*	2038/39	CPI regeneration zone. Ensure removal of all non-native species to protect the CPI area. *Mapping details are incorrect – species is SS not NS and area is larger than mapping suggests. Remove all non-native trees to enable successful CPI regeneration.
62102	0.32	0	0.04	0	0	0	0	0.22	0.06	N/A	Quarry expansion.
Totals	**101.07**	**45.82**	**9.15**	**4.46**	**3.19**	**23.19**	**1.42**	**0.22**	**13.62**		

	1.2 Table of Clearfelling (Phase 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 (MB)**	**Open Land by Ha**	**Restock Year**	**Monitoring Comments**
61048	2.91	0.59	0	0	0.18	0.33	0.69	0.33	0.79	2035/36	PAWS. Area full of WH. Remove all evidence of non-native species to secure PAWS restoration. Retain as much of the native component as possible.
61049	3.44	0.32	0	0	2.19	0	0.52	0.01	0.4	2035/36	PAWS. Mature & regenerating WH within this site. Remove all evidence of non-native species (including beech), to secure PAWS restoration.
61054	20.0	15.39	0	0	0	0	0	1.24	3.37	2035/36	PAWS. Retain as much of the birch component as possible. WH has seeded through this SS crop but mapping does not reflect its true spread. Remove all evidence of non-native species to secure PAWS restoration. Remove the SS component of LISS Coupe 61053 (irregular shelterwood) to restore native habitat on steep slopes.

	1.2 Table of Clearfelling (Phase 2)										
61068	6.88	1.93	0.03	0	3.24	0.45	0	0.03	1.2	2035/36	PAWS coupe lying between the Natural Reserve and a rich upland mixed ashwood ASNW. Retain as much of the SP & NMB component as possible. Remove all non-native species including any lone beech trees to secure PAWS restoration and protect adjacent ASNW. Remove the SS component from the Natural Reserve Coupe 61067 at the same time as the felling of this Coupe to complete the initial set-up operations. Also remove the non-native component from nearby LISS Coupe 61071 to secure PAWS restoration and the adjacent ASNW.
62034	37.6	21.31	0.46	11.26	0	0.78	0	0	3.79	2035/36	PAWS buffer with poor condition LP which is a threat to CPI areas in this wider location. Retain as much SP as possible. Remove all non-native species to secure successful native restocking. Lower half of site is scattered through the LISS Coupe 62036. Only remove the minimum SP in the LISS area to facilitate forwarder extraction routes. Fell at same time as nearby Coupe 62103.
62056	23.83	10.18	0	5.04	0	6.89	0.84	0	0.88	2035/36 & 2043/44	PAWS. Remove all non-native species and retains as much of the native species as possible. Ensure that the removal of the SS component from the adjacent LISS Coupe 62054 occurs at the same time as the felling of this coupe. Also remove the larch component from LISS Coupe 62052. Skyline winch extraction is required on the east facing slopes. Access for skyline extraction in this part of the coupe will be gained along the forwarder tracks as per EIA screening opinion request and operational access proposals.
62103	1.06	0.58	0	0	0.21	0	0	0	0.27	2035/36 & 2043/44	PAWS. Take the opportunity to fell this small quite young crop at the same time as felling Coupe 62034. Combine the areas in harvesting contract.
Totals	**95.72**	**50.3**	**0.49**	**16.3**	**5.82**	**8.45**	**2.05**	**1.61**	**10.7**		

(See Map 4a Management Coupes Loch Arkaig and Map 4b Management Coupes Clunes & Loch Arkaig east)

1.3 Table of LISS Felling (including Natural Reserve)											
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 (MB)**	**Open Land by Ha**	**Silv. Method**	**Monitoring Comments**
61053	7.74	3.46	0	0	0	0	0	3.36	0.92	Irregular shelterwood	Priority 2 operation. PAWS. Steep ground. Remove only the SS component at same time as clearfell of Phase 2 Coupe 61054
61067	6.49	1.72	4.43	0	0.27	0	0	0	0.07	Natural Reserve	Priority 2 operation. Remove only the SS as part of the initial set-up operations. Fell along with Phase 2 Coupe 61068.
61071	0.7	0.1	0	0	0	0	0	0.5	0.1	Irregular shelterwood	Priority 2 operation. PAWS adjacent to ASNW. Removal of only non-native species. Remove non-native species at same times as felling of Coupe 61068. Estimate of SS/beech component. Mapping has not identified these species.
62052	3.66	0	0	0	0	1.35	0	1.4	0.91	Irregular shelterwood	Priority 1 and Priority 2 operation.

1.3 Table of LISS Felling (including Natural Reserve)											
											PAWS adjacent to ASNW. Remove larch component only at same time as the felling of Phase 1 Coupe 62055 and Phase 2 Coupe 62056.
62054	6.01	0.6	0	0	4.51	0	0	0.9	0	Irregular shelterwood	Priority 2 operation PAWS adjacent to ASNW. Remove SS component at same time as the felling of Coupe 62056. Retain the NS to maintain humidity levels to support the bryophyte communities. Halo thin the oak & birch veteran trees within the NS crop.
62084	3.93	0.61	1.4	0	0.56	0	0.1	1.26	0	Group selection	Priority 1 operation. CPI Core Areas 5 – 9. Remove all non-native species, except NS in Core Area 6. Retain all native species. Mapping of the core areas is incorrect. LISS Coupe is best estimate of the location and distribution of core areas. Mapping incorrectly identifies species observed on the ground. This table is a best estimate of species. NB – Core areas 7, 8 & 9 lie or partly lie within FR experiment Lochaber 7B. FR must be informed well in advance of any operations to allow time for them to carry out any necessary assessments.
61012, 61024, 61031-61033, 61037, 61040, 61042, 61047, 61056, 61058, 61059, 61061, 61066, 61072, 62001, 62003, 62004, 62006, 62008, 62011, 62015-62017, 62025, 62030, 62032, 62033, 62036, 62038, 62041, 62043, 62045, 62065, 62078, 62081-62083, 62085.	375.64	14.1	23.8	0.69	0.7	0.8	3.3	82.3	249.95	A mix of irregular shelterwood and Group Selection	Removal (FTR) of NNR where dbh exceeds 10cm. These coupes include PAWS natural regeneration areas, non-PAWS natural regeneration and planted areas, open and riparian areas. These descriptions include large areas identified as felled awaiting restock. NB: Coupe 62045 lies within FR experiment C1110 - Achna. FR confirmed that there are no restrictions on felling. Coupe 62085 lies within FR experiment Lochaber 7B. FR must be informed well in advance of any operations to allow time for them to carry out any necessary assessments.

(See Map 5a – Thinning Loch Arkaig and Map 5b – Thinning Clunes & Loch Arkaig east)

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
61000	3.8	SS	3.8	Selective felling	3.8	5	Removal of NNR regeneration exceeding 10cm dbh from open habitat. Volumes are estimates
62080	3.57	SS	3.57	Selective felling	3.57	10	Removal of NNR regeneration exceeding 10cm dbh from open habitat. Volumes are estimates
LTRs 61011, 61022, 61026, 61065, 62007, 62095, 62098	21.26	SS, SP & MC	21.26	Amenity, safe access and environmental thinning	21.26	50	Removal of unsafe trees, gradual removal of invasive species, opening up riparian-areas, halo thinning of ancient woodland features. Coupe 61022 contains FR experiment Lochaber 7C. FR must be informed well in advance of any intervention to allow time for any required assessments to be completed.
61023	20.73	SS/NS	9.5	Selective thinning/ environmental	9.5	30	GGW safe access, manage riparian areas for UKFS compliance, favour regenerating NMB retention.
61025	22.63	SS	6.45	Selective thinning/environmental	6.45	20	Above top road only. This coupe may not be ready for some level of thinning even by the end of the plan. Favour retention of regenerating native species over SS and manage riparian areas for UKFS compliance.
61034	13.55	SS/HL/Birch	10.4	Selective thinning/plant health management	10.4	50	Skyline winch extraction required. Favour the removal of larch.
61035	16.25	MC/MB/SS/DF JL/NS	14.59	Selective thinning/plant health management	14.59	50	Favour the removal of larch. Favour the retention on native species.
61036	38.81	SS/HL/NS/Birch	36.3	Selective thinning/plant health management	36.3	50	Skyline winch extraction. Favour the removal of larch.
61038	11.8	SS/MB	8.1	Selective thinning/environmental	8.1	50	Manage to favour NMB retention. Manage riparian areas for UKFS compliance as a minimum, preferably exceeding riparian buffer widths.
61041	4.16	SP/NS/EL/DF	4.16	Selective thinning/plant health management	4.16	30	Favour the removal of EL. Thinning should favour the retention of SP.
61043	12.5	SS/HL/Birch	8.5	Selective thinning/plant health management	8.5	50	Skyline winch extraction. Favour the removal of larch and favour the retention of birch. Manage riparian areas for UKFS compliance, preferably exceeding riparian buffer widths.
61044	6.36	SS/Birch	5.0	Selective thinning/environmental	5.0	50	Skyline winch extraction Thin this crop if larch removal is required in Coupe 61043. Favour the retention of birch.
61055	14.89	SS/SP/Birch/NMB	14.89	Selective thinning	14.89	30	Manage the SS to favour the retention of SP and native broadleaf species. Halo thin ancient woodland features. Manage safe access along forest roads, especially the GGW.
62009	9.93	SS/SP/EL/NS	9.93	Selective thinning/plant health management	9.93	50	Favour the removal of EL and some SS. Halo thin SP and ancient woodland features
62018	18.59	SS/SP/EL/NS	18.0	Selective thinning/plant health management	18.0	50	Favour the removal of EL and some SS. Halo thin SP and ancient woodland features.
62037	11.1	SS/SP/EL/NS	8.7	Selective thinning/plant health management	8.7	40	Favour the removal of EL and some SS. NMB are regenerating in this coupe. Thinning should favour transition to native woodland. Halo thin ancient woodland features.
62040	6.95	SS/SP/EL/NS/DF	5.0	Selective thinning/plant health management	5.0	35	Favour the removal of EL and some SS. Halo thin SP and ancient woodland features.
62090	2.84	DF	2.84	Selective thinning	2.84	50	Improve stem quality and stand stability. Halo thin ancient woodland features
62091	5.33	NS	5.33	Selective thinning	5.33	50	Remove windblow and unstable trees. Halo thin ancient woodland features. Avoid these operations in FR experiment SampPlot 3426/3427/3428/3429 and associated buffer. Buffer zones will be marked at time of 2024 remeasurement.
62092	0.73	SS	0.73	Selective thinning	0.73	50	Remove windblow and unstable trees. Halo thin ancient woodland features.
62093	10.17	SS/DF/JL	10.17	Selective thinning/plant health management	10.17	50	Favour the removal of some EL and open up this crop to manage airflow. Halo thin ancient woodland features

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 (MB)**	**Open Land by Ha**	**Comments**
Clearfell	**196.79**	**103,192.4**	**96.12**	**9.64**	**20.76**	**9.01**	**35.11***	**1.83**	**24.32**	*Larch fell area is 31.64ha
Thinning	**255.95**	**9,120.7**	**124.66**	**7.87**	**0.11**	**19.77**	**28.32***	**12.62**	**62.6**	*Larch occupies 18.18ha. N.B. - Open ground includes some areas of crop where thinning will not take place.
LISS	**404.17**	**2,815**	**20.59**	**29.63**	**0.69**	**6.04**	**5.55***	**89.72**	**251.95**	*Larch fell area is 2.15ha. Open ground includes felled awaiting restock land use.
			Grand Total of Felled Timber Proposed for Plan Period							

(See Map 6a – Approved Restock Loch Arkaig and Map 6b – Approved restock Clunes & Loch Arkaig east)

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)**	Fell year **RS Year**	**Restock Method & Density** (Restock/Nat Regen/Alt Area/Coppice/Open)	**Monitoring Comments** (Including any reason not to restock)
61028	15.4	0	0	0.8	0	0	11.53	0	3.07	2028/29 2030/31 & 2038/39	Restock & nat regen 1600/ha	Part PAWS which is adjacent to ASNW therefore an expectation of some NR, especially upland mixed ashwood species. Plant oak on lower and central slopes – and in nests where access and slope provide the opportunity for appropriate management. Birch with scots pine on the upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes as well as riparian areas Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout but especially in riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Hazel, holly and hawthorn between the CS1 forest road (GGW long distance path) and Loch Lochy will enable permanent views along the Great Glen. Will require persistent management of NNR especially WH, as well as rhododendron management.
61047	33.58	0	0	3.22	0	0	27	0	3.36	2021/22 2024/25	Restock 1600/ha 10,000/ha in oak nests	PAWS. Lack of seed sources. Some ASNW at upper treeline so there may be some seeding of birch and NMB which will be welcomed. Requires vigilance regarding herbivore impact. Plant oak on lower and central slopes – and in nests where access and slope provide the opportunity for appropriate management. Birch with scots pine on the upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes as well as riparian areas

1.7 Table of Restocking – including incomplete RS from previous plan												
												Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout but especially in riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Hazel, holly and hawthorn between the CS1 forest road (GGW long distance path) and Loch Lochy will enable permanent views along the Great Glen. Will require persistent management of NNR especially WH, as well as rhododendron management.
61048	2.91	0	0	0	0	0	2.62	0	0.29	2033/34 2035/36	Restock 1600/ha 10,000/ha in oak nests	PAWS Plant oak – and in nests where access and slope provide the opportunity for appropriate management. Birch with scots pine on the upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes as well as riparian areas Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout but especially in riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Hazel, holly and hawthorn between the CS1 forest road (GGW long distance path) and Loch Lochy will enable permanent views along the Great Glen. Will require persistent management of NNR especially WH, as well as rhododendron management.
61049	3.44	0	0	0	0	0	3.09	0	0.35	2033/34 2035/36	Restock 1600/ha 10,000/ha in oak nests	PAWS. Plant oak – and in nests where access and slope provide the opportunity for appropriate management. Birch with scots pine on the upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes as well as riparian areas Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout but especially in riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Hazel, holly and hawthorn between the CS1 forest road (GGW long distance path) and Loch Lochy will enable permanent views along the Great Glen. Will require persistent management of NNR especially WH as well as rhododendron management.
61054	20	0	0	2.46	0	0	14.42	0	3.12	2033/34 2035/36	Restock 1600/ha	PAWS. Birch with scots pine on upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Should get some birch regen from adjacent areas. Plant oak on lower and central slopes – and in nests where access and slope provide the opportunity for appropriate management.

1.7 Table of Restocking – including incomplete RS from previous plan												
												Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes as well as riparian areas Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout but especially in riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Keep on top of NNR especially SS & WH as well as controlling rhododendron.
61059	5.93	0	0	1.24	0	0	4.03	0	0.66	2018 2025/26	Restock 1600/ha	PAWS buffer. Upper section has debris from previous windblow. Birch with scots pine on upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Should get some birch regen from adjacent areas. Plant oak on lower and central slopes – and in nests where access and slope provide the opportunity for appropriate management. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm on the upper slopes. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Must fell the scattered beech and control rhododendron and thick areas of buddleia to ensure resilience for native woodland habitat. Keep on top of the NNR.
61068	6.88	0	0	0.69	0	0	5.5	0	0.69	2033/34 2035/36 & 2043/44	Restock & nat regen 1600/ha	PAWS & adjacent to ASNW of upland mixed ashwood species. Allow time for regeneration of birch and hot plant desirable species. Manage other native species which seed in form neighbouring ASNW prioritising them to expand the ASNW habitat from its original location. Birch with scots pine on upper slopes to build resilience for pinewood connectivity throughout the LMP forested areas. Should get some birch regen from adjacent areas. Plant oak on lower and central slopes. Diverse species should include: rowan, aspen, hazel, common alder holly, hawthorn, and wych elm. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Manage NNR, especially WH, SS and beech. Fell any beech that survives felling operations. Vigilance/ zero-tolerance required for rhododendron, gaultheria and buddleia.
62003	29.07	0	0	0	0	0	26.17	0	2.9	2023 2025/26 & 2033/34	Restock & nat regen 1600/ha	PAWS buffer. Create an upland birchwood habitat. Some SP groups through the area will enable some SP regeneration, however, some planting will take place to ensure a scattering throughout the restock coupe. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62004	14.79	0	0	0	0	0	13.31	0	1.48	2018 2025/26	Restock 1600/ha	PAWS buffer. Create an upland birchwood habitat with scattered SP in low numbers.

1.7 Table of Restocking – including incomplete RS from previous plan

												Also plant diverse species in appropriate locations to include: sessile oak, aspen, hazel, hawthorn, rowan and alder. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62005	2.3	0	0	0	0	0	2.07	0	0.23	2028/29 2030/31	Restock 600-1200/ha	PAWS buffer. Create an upland birchwood habitat with scattered SP in low numbers. Ideally this section will have had the original checked crop FTR in time to replant at the same time as Coupe 62004. There will likely be much debris on site and as such will limit opportunity to plant, hence the lower stocking densities.
62006	21.62	0	0	0	0	0	19.46	0	2.16	2018 2021 2023 2025/26 & 2033/34	Restock & natural regen 1600/ha	PAWS. Establish upland oakwood habitat. Planting will not take place within 10m of the recessed platforms. Diverse species will include birch, aspen, hazel, hawthorn, rowan and alder. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62008	17.51	0	0	0	0	0	14.26	0	3.25	2018 2025/26	Restock 1600/ha 2500-3000/ha for productive fuelwood potential areas 320/ha around heritage features	PAWS, PAWS buffer & heritage feature open crowned woodland. Establish upland birchwood habitat on non-PAWS areas that also includes: sessile oak, aspen, hazel, hawthorn, rowan and alder with a scattering of Scots pine. In PAWS areas establish upland oakwood habitat with some birch, aspen, hazel, hawthorn, rowan and alder. Keep on top of NNR & INNS to establish a resilient native woodland habitat. Plant birch and oak inside the heritage enclosure to eventually establish open crowned woodland. Best practice around the heritage structures will include observing a 5m unplanted buffer.
62016	14.88	0	0	0	0	0	13.19	0	1.47	2013? 2025/26	Natural regen 1600/ha	Mapping system has not retained the date of felling. PAWS. Eventually establish an upland oakwood habitat. This site is currently regenerating well but requires the removal of NNR before signing off as an establish native woodland. A 5m open buffer around the small heritage feature. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62033	33.97	0	0	5.57	0	0	24.4	0	4	2018 2025/26	Restock & nat regen 1600/ha 600-1200/ha	PAWS buffer and riparian woodland. Establish an upland birchwood habitat that also includes: sessile oak, aspen, hazel, hawthorn, rowan and alder with a scattering of Scots pine. The riparian areas will be stocked at around 600-1200/ha as a minimum, ideally at 2500/ha with 20% open to create enough shade on these south facing slopes to maintain humidity levels for bryophyte communities to develop. Keep on top of NNR & INNS to establish a resilient native woodland habitat.

1.7 Table of Restocking – including incomplete RS from previous plan												
62034	37.6	0	0	6.62	0	0	26.68	0	4.3	2033/34 2035/36	Restock 1600/ha 2500/ha in riparian areas	PAWS buffer and riparian woodland. Establish an upland birchwood habitat that also includes: sessile oak, aspen, hazel, hawthorn, rowan and alder and pinewood mosaic. The riparian areas will be stocked at around 600-1200/ha as a minimum, ideally at 2500/ha with 20% open to create enough shade on these south facing slopes to maintain humidity levels for bryophyte communities to develop. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62041	22.85	0	0	0	0	0	22.85	0	0	2010 2025/26	Nat regen 1600/ha	This site is currently regenerating well, but will not be signed off as established until the NNR has been removed. It is an upland birchwood habitat but it is expected to transition to upland oakwood over time. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62055	40.02	0	0	8.54	0	0	31.48	0	0	2028/29 2030/32 & 2038/39	Restock & nat regen 1600/ha	PAWS. Hot plant SP out with CPI buffers in random groups throughout the site to improve ecological connectivity of pinewood in this location. Hot plant diverse species before vegetation becomes rank: to include sessile oak, aspen, alder, hazel, hawthorn, holly. Manage NNR & INNS to establish a resilient native woodland habitat. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats.
62056	23.83	0	0	0	0	0	23.83	0	0	2033/34 2035/36 & 2043/44	Restock & nat regen 1600/ha	PAWS. Hot plant the desirable species before vegetation becomes rank on the site: to include sessile oak, aspen, alder, hazel, hawthorn, holly. It is hoped that SP will regenerate within this site as it lies within the CPI buffer. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62069	13.13	0	0	1.31	0	0	9.2	0	2.62	2028/29 2038/39	Nat regen 1600/ha	PAWS buffer and a small section of PAWS in outlying scattered areas. Plant at same time as establishing the adjacent afforestation site Coupe 62073 so that it can be protected by the deer fence. Establish an upland birchwood habitat with scattered SP to improve the ecological connectivity of pinewoods within the LMP but to also improve linkage with the Glengarry pinewoods via the Fhudair pass. Keep on top of NNR & INNS to establish a resilient native woodland habitat. Ensure robustness of deer fence whilst the deer population is reduced over this plan period.
62079	0.82	0	0	0.74	0	0	0.08	0	0	2028/29	Nat regen	Adjacent to CPI core areas 6 and 7.

1.7 Table of Restocking – including incomplete RS from previous plan												
										2038/39	1200/ha	Lies on outcrops. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62081	2.09	0	0	0.21	0	0	1.46	0	0.42	2020 2025/26	Restock 1600/ha	PAWS buffer. Create an upland birchwood habitat. This area lies within the CPI buffer but it is hoped that with robust deer management there will be some regeneration from the retained SP crop from the previous crop. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62082	5.6	0	0	0.9	0	0	4.25	0	0.45	2020 2025/26	Restock 1600/ha	PAWS buffer. CPI regeneration zone affects 3.35ha. Remove the non-native checked crop that was left behind after harvesting operations. Also carry out the selective felling of non-native species on surrounding open habitats. Create an upland birchwood habitat. This area lies partly within the CPI regeneration zone and it is hoped that with robust deer management there will be some regeneration from the CPI core areas. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62083	3.08	0	0	0.51	0	0	2.37	0	0.2	2012 2025/26	Restock 1600/ha	PAWS buffer. CPI regeneration zone affects 2.07ha. Remove the NNR (SS) before attempting any planting operation. Also carry out the selective felling of non-native species on surrounding open habitats. Do this before carrying out planting operations. Create an upland birchwood habitat. This area lies partly within the CPI regeneration zone and it is hoped that with robust deer management there will be some regeneration from the CPI core areas. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62085	14.81	0	0	2.96	0	0	11.85	0	0	2012 2025/26	Restock 1600/ha	PAWS and CPI regeneration zone. Much of this site is successfully regenerating. Before declaring establishment, some supplementary planting of oak, rowan, aspen, wych elm and hazel is required in the upper parts of the site. Non-native regeneration should be removed before planting takes place. This area lies within the CPI regeneration zone and it is therefore hoped that with robust deer management there will be some regeneration from the CPI core areas. Keep on top of NNR & INNS to establish a resilient native woodland habitat. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats.
62087	25.78	0	0	5.15	0	0	20.63	0	0	2028/29 2030/32 & 2038/39	Restock & nat regen 1600/ha	PAWS. Hot plant with diverse species such as sessile oak, hazel, hawthorn, aspen, alder before vegetation becomes rank and to stabilise these steep slopes with moderate to high slope instability risk. Increased stocking within the

1.7 Table of Restocking – including incomplete RS from previous plan												
												riparian zone to improve slope stability but also to bolster humidity levels that supports bryophyte communities and improve water quality and quantity. Scots pine may be planted but it is hoped to retain as much of the previous crop as possible for stand structure and as seed sources. Keep on top of NNR & INNS to establish a resilient native woodland habitat. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland throughout. Ensure a good mixture of native species with plate, heart and tap rooting habitats.
62096	2.97	0	0	0.59	0	0	2.38	0	0	2028/29 2038/39	Nat regen 1600/ha	PAWS. CPI regeneration zone. Keep on top of NNR & INNS to establish a resilient native woodland habitat.
62102	0.32	0	0	0	0	0	0	0	0.32	2028/29	N/A	Open. Quarry expansion land use.
62103	1.06	0	0	0	0	0	1.06	0	0	2033/34 2043/44	Natural regeneration	PAWS. Accept SP regeneration. Keep on top of NNR & INNS to establish a resilient native woodland habitat.

(See Map 7a – Future restock Loch Arkaig and Map 7b – Future restock Clunes & Loch Arkaig east)

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 & juniper**	**Montane scrub**	**Open (Ha)**	**Year**	**Planting Method & Density (Planting/Nat Regen)**	**Monitoring Comments**
62073	41.43	0	0	4.14	0	0	32.95	0.2	4.14	2029/30	1600/ha	Erect protective deer fence around this coupe and the neighbouring restock Coupe 62069. (see Table 1.10 Table of Other Projects). Expect some regeneration from the moribund birch on the lower slopes. Hot plant diverse species such as sessile oak, rowan, aspen, hazel, hawthorn in the riparian areas and gullies throughout the site, with dark or tea-leaved willows within the upper reaches of the gullies. Supplementary plant with birch on areas which fail to regenerate after 5 – 10 years. Elsewhere on the slopes hot plant SP and some juniper. Overall stocking will be 1600/ha, however densities will be greater in the gullies and lower slopes and decreasing as elevation increases to reflect the move towards transition native woodland habitat around 450m+ elevation. Plant according to Forest development type FDT 10.1.2 – Slope Stability Woodland, especially in the gullies and riparian buffers. Ensure a good mixture of native species with plate, heart and tap rooting habitats.

1.9 Table of Civil Engineering				
Proposed Activity (Road/Quarry)	**OS Grid Reference**	**Forest/Coupe**	**Description (Length/Area/Construction)**	**Monitoring Comments**
Forwarder tracks	Track 1 – NN 1694 8903 Track 2 - NN 1881 8911 Track 3 – NN 1623 8915	62055 & 62056 62050 62055	Track 1 - 730m Track 2 - 80m Track 3 – 30m	Required to enable the skyline winch to access the east side of Coupe 62056 from forest road LK3. To enable access to the hanging section of Coupe 62055 from forest road LK3 via Coupe 62050 To enable extraction from parts of the west section of Coupe 62055 to access the forest road LK3
Forest road upgrades (confined to original footprint of road)	NN 2120 8934 to NN 2471 9273 NN 2328 9113 to NN 2471 9273	CS100 CS1	1480m 2260m	To enable access for harvesting and haulage from Phase 2 fell Coupes 61067 & 61068 To enable access for harvesting and haulage from Phase 1 fell Coupe 61028 and improve access along the route of the Great Glen Way (GGW) by clearing alder, spruce, western hemlock and gorse regeneration.
Quarry expansion Quarry closure	NN 1358 9073 NN 1818 9022	Coupe 62102 Quarry LK4 Cia-Aig 7588	Up to 0.32ha 0.57ha	Fell Coupe 62102 allows up to 0.32ha of quarry expansion. Close quarry due to its proximity of the Cia-Aig hydro water pipeline within the blast zone.

1.10 Table of Other Projects				
Proposed Activity	**OS Grid Reference**	**Forest/Coupe**	**Description (Length/Area/Construction)**	**Monitoring Comments**
ATV Tracks	NN 1854 9236	61074	2330m (0.58ha)	Wild Land Area visual assessment to be carried out by the FLS Landscape Architect to support the PN application. Track commences at an existing ATV track on ScotWays route HL0022.
Deer fence upgrades		Loch Arkaig Forest: Culcharn and Allt Mhuic woods	2800m	Work with Achnacarry Estate to agree mutual fencing and agree responsibilities.
Strategic deer fencing upgrade/ replacement		Loch Arkaig Forest: Achnasaul & Chia-Aig woods Clunes Forest: Coupes 61074 & 61075	8460m	Work with Achnacarry Estate to agree mutual fencing and agree responsibilities.
Afforestation deer fence		Loch Arkaig Forest: Coupes 62069 & 62073	2460m	Link to new deer fence at Coupe 61074 and the strategic fence on the west.
Major beat-up		Clunes Forest: Coupe 61074 Loch Arkaig Forest; Coupe 62065	71.35ha 16.07ha	Originally planted in 2021. Deer fence has now been erected, with major beat-up 2024/25. Originally planted in 2017 after the hydro water pipeline was installed. Very little of the original crop left with some NNR. Replant in 2025/26.
NNR/INNS removal		Coupes: 61027, 61029, 61030, 61046, 61050, 61070,	357.57ha	Priority 1: 114.2ha ASNW & CPI core area and regeneration zones (Minimum Intervention) areas and Natural Reserve

1.10 Table of Other Projects				
		62012, 62027, 62039, 62049, 62053, 62058, 62060, 62061, 62079, 62082, 62083, 62084, 62085, 62086, 62094, 62095, 62096, 62097, 62099, 62100 61012, 61024, 61031, 61037, 61040, 61047, 61056, 61066 61058, 61059, 61072, 62006, 62050 61039, 61052 62003, 62004, 62008, 62033		Coupes: 61027, 61029, 61030, 61046, 61050, 61070, 62012, 62027, 62039, 62049, 62053, 62058, 62060, 62061, 62079, 62082, 62083, 62084, 62085, 62086, 62094, 62095, 62096, 62097, 62099, 62100 LISS riparian coupes: 66.32ha Coupes: 61012, 61024, 61031, 61037, 61040, 61047, 61056, 61066 Legacy restock areas and young restored in PAWS (also see Table 1.7 – restocking) – 61.24ha Coupes: 61058, 61059, 61072, 62006, 62050 Semi-natural woodlands (Minimum Intervention) – 16.03ha Coupes: 61039, 61052 Priority 2: Legacy restock area out with PAWS (also see Table 1.7 – restocking) – 99.78ha Coupes: 62003, 62004, 62008, 62033
NNR/ INNS/birch respace		62001, 62011, 62015, 62016, 62041, 62042, 62043	86.72ha	Priority 1: 86.72ha PAWS legacy restock & young established crops. Coupes: 62001, 62011, 62015, 62016, 62041, 62042, 62043
Halo thin veteran trees/AW features fell non-native trees		61027, 61029, 61030, 61050, 61070, 62012, 62027, 62039, 62049, 62053, 62086, 62088, 62097, 62099, 62100 61055, 62018, 62037, 62091, 62092, 62093, 62054	79.74ha 60.81ha	Priority 1: ASNW (Minimum Intervention) – 73.73ha Coupes: 61027, 61029, 61030, 61050, 61070, 62012, 62027, 62039, 62049, 62053, 62086, 62088, 62097, 62099, 62100 LISS Coupe – 6.01ha Coupe 62054 Priority 2: Phase 3 and 4 harvesting coupes in PAWS: 61055, 62018, 62037, 62091, 62092, 62093
Tree Roadside Safety Survey	Along the side of public roads C1153 & B8005	61068, 61070, 61088, 62100, 62001, 62006, 62011, 62012, 62015, 62016, 62027, 62041-43, \62048, 62049, 62058, 62098	10,890m (21.8ha)	Priority 1. Identify trees that pose a danger to the local infrastructure and homes. Prescribe the minimal work to make ash trees safe but retaining as much as possible to protect rare lichen, niches etc.
Peatland restoration	NN 2039 9362 NN 1944 9127 NN 2092 9089	62074 61076	217ha	Priority 1: upper Chia-Aig – 7ha Coupe: 62074 Priority 2: high elevation sites Clunes Hill – 210ha gross Coupe: 61076

1.3 EIA Screening Determination

(see the EIA screening opinion request appendices)

EIA screening opinion requests are being sought as follows:

- Afforestation of 41.43ha
- Operational tracks:
    - Forwarder tracks totally 840m to enable the safe harvesting of Coupes 62055 and 62056
    - ATV track 2330m in length in Coupe 61074 to support new native woodland establishment operations, and long term deer management in the north and NW of Clunes hill to enable future mountain woodland expansion through natural regeneration.

See Appendix XVII – Unexpired FPAs and PNs and Map 8: Current Permissions map

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. A full list of these standards and guidance can be found here:
https://forestryandland.gov.scot/what-we-do

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

Clunes and Loch Arkaig Forests are situated on the corner where Loch Lochy and the Loch Arkaig catchment meet in the south west of the Great Glen. The majority of this LMP comprises of open land on Clunes Hill (Meall na Teanga, Meall an Odhar, Meall Coire Locha, Meall Breac, Ruighe na Beinne, Creag Liath and Creag Dhonn collectively). The importance of this LMP is that it connects the Arkaig catchment with Glengarry Forest.

The Clunes face which lines the western slopes of the Great Glen is dramatic in its appearance in terms of its scale, striking impact and linearity in combination with the long loch, (as described in the Special Landscape Area document). This makes it highly visible from much of the A82 on the east side of Loch Lochy – a view which is quite unforgiving in terms of forest management. Wild Land Area designation lies on the western watershed of the mountains that constitute the Clunes Hill area.

The forested areas contain ancient semi-natural (ASNW) and Caledonian pinewood (CPI) remnants as well as substantial areas of plantation on ancient woodland sites (PAWS). The over 90% of the PAWS is deemed to be of high ecological importance with the remainder being of medium ecological importance. The ASNW and CPI areas are refuges for Scottish rainforest features such as bryophyte and lichen communities. The ASNW remnants in particular tend to be located around the “Allts”, the main mountain streams and as such demonstrate some oceanic ravine habitat. The “Allts” of Clunes are of particular interest where upland mixed ashwood species includes wych elm, alder ash and hazel rich with lichen and bryophyte communities can be found. Their ravine locations help to regulate temperature and humidity levels to sustain these features. The remaining ASNW tends to lie adjacent to the shore of Loch Lochy. The protection of these ASNW and CPI remnants will take priority in this LMP, with a second priority to adding further resilience to surrounding protective buffers and ancient woodland features in PAWS areas as well as securing establishment in felled areas. Over time the forest south of Allt Glas Dhoire at Cam Bhealach will be fully restored to native woodland habitats. Scots pine will be planted on non-PAWS areas and scattered through the upper slopes of PAWS areas out with CPI buffers. This aims to establish an ecological connectivity between the Arkaig pinewoods and the Glengarry pinewoods via the Fhudair mountain pass and along Clunes Forest in the Great Glen.

The native woodland and open habitats will require ongoing efforts to manage INNS and NNR to secure resilience and long term health. This effort will be bolstered by the neighbouring landowners managing these issues to secure the native restoration in the Arkaig catchment.

Harvesting and establishment operations will take account of the vulnerabilities of the steep slopes and multiple watercourses. Details of protective measures will form part of the associated operational plans. Establishment of the steep slopes will include slope stability measures. In general, natural regeneration will be favoured where seed sources permit, but the hot planting of desirable species will help to secure resilient and diverse native habitats.

All haulage from Clunes Forest accesses the B8005 public road at Clunes hamlet, with haulage from Loch Arkaig Forest accessing the C1153 and B8005 at three locations: Allt Mhuic east, Achnasaul central and Dark Mile. The current forest road network is suffice for harvesting and haulage albeit with localised road upgrades contained within the original footprint.

Herbivore impact is an ongoing issue at present especially in the upper margins of the forest next to the open hill. Recently there has been a break in of sheep from neighbouring land. Deer management will take account of these pressures and efforts to reduce the population to ideally around 3 deer/km2 will enable successful and healthy native woodland and open land habitats. This will take some time to achieve and will be carried out in partnership with our neighbours. Afforestation proposals will initially require deer fencing protection whilst the deer population is being reduced.

It is recognised that visitor use is increasing in this LMP, by locals, anglers, long distance walkers, hillwalkers and those who travel to see the iconic waterfall at Chia-Aig which has been popularised on social media. The Butterfly Reserve is also a popular attraction especially appreciated by locals. There are some informal mountain bike trails through some of the upcoming harvesting sites around the Dark Mile and Clunes hamlet. Informal structures will be removed especially to facilitate harvesting operations and subsequent establishment operations as well as to encourage bikers away from these sensitive PAWS sites on steep ground which lie above local infrastructure.

For the purposes of this LMP, there has been no change from the previous plan for the Cam Bhealach/Allt Glas Dhoire to Kilfinnan section of Clunes Forest. No forestry work is planned in this area which is under lease for SSE exploratory development ahead of the proposed Coire Glas pumped storage scheme.

2.2 Plan Objectives

- To continue sawlog production in the short to medium term using harvesting methods that protect soils and water.
- To restore the forested areas to native woodland habitats as the current rotation is felled, including enabling the ecological connectivity between the Dark Mile CPI and the pinewoods in the wider landscape.

- To secure ancient woodland remnants during harvesting and establishment operations and to halo thin remnants in mid-rotation crops to protect crowns and associated lichen and bryophyte communities.
- To develop a programme of work to remove non-native regeneration (NNR), in particular western hemlock, sitka spruce and localised areas of beech.
- To develop a programme of work to control invasive non-native species (INNS), in particular rhododendron, gaultheria shalon and buddleia.
- To improve the resilience of core ancient semi-natural woodland (ASNW), the Caledonian Pinewood (CPI) core areas and associated regeneration zone and riparian areas in readiness for the wider PAWS restoration.
- To plan for the expansion of native woodland into the mountain woodland project zone to enable the natural succession of native woodland as it transitions to montane scrub on Clunes hill. This will be enabled in the long term through deer management.
- To develop a plant health plan for the phased removal of larch and non-native pines, optimising economic return where possible.
- To improve the visual appearance of the forest in the iconic landscape of the Loch Lochy and Loch Oich Special Landscape Area (SLA), as viewed from the A82.
- To maintain and improve water quality and quantity to mitigate the impacts of a changing climate within as well as downstream of the forest.
- To work with our neighbours on the shared goals to manage deer and boar to sustainable levels and to deliver a landscape scale native woodland restoration in the Arkaig catchment.
- To work with the local community on supporting local expertise and seeking input on the delivery of native habitat restoration within the LMP.
- To recognise the significance of public access within the LMP in particular: angling; the Great Glen Way (GGW); the hill access routes, the Allt Mhuic Butterfly Reserve and the facilities around the iconic Chia-Aig Falls.
- To support the Scottish Government in their aim to improve energy supply resilience enabled by the development of renewable schemes.
- Caring for the Historic Environment.

Key challenges

- Building climate change (cc) adaptation and mitigation measures into species, land use, infrastructure, soil, slopes and water.
- Reducing herbivore impacts on forest and land habitats in the short and long term. To reduce deer numbers to sustainable levels appropriate to the sensitive habitats found in the LMP. This includes managing sheep trespass from neighbouring land.
- The sustained removal of NNR throughout the forest and open land habitats.
- Effective and timely control of INNS.

- Protecting slope stability and the associated infrastructure on the steep and bouldery slopes above the Dark Mile and Achnasaul during and post harvesting operations.
- Haulage along the narrow and twisty C1153 public road along the northern shore of Loch Arkaig in combination with haulage from Woodland Trust and Glen Dessary Estate fell sites.
- Optimising returns regarding harvesting and extraction on steep ground whilst managing public access.
- Planning the phased removal of larch and preparing for its immediate removal in the event of a statutory plant health notice (SPHN), with consideration to its distribution through other crops.
- Liaising with Highland Council Access Officers to ensure the Scottish Outdoor Access Code (SOAC) is respected in particular to the use of campfires in wooded and sensitive open habitats.

2.3 Analysis and concept

(See Map 9a – Analysis Loch Arkaig, Map 9b - Analysis Clunes & Loch Arkaig east, Map 10 – Concept, Map 11a - Climate change adaptation concept Loch Arkaig, Map 11b – Climate change adaptation concept Clunes & Loch Arkaig east, Map 12 – Opportunities & Constraints)

Objective	Opportunity	Constraint	Concept
To continue sawlog production in the short to medium term using harvesting methods that protect soils and water.	The first rotation sitka spruce and most of the mixed conifer second rotation crops are growing well and capable of producing a commercial sawlog crop as well as other wood products in the short and medium term. Carbon sequestration and the creation of wood products contribute to climate change mitigation.	Increased risk of climatic and disease impacts (larch) which may affect trees in the ground and restocking species choices. Soils on these steep slopes are becoming increasingly podzolised with heather naturally regenerating widely further limiting the growth of younger spruce and douglas fir crops. Original crops grew well due to the improvements to fertility and vegetation made by the previous agricultural land use. ESC modelling indicates declining range of suitable species for the site under present climate models using generic soil data. Storm events of increasing intensity would limit the rotation length.	Utilise native broadleaf species best suited to the site while increasing species diversity on the better lower slopes. The thinner soils of the steep upper slopes and have been identified as areas where native woodland provides opportunities to transition farther upslope into the open hill to link with the montane scrub remnants whilst at the same time improving how the forested area fits naturally into this iconic highland landscape. Non-PAWS locations can provide opportunities for productive management under continuous cover forestry for scots pine, with potential for native broadleaf fuelwood and localised oak sawlog production (oak nest management) where slope and proximity to forest roads permit.

Objective	Opportunity	Constraint	Concept
		Extensive PAWS designations in combination with ASNW and CPI remnants, existing priority habitat native woodland, planting native woodland and riparian woodland restoration reduces commercial conifer productive areas to awkward to access areas that are often steep and affected by a high volume of public access compromises future economic opportunities.	
To restore the forested areas to native woodland habitats as the current rotation is felled, including enabling the ecological connectivity between the Dark Mile CPI and the	The significant scale of the PAWS designations within the forested areas of the LMP area, in conjunction with the FLS PAWS Policy to restore 85% of PAWS to native woodland habitat, will result in a large native woodland creation – a scale which will improve its resilience in climate change adaptation. The level of PAWS that is deemed to be of high ecological potential (91%) with the remaining 9% being of medium ecological potential supports the justification for full restoration.	Current levels of deer within and adjacent to the LMP area are too high. Quite high levels of NNR and INNS throughout all habitats and forest roads, in particular SS and WH, with a widespread scatter of small rhododendron. Delivering native woodland establishment on steep slopes.	Restore PAWS to native woodland and plant Scots pine scattered though the upper slopes out with the CPI buffers. In non-PAWS areas plant a higher volume of Scots pine for native woodland establishment. This enables a continuous connection for native pine between the Arkaig catchment and Glengarry Forest. Natural regeneration of native broadleaf species will be preferred, as will the native regeneration of Scots pine within CPI buffers. Hot planting of desirable species as well as species

Objective	Opportunity	Constraint	Concept
pinewoods in the wider landscape.	Proximity of PAWS areas to the LMP ASNW, CPI and watercourses provides the opportunity to link native woodland habitats throughout the forested areas of the LMP and beyond the LMP boundaries. Adjacency to Arkaig CPIs and Glengarry Forest will enable connectivity of native woodland habitat between the Arkaig catchment pinewoods and the pinewoods of Glengarry Forest.	Gaps in native seed source locations, especially in parts of Clunes Forest.	unlikely to naturally regenerate in an acceptable timeframe. Use of Forest Research ESC decision tool to identify current species suitablity and its resilience in the worst case climate scenario in 2080. Application of measures for steep slopes and slope instability areas to ensure there is a good mix of native tree and shrub species that include plate, heart and tap rooting habits, including the implementation of Forest Development Type FDT 10.1.2 slope stability woodland (SSW) management.
To secure ancient woodland remnants during harvesting and establishment operations and to halo thin remnants in mid-rotation crops to protect crowns and associated lichen	All PAWS areas are of high or medium ecological potential and are therefore regarded as priority areas to protect. These features will provide the seed and spore banks for the native woodland ecosystem restock regeneration, including senescence and deadwood habitats.	Skilled resource availability and funding. The complexities associated with working on steep slopes.	Prioritise work where the need is greatest such as CPI core areas and regeneration zones, coupes adjacent to ASNW areas and the Allts. Carry out work in other areas if resources improve.

Objective	Opportunity	Constraint	Concept
and bryophyte communities.			
To develop a programme of work to remove non-native regeneration (NNR), in particular western hemlock, sitka spruce and localised areas of beech.	Removal of NNR in legacy felled areas will enable establishment as native woodland. It will also enable the improvement and resilience of native habitats at a stage which is easier and relatively less expansive to manage.	Current financial constraints and a lack of resources restricts what can be achieved in the short term. Steep ground also presents challenges in the delivery of these operations.	Prioritise the removal of NNR from core native woodland habitat areas such as the ASNW, CPI core areas and regeneration zone, riparian areas of the main burns (Allts) and establishing PAWS sites. Second priority will be given to these operations in high elevation semi-natural woodlands, PAWS areas adjacent to the above mentioned core areas, the selective fell open habitats, minor watercourses in mid rotation crops and roadside verges.
To develop a programme of work to control invasive non-native species (INNS), in particular rhododendron, gaultheria shalon and buddleia.	Improvement in the health and resilience of native habitats. Minimise expense by the removal of these species at this early stage of development, with a chance of an effective outcome due to FLS neighbours in the Arkaig catchment also carrying similar operations on their land to achieve a landscape scale native restoration.	As per NNR removal above.	As per NNR removal above. Combine the removal of NNR and INNS with birch respacing operations for efficient costs, effective management and to maximise resilience of the native woodland habitats.

Objective	Opportunity	Constraint	Concept
To improve the resilience of core ancient semi-natural woodland (ASNW), the Caledonian Pinewood (CPI) core areas and associated regeneration zone and riparian areas in readiness for the wider PAWS restoration.	Removal of non-native seed sources from highly sensitive habitats whilst generating revenue wherever possible. Making the core habitats as robust as possible to improve the outcome of adjacent PAWS restoration through the expansion of native tree and plant seeding and the absence of non-native seeding.	Difficult to access areas within and in the vicinity of the CPI core areas 5 – 9 and the Allt Bhan on the Clunes and Loch Arkaig Forest boundary above the Dark Mile. Potentially high levels of standing or felled deadwood in the vicinity of the CPI outcrops depending on the operational methods to remove the non-native seed sources. This could increase wildfire risk as well as becoming a landscaping issue in the locality.	Prioritise the felling of Coupes 62079 and 62096 in Phase 1 to remove the current SS seeding threat and upcoming seeding threat from the central and upper CPI regeneration areas. LISS management in the CPI core areas 5 – 9 will enable the irregular groups felling of non-native species, with the exception of the NS in core area 6. Minimum Intervention management in CPI core areas 1 – 4 and in the ASNW areas will enable low scale removal/halo thinning of non-native trees, especially the removal of beech in ASNW Coupes 61050 and 61070. Phase 2 felling will remove mature LP with increasing pine condition scores in Coupe 62034 within close proximity to the CPI areas. Also the removal of CP in Coupe 62056 which lies within the Dark Mile CPI buffer.

Objective	Opportunity	Constraint	Concept
			The felling of combined coupes 61048, 61049 and 61054 when the SS crop is around 40 years of age will help to remove the non-native seeding issue from the PAWS designation. It will also remove the WH which has been regenerating through the SS crop.
To plan for the expansion of native woodland into the mountain woodland project zone to enable the natural succession of native woodland as it transitions to montane scrub on Clunes hill. This will be enabled in the long term through deer management.	Native woodland creation/expansion into the open hill of Clunes. Creation of native woodland in Clunes Forest that transitions from 30m ASL to the montane zones at 680m+. Native species are seeding on many parts of the hill slopes.	Deer population is high in Clunes Forest and in particular on the open hill. A strategic deer fence that stretches along the western edge of Glengarry, Clunes and east Loch Arkaig Forests adjacent Sporting Estate to the west is in need of a major upgrade. The hill ground is very difficult terrain for deer management with little in the way of formal access to enable regular visits without eroding vegetation. Wild Land Area designation covers the western watershed of Clunes hill.	Spend this LMP to concentrate on lowering the deer population to sustainable levels for sensitive habitats. This will hopefully initiate native regeneration to develop beyond the seedling stage. Work with our Arkaig neighbours who are also trying to reduce deer numbers. Initiate native woodland establishment in the lower western section of the Mountain Woodland project zone through the major beat-up of the recently deer fenced Coupe 61074.

Objective	Opportunity	Constraint	Concept
			Construct an ATV track through Coupe 61074 to enable deer management access to the lower coire areas of north Clunes hill. Also carry out native woodland establishment in the AWI ghost wood site of Coupe 62073, in conjunction with the restocking of the Phase 1 fell Coupe 62069. These combined coupes will be deer fenced to secure establishment whilst deer numbers are being reduced.
To develop a plant health plan for the phased removal of larch and non-native pines, optimising economic return where possible.	Build resilience in the health of the Dark Mile and neighbouring Achnasaul CPI enabled by the removal LP and CP from central Loch Arkaig Forest. Optimising economic return and sawlog production through the phased removal of larch in accordance with the Scottish Forestry (SF)and FLS Larch Strategies in the Priority Action Zone (PAZ). Identify opportunities for thinning which will favour the removal of larch whilst improving the health and quality of the remaining standing crop.	Steep ground in Clunes impedes the skyline extraction of mid-rotation crops. A lack of thinning expertise and resources in this locality. Larch is often in the form of a minor component in spruce crops in central Clunes making removal difficult without negatively impacting the remaining stand.	Fell economically mature stands of lodgepole pine and larch in Coupes 62034, 62055, 62056, 62087 and windblow affected Coupe 61028. Ensure felling approval is sought for all stands that includes larch to enable proactive management if or when resources improve.

Objective	Opportunity	Constraint	Concept
To improve the visual appearance of the forest in the iconic landscape of the Loch Lochy and Loch Oich Special Landscape Area (SLA), as viewed from the A82.	Creation of a coherent native woodland that provides a continuous cover, which transitions naturally up into the hill ground where soils, vegetation and exposure allows. No hard edges of an upper treeline, instead one that sits within topographical features emphasising areas of bedrock/cliffs and outcrops	Current high levels of deer and trespassing sheep are negatively impacting on the success of regenerating native seedlings reaching establishment. Some areas of non-native regeneration is occurring. Herbivores are not negatively impacting this type of regeneration. Time. This regeneration process will take many years to have a visual impact.	Spend the period of the new LMP to reduce the deer population to levels which will sustain native mountain woodland and montane scrub habitats. This will create conditions suitable for potential interventions in the next plan period.
To maintain and improve water quality and quantity to mitigate the impacts of a changing climate within as well as downstream of the forest.	The improvement and creation of riparian woodland habitats and the restoration of the hydrology of carbon emitting hagged blanket bogs. The opportunity to create riparian woodland that effectively regulates water temperature by creating summer dappled shade for water fauna. The regulation of humidity levels within the riparian woodland habitat to sustain the Scottish rainforest/ oceanic ravine bryophyte communities.	Funding and resources are limited in the short term for both riparian woodland improvements and for peatland restoration. Machine access to restore the high elevation hagged blanket bogs of Coire Bhan and Meall Breac is difficult.	Prioritise the removal of non-native species and INNS from riparian zones of the ASNW, the main “Allts” and from felled areas and establishing native woodland. Enable the natural regeneration of native trees and shrubs in these areas. Supplementary plant, where required, with desirable native species to ensure a good mix of plate, heart and tap rooting habit for slope stability resilience in the immediate water catchment.

Objective	Opportunity	Constraint	Concept
	In addition reducing rates of evaporation from the watercourses and the air within the riparian woodland during periods of prolonged dry and warm conditions. Improving the water holding capacity of the hagged bogs through peatland restoration will slow water run-off into the Abhainn Chia-Aig, and in particular the Allt Bhan. Predicted future increase of storm events will increase water run-off into Coire Bhan funnelling into Allt Bhan with potential increase of flooding in the fields close to Clunes hamlet.		Prioritise the restoration of hagged blanket bog in upper Chia-aig where machine access is easy and funding is secured.
To work with our neighbours on the shared goals to manage deer and boar to sustainable levels and to deliver a landscape scale native woodland restoration in the Arkaig catchment.	The reduction of deer and wild boar to sustainable levels throughout the Arkaig catchment to enable the restoration and expansion of healthy native woodland habitats and ecosystems.	The cost of increasing culling and availability of increased local contractor resource over the longer term. Cost of major upgrade of existing strategic deer fencing and the cost of deer fencing new enclosures to protect the afforestation scheme. Difficult to access hill and mountain terrain.	Seek approvals from Scottish Forestry and Highland Council for ATV track construction through the young native woodland Coupe 61074 to enable access for deer management into the north and NW side of Clunes hill. Increase the deer culls early in the LMP to hasten the drop in the deer population to sustainable levels by the end of the plan period.

Objective	Opportunity	Constraint	Concept
		Difficulty in obtaining new ATV track approval in a "Wild Land Area" designation to improve safe access for deer management and prevent erosion of soil and vegetation.	
To work with the local community on supporting local expertise and seeking input on the delivery of native habitat restoration within the LMP.	To achieve a successful native woodland restoration in the Arkaig catchment by working together with the local community and neighbouring landowners. Recognising the skills and local expertise of the local Community that could benefit native woodland restoration within the LMP. Utilising the Arkaig Community Forest (ACF) tree nursery to grow montane scrub from cuttings taken from Clunes hill. Other species could include minor species such as juniper, wych elm and aspen.	Compliance the FLS procurement and contract specifications may prove restrictive for small local businesses.	Continue to liaise with the local Community on mutual commercial and environmental opportunities to deliver aspects of the LMP. Explore the opportunity to manage beech in the ASNW and PAWS areas of south Clunes.
To recognise the significance of public access within the LMP in particular: angling; the Great Glen Way	Improve visitor access through the careful siting of operational ATV access tracks to take the opportunity to link with existing forest roads and trails.	Lack of current funding to deliver major upgrades of existing paths or the creation of new paths to create more circular routes.	Maintain the car parking facilities at Chia-Aig Falls and the Allt Mhuic Butterfly Reserve. Re-evaluate the informal car parking facility at Clunes Forest in light of the

Objective	Opportunity	Constraint	Concept
(GGW); the hill access routes, the Allt Mhuic Butterfly Reserve and the facilities around the iconic Chia-Aig Falls.	Identify opportunities to maintain spectacular views at specific locations along the Great Glen as the young native woodland areas develop. Provide small interpretive panels along the route of the GGW to remind visitors that they are within public forests; inform them of the long term conversion to native woodland and of the special habitats that are around them on their journey through the forest.		impact of antisocial behaviour on the local Community and their private water supply. Continue to work with Scottish Canals to provide informal camping facilities along this stretch of the Great Glen Way long distance trail and kayaking route. Improve visitor knowledge on the importance of no campfires in wooded areas and sensitive open habitats. Work with the local Community to identify opportunities to deliver visitor management of current FLS facilities. Consider creating a new GGW diversion in Clunes Forest south of Allt Dearg to improve visitor management options on operational sites.

Objective	Opportunity	Constraint	Concept
To support the Scottish Government in their aim to improve energy supply resilience enabled by the development of renewable schemes.	The successful development of a large renewable pumped storage scheme within Clunes and Glengarry Forests that will provide a significant benefit to the energy supply to the Scottish and wider UK public.	Environmental impact during the development phase of the scheme which will also have a major impact on the neighbours along the Kilfinnan access to the NE of Clunes Forest. Restrictions to forest management in the Kilfinnan section of Clunes Forest.	Work with the Developers to identify environmental improvement opportunities within Clunes and Glengarry Forests to offset some of the impacts resulting from the development.
Caring for the Historic Environment	We will ensure positive conservation management at significant historic assets, undertaking scrub control, condition monitoring and archaeological recording where necessary	We will undertake suitable work practices on operational sites with known historic assets (and those discovered during operations)	We will ensure that historic assets (both designated and undesignated) are included within our land management and operational plans and are managed in line with UK Forestry Standard.

3 LMP Proposals

3.1 Management

(See Maps 4a – Management Coupes Loch Arkaig and Map 4b -Management Coupes Clunes & Loch Arkaig east)

Clear Felling

The approved clearfelling during the plan period is required for a range of management outcomes:

- To optimise timber revenue: economic felling of mature crops in Coupes 61028, 61049, 61054, 61068, 62034, 62055, 62056 and 62087
- To manage plant health issues: phased removal of larch in Coupes 61028, 62055 and 62056; removal of LP & Corsican pine (CP) affected by Dothistroma in Coupe 62034 and 62056 in proximity to CPI areas; removal of windblown/stressed mature crop in Coupe 61028.
- To improve resilience of PAWS and CPI restoration, ancient woodland features and other native woodland establishment: fell to recycle small checked areas of lodgepole pine (LP) and sitka spruce (SS) in Coupe 62005; premature felling of Coupe 62103 and 62096; felling of small mature SS areas in Coupe 62079 on steep areas next to CPI core areas 6 and 7; and felling of Coupes 61048, 61049, 61054, 61068, 62055, 62056 and 62087.
- To enable afforestation in Coupe 62073 by clearfelling Coupe 62069.
- To enable the expansion of the Loch Arkaig LK4 Arkaig quarry at Allt Mhuic by felling Coupe 62102.

Conventional mechanised harvesting and extraction methods will be adopted on the gentle to moderate slopes in Loch Arkaig Forest using brash mats to protect forest soils and log bridges at all water crossing points.
On the steep and slope instability risk areas of Clunes Forest and the Dark Mile and Achnasaul areas of Loch Arkaig Forest motor manual felling and skyline winch methods for harvesting and extraction will be adopted.
Protection of ancient woodland features, protected species, heritage features, soils and water during harvesting operations is paramount. Pre-operational checks will be carried out by the FLS Environment team who will identify features that require protection, marking buffers on the ground and advising on mitigation measures that must be followed. These are fed into the FLS wok plan system for further team consultation and built into pre-commencement documents. Operational teams will identify safe areas for machine maintenance, storage of fuels, welfare areas and stacking areas. The Civils team will prepare harvesting facilities in advance of harvesting operations.

Best practice will be followed in accordance with:

- UK Forestry Standard, in particular in relation to general forest operations, biodiversity, historic environment, soils and water.
- SEPA GBRs
- Guidance on Pollution Control and Management of Surface Water Run-off for Specific Forestry Activities.
- FCPG25 – Managing forest operations to protect the water environment.
- Confor – Guidance on Responsibilities for Environmental Protection in Forestry.
- Forestry and Water Scotland – Protecting private Water Supplies During Forestry Activities.
- SEPA – Management of Forestry Waste
- FLS Environment mitigation measures will be based on the following best practice:
    - FLS Practice Guide – Archaeology and the Historic Environment
    - FCS Guidance Note 31 – Forests and Wildlife Protection
    - FCS Guidance Note 32 – Forest Operations and Birds in Scottish Forests
    - FCS Guidance Note 33 – Forest Operations and Red Squirrel in Scotland
    - FCS Guidance Note 35a – Forest Operations and Bats in Scotland
    - FCS Guidance Note 35c – Forest Operations and Otter
    - Species Licensing – Guidance Notes for Application for a licence for European Protected Species
    - NatureScot Guidance – Disturbance Distances in Selected Scottish Bird Species
    - FCP101 – Managing Forests for White Tailed Eagles
    - FCPG9 – Forest Operations and Badger Setts
- Compliance with FISA Safety Guides: 301-304; 306-307; 310; 501; 503; 504; 506; 603; 605; 608; 703-706; 802; 804, 806 and FIS Guidance on Managing Health & Safety in Forestry.

The use of banksmen, especially around the GGW in Clunes, will enable safe access for the public during operations. The management of the public during operations will be in accordance with:

- FCPN019 – Managing Public Safety on Harvesting sites.
- FCPN104 – Managing Woodland Access and Forestry Operations

It should be noted that some felling is undertaken by SSE as part of the Coire Glas pumped hydro exploratory works which is approved under Planning Permission associated with the project.

Thinning & Selective Felling

Different types of thinning interventions being used within this plan are identified in Maps 5a – Thinning Loch Arkaig and Map 5b – Thinning Clunes & Loch Arkaig east.

Thinning

Areas of mid rotation conifer crop in Loch Arkaig Forest have been identified as candidates for silvicultural thinnings where terrain may enable machine access throughout the sites. This provides

the opportunity to favour the removal of larch as part of the SF and FLS Larch Strategy to plan the phased removal of larch in the Priority Action Zone (PAZ).

Thinning areas along the face of Clunes Forest at Loch Lochy are in preparation of managing areas of Phytophthora ramorum infected larch scattered through spruce dominated mid-rotation crops. Thinning interventions may include: fell-to-recycle where larch densities are very low within the spruce crops; or removal via conventional thinnings provided the surrounding crops are mature enough to support skyline winch extraction methods and the availability of contractors skilled and resourced for skyline winch thinnings.

Thinning operations will enable the management of semi-open land such as the Allt Mhuic Butterfly Reserve wood pasture habitat in Coupe 62029, the Chia-Aig hydro water pipeline wayleave where we will accept native regeneration but remove non-native regeneration – Coupes 62062 & 62067; and the development of open-crowned woodland in the Stochid Culcharn enclosure heritage feature in Coupe 62008.

Thinning approval for safe access purposes is sought for trees within falling distance of public roads, forest roads, forest trails, car parks and ATV tracks.

These interventions will adhere to all the best practice identified in the clearfelling section.

Selective Felling

Selective Felling is sought for the removal of non-native species from upland heathland habitat in and around the CPI regeneration zone in Coupe 62080 and in parts of Coupe 61000, as well as the bracken and fen habitat along the former utility wayleave in Achnasaul – Coupe 62051.
In all of these cases natural regeneration of native trees will be accepted.

Interventions will adhere to the appropriate best practice identified in the clearfelling section.

Low Impact Silvicultural Systems (LISS)

Low impact management systems will be adopted within many wooded areas in the LMP. This signifies a move away from routine clearfell and replant regimes associated with commercial non-native forests.

LISS

LISS management has been applied for the following reasons:

- Management of mature woodland areas under irregular shelterwood to remove the non-native component at the same time as the clearfelling of neighbouring coupes and to enable access through LISS coupes to access clearfell hanging coupes. Such management will apply to resilience intervention measures affecting CPI core areas 5 – 9 (Coupe 62084) to remove the non-native component. The NS component within CPI core area 6 and in Coupe 62054 will be

retained during this plan as it currently provides humidity conditions that support Scottish rainforest bryophyte assemblages. Interventions will also include localised halo thinning.

- Management of native establishing and young established PAWS restoration areas to enable larger scale interventions than those associated with minimum intervention management. This includes: supplementary planting to achieve desired stocking densities and species mixtures, removal of NNR, including those exceeding 10cm (diameter at breast height dbh; removal of INNS and the respacing of birch and other native species to improve stem strength and diversify stand structure.
- Management operations to establish native woodland in non-PAWS, including planting operations where native natural regeneration is deemed unlikely. This will also include NNR and INNS removal to secure native woodland habitat.
- Management of some open areas which are naturally regenerating to remove the non-native species component.

Harvesting interventions will adhere to all the best practice identified in the clearfelling section with establishment and maintenance interventions adhering to the best practice identified in the restocking section.

Minimum Intervention

Minimum intervention management has been applied for the following reasons:

- Management of all the ASNW and CPI cores areas 1 – 4 (Coupes 62086, 62097 and 62099), and associated regeneration zones.
    - Enabling the halo thinning of native specimen and ancient woodland trees to protect the integrity of the crowns and associated deadwood, bryophyte and lichen communities.
    - Management of Chalara affected ash where it negatively impacts local infrastructure. Minimal interventions will balance public safety and protection of ash and associated protected lichen assemblages and to avoid complete felling wherever possible.
    - Carrying out NNR and INNS removal operations.
    - Carrying localised supplementary planting as identified in the ASNW surveys.
- Similar interventions as above in semi-natural woodland habitat as well as including the establishment of young PAWS where major interventions are not applicable.
- Management of current open areas which are important reserves for butterflies where native trees are regenerating at beneficial levels, but includes low levels of NNR which requires removal.

Felling interventions will adhere to all the best practice identified in the clearfelling section with establishment and maintenance interventions adhering to the best practice identified in the restocking section. Felled trees will be left in-situ unless they pose as a wildfire threat in proximity to the GGW.

Natural Reserves (NR)

The plantation origin natural reserve (Coupe 61067) occupies 0.9% of the LMP current plantation. It is negatively impacting the adjacent young established PAWS, open and riparian habitat with the seeding of SS which is prolific along the forest road verges on the southern boundary.
The proposed management interventions are as follows:

- Initial set-up operations:
    - Removal of the mature SS component at the same time as felling Coupe 61068 which lies immediately to the south.
    - This restores UK Forestry Standard compliance in relation to riparian management.
    - Will enable the restoration of riparian woodland habitat
    - Improves the resilience of the private water supply catchment in terms of water quality and quantity.
    - Provides resilience for the surrounding PAWS restoration areas and open habitats by removing the non-native seeding threat.
- Allowable management operations will include:
    - Deer management
    - Wildfire control
    - Removal of NNR & INNS to protect surrounding native habitats.
    - Operations to enable safe access along the forest road.

Long Term Retentions (LTR)

There are seven LTRs spread throughout the LMP occupying 1.8% of the forested area.

They include areas of SS and NS planted in the late 1920s; areas of thinned healthy larch planted in the 1930s located next to the Clunes Forest car park which acts as a welcome zone for the GGW; a small area of mixed conifer (MC) planted in 1940 above the Dark Mile, a stand of P'1930s NS located close to the Chia-Aig waterfall car park which improves the humidity levels to sustain Scottish rainforest bryophytes; and areas of SP planted in 1956 and 1960 in Culcharn wood which provides a seed source for native woodland regeneration and improves the ecological connectivity of pinewoods along north Arkaig.
Thinning may occur within some of these areas if the opportunity arises or to remove unstable or unhealthy trees close to forest infrastructure.
The NS, SP and larch in particular provide a valuable food source for resident red squirrels.

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.

The restructuring of the existing commercial crops will continue in this plan enabled by clearfelling and some LISS interventions.

The long term objective of the plan is to convert to continuous cover native woodland habitat. It is envisaged that these native woodland habitats will be diverse in stand structure, growth rates and species, reflecting changes in geology, soils, exposure, aspect and topography. It will be a mosaic of upland birchwood, upland oakwood, upland mixed ashwood, wet woodland, pinewood and montane scrub, with areas of dense woodland cover, open crowned woodland, wood pasture and Krummholz habitats. Future restructuring of the CCF native woodland will be enabled by human and climate interventions.

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. 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.

(See Map 11a - Climate change adaptation concept Loch Arkaig and Map 11b - Climate change adaptation concept Clunes & Loch Arkaig east

CLIMATE CHANGE ADAPTATION:

One of the main aims of this plan is to strengthen climate change (CC) adaptation resilience for land use, biodiversity, species, soils, water and community.
CC adaptation measures will include:

- Building resilience for the core ancient woodland habitats by removing threats to the ASNW and CPI core and regeneration areas by prioritising the removal of NNR & INNS.
- Build resilience in the ecological connectivity of native woodland habitats within and out with the LMP area by securing establishment of native woodland in PAWS felled areas and clearfelling non-native crops on PAWS areas before the seeding threat becomes high to halt the further spread of SS & WH seeding. Adherence to FCS – Managing invasive and non-native forestry species and UKFSPG – Adapting forest and woodland management to the changing climate wherever possible.
- Managing land with an appropriate land use according to soils, water and topography by accepting that continued leaching of soils on steep slopes does not support commercial spruce production.

- Build resilience in woodland species using the Forest Research (FR) ESC decision tool to analyse the mosaic of soils and identify site suited native species for current climate that will also be resilient in the predicted worst case climate scenario in 2080.
- Using restocking and afforestation opportunities to restore riparian habitats on felled conifer sites; extending these habitats upstream into the open hill enabled by effective deer management to regulate water quality, quantity and humidity levels to build resilience for water fauna, salmonids, private water supplies and oceanic ravine bryophyte assemblages.
- Adopting the principles of FR Forest Development Types (FDTs) to improve stand structure, health and stability as well as improve soil stability, carbon, fauna and fertility.

This plan will, (in conjunction with the wider landscape scale native restoration in the wider Arkaig catchment), help to create a diverse native woodland base which will be able to adapt to changes in climate by creating conditions and connections for species to move to ideal niches.

CLIMATE CHANGE MITIGATION:

A second aim of the plan is to build on measures to mitigate the impacts of climate change.
CC mitigation measures include:

- Restoring the hagged blanket bog in upper Chia-Aig and restoring as much of the high elevation hagged blanket bogs in Coire Bhan and on Meall Breac that can be accessed by machines. This will transition the bogs from carbon emitters to carbon sinks. The restoration of the high elevation bogs will improve the hydrology of this area which naturally drains into the Allt Bhan. SEPA's future flooding prediction maps show an increase in occurrence and level of flooding in the fields around Clunes hamlet sourced from Allt Bhan. Water held in restored bogs will slow the rate of run-off into the wider catchment.
- Reduce the resident deer population to around 1 – 5 deer/km2 to protect restored bogs; enable native woodland, montane scrub and tall herb communities to flourish; and to enable native regeneration to expand into the open hill to create a continuous natural succession of native woodland from 30m elevation at the loch shores to beyond 680m elevation in the montane zone.
- Use restocking and afforestation opportunities to establish slope stability native woodland on the steep slopes, riparian zones and slope instability areas to improve resilience for local infrastructure, neighbouring homes and forest access.
- Manage existing conifer crops to optimise sawlog production for long term carbon storage end uses.
- Continue to accommodate the operational hydro schemes in Loch Arkaig Forest.
- Accommodate the construction of a large pumped storage scheme in Clunes and Glengarry Forests to improve energy supply resilience at a Scotland level via a renewable resource.

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). 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. The Clunes and Loch Arkaig LMP lies within the Priority Action Zone (more vulnerable zone) as determined by Scottish Forestry. This is the location where actions have the greatest impact on the control and spread of this disease. By the end of this plan 49% of the larch crop will have been felled, the majority of that by 2028. This exceeds the minimum requirement in the FLS Larch Strategy which is aligned to the SF Larch Strategy. All other larch crops will either be immature but potentially accessible for thinning operations or are too small to remove via skyline winch extraction. The LMP is well served by forest roading so there is no requirement for further access.

Dothistroma needle blight (DNB) affects pine species. Compliance with the FLS DNB Strategy pine stands are being monitored and the worse affected brought forward for harvesting – such as Coupe 62034. Only the Alaskan lodgepole pine has resistance and currently Scots pine can only be planted out with the Caledonian pinewood inventory buffer zone.

Ash Dieback (Chalara), 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. Some upland mixed ashwood priority habitat and ASNW lie close to the B8005 and C1153 public roads where the impact of Chalara is evident.
Much of this ash supports rare lichen assemblages some of which is legally protected. Tree safety assessments will identified work to remove safety issues whilst avoiding complete felling, such as crown reduction and delimbing measures to ensure valuable habitat is retained.

Hylobius abietis (large pine weevil) can kill young conifer species on restock sites. Although the forested areas within the LMP area will be converted to native woodland, the scots pine element are at risk of bark stripping by this insect. Climate change is expected to improve the survival of Hylobius. The following options may address this issue:

- Hot planting of scots pine on sites post felling, selecting trees with large and robust root collars which are more difficult to girdle when attacks are low to moderate.
- Application of insecticides. FLS uses chemicals as a last resort when alternative methods of management have been considered and ruled out.
- Delay replanting until the weevil population has subsided.
- Use of the FR decision making tool – Hylobius Management Support System.

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, age diversity and the establishment of lush ground/woodland flora, as well as having open rides and riparian woodland. The road network will also provide a barrier for fires and enable access to areas if a fire would occur.

Regular maintenance of forest road verges and drains will further improve wildfire resilience and access.
The greatest wildfire threat relates to people's behaviour in particular the expectation of creating campfires irrespective of being in woodland habitat or in sensitive open habitats. Proactive management of the public is required which will include liaising with Access Officers, Scottish Canals on the management of the Loch Lochy Trailblazer campsite in Clunes Forest; erecting signage at forest car parks and the start of trails to remind visitors of responsible access under the Scottish Outdoor Access Code (SOAC). Informing the public of the sensitive habitats within the LMP may help visitors understand the impact wildfire can have on the environment and local community.

The principles of the best practice document FCPG022 – Building wildfire resilience into forest management planning will be implemented to reduce the risk of fire where possible.
The FLS West Region has in place an Incident Plan which includes managing wildfire clarifying the roles for some teams and staff. This is reviewed each year. There is always a member of staff on duty within Lochaber with a senior member of staff covering all of West Region

FLOOD RISK

The LMP process involves checking the SEPA website for current and predicted future flooding. There are pockets of surface water flooding which will not impact neighbouring properties. There is an increased chance of the Allt Bhan flooding fields in the vicinity of the homes around Clunes hamlet.

Extending riparian woodland along the Allt Bhan well into Coire Bhan will help to slow run-off downstream. Restoring the high elevation hagged blanket bogs in Coire Bhan and Meall Breac will restore the local hydrology and hold water back slowing run-off downstream. This restoration is dependent of machine access and funding.

Operational Access

(See Map 3 – Haulage)
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)]

There are three primary "in forest" routes within the LMP:
In the western sections of Loch Arkaig forest the LK4 forest road runs through the Culcharn and Allt Mhuic blocks and the section of Achnacarry Estate in between. There is an agreement that this route is also used by adjacent commercial forest neighbours Glen Dessary Estate and Achnacarry Estate to avoid travel along the vulnerable public road C1153 to the south of these blocks.
In Loch Arkaig east at the Dark Mile, forest road LK1 serves as the main route into this section of the forest off the B8005.
The sections of public roads C1153 and B8005 that provide access to the Loch Arkaig forest roads are both consultation routes. FLS will agree a Timber Transport Management Plan with Highland Council Roads Department in advance of harvesting and haulage operations.

In Clunes Forest road CS1 stretches the full length of the forest from Clunes at the B8005 to Kilfinnan (U1035), along the shores of Loch Lochy. This is also the route for the GGW long distance path. The Coire Glas pumped storage development in the Kilfinnan section of Clunes Forest impedes forest traffic in this location.
The section of the B8005 from the Clunes Forest southern entrance heading south is an agreed timber transport route. All timber haulage from Clunes Forest will travel along this route.

The design of the forest roads will conform to both the Timber Transport Forum The-design-and-use-of-the-structural-pavement-of-unsealed-roads-Revised-2020.pdf (timbertransportforum.org.uk) and NatureScot's "Constructed tracks in the Scottish uplands – revised Sept 2015" Constructed Tracks in the Scottish Uplands
Road maintenance material is likely to be sourced from within the LMP. There are three quarries, two in Loch Arkaig Forest and one in Clunes Forest. Their management are as follows:

- Active quarry – LK4 Arkaig (0.19ha) Loch Arkaig. Felling approval for 0.32ha in Coupe 62102 is sought to enable the expansion of this quarry.
- Redundant quarry – Cia-Aig - Coupe 62066 (0.48ha) Loch Arkaig. This quarry is no longer operational due to the proximity of the Chia-Aig Hydro water pipeline infrastructure. This quarry will be formally closed and undergo restorative operations to make it safe for public access.
- Active quarry – CS1 Sidhean Mor – Coupe 61006 (0.48ha) Clunes. This quarry will not be active for forestry purposes during this LMP. It lies within the Coire Glas development zone and is currently being used to store rock material resulting from the SSE exploratory tunnelling operations.

Onsite operational access, for which an EIA screening opinion request forms part of this plan, is required as follows:

- Three forwarder tracks totally 840m are required to gain harvesting access to Coupes 62055 and 62056. Prior Notification (PN) approval has been issued – 24/01257/PNO – expiring on 22/04/2027.
    - Track 1 is 730m in length and is required to gain safe access for skyline winch machinery around the nose of the slope to extract timber from the east facing slopes of Coupe 62056. The use of brash mats and flipped stumps will be used wherever possible to minimise track construction in this sensitive area. Shorter tracks are required to gain access to the west side of Coupe 62055 (30m track) and through the young native woodland in Coupe 62050 (80m track), to gain access to the hanging section of 62055.
- Around 2330m of ATV track access is required in Coupe 61074 to secure the establishment of native woodland, and to enable deer management access within this coupe and in the entire north and north west side of Clunes hill for long term deer management to enable the natural regeneration of mountain and montane woodland in this extensive area. The route of the track lies in the Kinlochhourn-Knoydart-Morar Wild Land Area. PN approval will be sought prior to

construction. The FLS Landscape Architect will carry out a Wild Land Area visual impact assessment as part of the PN application and his mitigation measures will built into the pre-commencement agreements as will the mitigation measures identified by the FLS Environment team resulting from their pre-operational surveys, most likely to involve the protection of ancient woodland features and nesting birds.

- Further ATV access will be required on some restock sites resulting from this plan's Phase 1 & 2 felling. ATV access may also be required in the afforestation site – Coupe 62073. The routes of these tracks will be survey post harvesting with approvals sought prior to construction.

Construction of the tracks will also adhere to the following best practice:

- UK Forestry Standard, in particular, biodiversity, general forestry practice, historic landscape, landscape, soils and water.
- SEPA GBRs with licences sought where relevant
- FLS ATV/Restocking tracks PN description/specification
- FLS Forwarder track specification
- FLS Culvert Design Handbook
- NatureScot's "Constructed tracks in the Scottish uplands – revised Sept 2015" Constructed Tracks in the Scottish Uplands
- Guidance on Pollution Control and Management of Surface Water Run-off for Specific Forestry Activities.
- FCPG25 – Managing forest operations to protect the water environment.
- Confor – Guidance on Responsibilities for Environmental Protection in Forestry.
- Forestry and Water Scotland – Protecting private Water Supplies During Forestry Activities.
- SEPA – Management of Forestry Waste
- FLS Environment mitigation measures will be based on the following best practice:
    - FLS Practice Guide – Archaeology and the Historic Environment
    - FCS Guidance Note 31 – Forests and Wildlife Protection
    - FCS Guidance Note 32 – Forest Operations and Birds in Scottish Forests
    - Species Licensing – Guidance Notes for Application for a licence for European Protected Species
    - NatureScot Guidance – Disturbance Distances in Selected Scottish Bird Species
- FCPN104 – Managing Woodland Access and Forestry Operations
- Relevant FISA safety guides will be followed.

3.2 Establishment

(See Map 7a – Future restock Loch Arkaig, Map 7b – Future restock Clunes & Loch Arkaig east and Appendix IX – Woodland Types.

Restocking

All restocking will be focused solely on native woodland restoration.

Soils in the forested areas of Loch Arkaig and Clunes are typically podzolic on the upper half of the slopes, (with areas of peatier soils on upper slopes of Loch Arkaig Forest), and a range of brown earths on lower slopes. It has been observed that the podzolisation of soils is increasing, as is the encroachment of heather.
The south facing slopes of Loch Arkaig Forest and the lower slopes of Clunes Forest should support upland oakwood species. Upland birchwood species are best suited to the upper slopes of both forests and the peatier soils of Loch Arkaig Forest where it can support a component of scots pine.
The Dark Mile CPI core areas and regeneration zone should see an element of scots pine regeneration, especially once deer numbers are reduced in the NE section. Typically for Lochaber scots pine is a minor component of native pinewood. Juniper is also suited to this area.
The base intrusions in Clunes Forest and in lower Loch Arkaig Forest at the Dark Mile, Achnasaul and Allt Mhuic supports upland mixed ashwood species allowing for more diverse species such as ash, hazel, aspen, wych elm, rowan, alder and holly. All but ash can be planted/supplementary planted to increase species diversity. Increasing the use of aspen throughout the LMP restock areas (where the soil moisture regime of mineral soils permits), will help to fill the ecological function of ash where it is in decline. The increased use of hazel, hawthorn, blackthorn and holly near Loch Lochy will help to retain some of the spectacular views of the Great Glen.

In general scots pine and native broadleaf species will favour natural regeneration establishment in proximity to appropriate seed sources to achieve a minimum stocking density of 1600ha over a 5 to 10 year period, and 1800/ha if planted. This may vary depending on the site objective as detailed in Appendix IX – Woodland Types. As a minimum, riparian woodland will achieve 50% open ground with 50% native trees and shrubs, however, in some cases up to 2500 trees/ha with 20% open ground may be adopted to create enough dappled shade for the watercourses on the south facing slopes of Loch Arkaig. This will help build water quality and quantity resilience and oceanic ravine habitat resilience by improving humidity levels under the riparian woodland canopy.

Where there is an opportunity to gain operational access on appropriate sites productive native woodland management for fuelwood and timber products may be possible. Scots pine will be planted at 2500/ha with birches and aspen at 2500 – 3000/ha. Oak production will be in the form of oak nest planting at the equivalent of 10,000/ha, encircled with species such as hazel, hawthorn or blackthorn depending on local herbivore impacts.

Cultivation methods in restock area will be selected to aid the establishment of the trees which seek to balance minimising the amount of the soil disturbance and the need for herbicide treatment.

The fallow period for restocking is set at two years in the plan, however, hot planting of diverse species will be desirable, with the use of larger scots pine with large root collars will add resilience to *Hylobius* attack. See “Tree Diseases and Pests” section.

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, excess deer browsing leading to failure of restocking and beat-up now required. These areas have been identified, assessed and included in the establishment programme and will be monitored as the plan progresses. See the Natural Regeneration section for the approach to managing legacy natural regeneration areas.

Natural regeneration of native species will be preferred, particularly within PAWS designations. Where planting and supplementary planting takes place to achieve the desired stocking densities and desired species diversity the following seed sources will be sought in compliance with FCS FCFC151 – Seed sources for planting native trees and shrubs in Scotland:

- Native mixed broadleaf species – Region 10, Seed Zone 105
- Scots pine (out with CPI buffers) – Seed zone 6 - SW

All restocking operations will adhere to the following best practice:

- Forest Research decision tools:
    - ESC – to confirm desirable species suitability for a given site ensuring resilience in current climate conditions and in the worst case climate scenario in 2080.
    - FDT – using the FDT principles to diversify species and mixtures, stand structure and implement slope stability resilience
- UK Forestry Standard, in particular, biodiversity, general forestry practice, historic landscape, landscape, soils and water.
- SEPA GBRs
- Guidance on Pollution Control and Management of Surface Water Run-off for Specific Forestry Activities.
- FCPG25 – Managing forest operations to protect the water environment.
- Confor – Guidance on Responsibilities for Environmental Protection in Forestry.
- Forestry and Water Scotland – Protecting private Water Supplies During Forestry Activities.
- FC Bulletin 119 Cultivation of Soils for Forestry and FR TDJR193 – Field Guide to Soil Cultivation
- FR Hylobius Management Support System (MSS) decision tool.
- FCIN038-The assessment of site characteristics as part of a management strategy to reduce damage by *Hylobius.*
- FCPG-017 – Managing and controlling invasive rhododendron
- FCPG015 – Reducing pesticide use in forestry
- FCTG – Forest Fencing
- FLS Environment mitigation measures will be based on the following best practice:
    - FLS Practice Guide – Archaeology and the Historic Environment
    - FCS Guidance Note 31 – Forests and Wildlife Protection
    - FCS Guidance Note 32 – Forest Operations and Birds in Scottish Forests
    - Species Licensing – Guidance Notes for Application for a licence for European Protected Species
    - NatureScot Guidance – Disturbance Distances in Selected Scottish Bird Species
- FCPN104 – Managing Woodland Access and Forestry Operations

- Relevant FISA safety guides will be followed, including: 103, 104, 202, 701-703, 802-806 and FISA Guidance on Managing Health and Safety in Forestry.

Woodland Creation

An EIA screening opinion request is sought for the afforestation of Coupe 62073 in the upper Chia-Aig section of Loch Arkaig Forest. It comprises of 41.43ha gross of open land that has around 5% of moribund birch. Around 22.8ha of this site lies in an ancient woodland area noted on the 1860 maps identified as part of the ancient woodland inventory project. Native woodland creation will help to restore this ghost wood and improve native woodland resilience and connectivity by linking with the young native establishment and ASNW to the north with PAWS to the south and SW. It will help to close the gap with the montane scrub remnants to the NE. Multiple streams affect this site which often form gullies.

The long term objective in Clunes is to create a mountain and montane woodland habitat on the current open hill which will mostly be enabled by natural regeneration resulting from effective deer management. The young native woodland to the north and this afforestation site kick start the mountain woodland project through active interventions. See Appendix XV Clunes Mountain Woodland Project for more details.

The site extends from 300m up to 550m elevation and as such moves from the woodland zone through to the transition zone with DAMS scores ranging from 17 – 19. The planted species will reflect this transition with elements of upland birchwood, pinewood, transition upper margin with some montane woodland. See Appendix IX – Woodland Types. Overall the stocking will be 1600/ha, however, this will be in the form of higher densities on lower slopes and riparian areas and gullies with wide and very wide spacing as elevation increases. Areas of deep peat close to the upper margin will be avoided. The afforestation site and the restocking of coupe 62069 will be managed as a single site and protected by deer fencing whilst increased efforts to reduce the deer population in the wider area take place.

There is an expectation that natural regeneration of birch will occur in proximity to the moribund trees and FLS may allow up to ten years to achieve establishment in the natural regeneration areas identified in the Afforestation EIA screening opinion request documents: Planted & natural regeneration map. The Background Information document details where the planting of desirable species- and types of trees will take place. Diverse species including: oak, rowan, aspen, holly, hazel, dark or tea-leaved willow and dwarf birch will be mainly concentrated in the riparian areas and gullies, with birch, scots pine and juniper across the main slopes.
The following seed sources will be sought in compliance with FCS FCFC151 – Seed sources for planting native trees and shrubs in Scotland:

- Native mixed broadleaf species – Region 10, Seed Zone 105
- Scots pine (out with CPI buffers) – Seed zone 6 - SW

Adherence to best practice will include:

- All best practice identified in the above restocking section, (except for *Hylobius),* including FLS Environment pre-operational checks.
- Practice guide on ground water dependent terrestrial ecosystems
- FCS Developing native woodland habitat networks.

Natural Regeneration

Permanent native woodland habitats have been identified for all expansion and/or establishment following felling operations or as part of the afforestation project. 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 been 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.

Monitoring of Natural Regeneration – a monitoring programme will survey regenerating areas to gain evidence of their success usually by means of Stocking Density/Herbivore Impact Assessments. This will be undertaken at year 5. If Natural regeneration is not going to succeed it will go into the planting programme. 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. These legacy coupes have been identified the plan activity summaries and will feed into the FLS work plan system to ensure establishment is secured.

There are naturally regenerating areas in Loch Arkaig Forest that have exceeded ten years since felling. The vast majority of these sites are very well stocked with native species. These areas will undergo non-native & INNS removal operations with stocking density surveys confirming native establishment. There is one area partially affecting the CPI regeneration zone that is not regenerating with native species. These non-native species will require removal, probably at the same time as the clearfelling and LISS felling interventions in and around the CPI core areas 6 & 7. This felled area will be restocked with native broadleaf species with scots pine regeneration once deer numbers have been reduced. Intervention operations will comply with the best practice identified in the restocking section above, including native seed source and Environment team pre-operational checks.

PAWS restoration

PAWS restoration is the major long term management affecting this LMP and links to the landscape scale native restoration in the Arkaig catchment.

The approved felling coupes in Loch Arkaig Forest: Achnasaul and Dark Mile sections and in Clunes Forest fall within a large area of PAWS which is undergoing restoration. In some instances, where unavoidable, further adjacent felling may take place before a full 2m height difference has been achieved, to reduce conifer seed rain back into these areas of restoration, especially of Sitka Spruce and Western Hemlock trees, most notably Coupes 61048, 61049 and 61054 in Clunes. Management to control non-native regeneration, non-native invasive trees and invasive non-native species)as identified in section 3.8: Invasive species), will be paramount to the successful establishment of native woodland on ancient woodland sites.

All operations will aim to protect ancient woodland features in accordance with UKFS best practice. Pre-operational checks carried out by the FLS Environment team will identify ancient woodland features and the appropriate mitigation measures to be followed which will feed into the work plan system and pre-commencement agreements.

Riparian Management

Watercourses form a main feature of the LMP area with “Allts” being the richest for oceanic ravine habitat. Many minor watercourses are impacted by the former practice of planting conifer species up to burns and excessive regeneration of non-native species being allowed to develop, especially on steep and difficult to access areas. Restocking and afforestation provide the opportunities to improve these native habitats.

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.

The supplementary planting of desirable species will occur within some riparian areas without ground disturbance to improve species diversity, build resilience for oceanic ravine habitat and for slope stability resilience. In the latter case, native trees and shrubs that have a mix of plate, heart and tap rooting habit will enable better anchorage, improve soil fertility and soil stability with the further resilience of water quality from sedimentation.

Where supplementary does occur this may be at higher stocking densities than the minimum densities described the UKFS, for the reasons stated in the restocking section to secure resilience for healthy water and oceanic ravine habitats.

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 and continuity of resource where trees in all stages of growth are found,

including veteran, senescence, standing and fallen deadwood. The highest ecological potential for deadwood is found in:

- The core ASNW and CPI minimum intervention areas including the CPI LISS core areas.
- The Natural Reserve.
- Established woodland within PAWS
- Semi-natural woodland and veteran trees out with PAWS areas and riparian areas.
- Long Term Retentions.

Deadwood will be retained in-situ in the majority of these habitats where it does not pose as a public safety risk. Wildfire risk assessments may be considered in future if climate change increases prolonged periods of dry and warm conditions.

Moderate potential for deadwood has been identified in the partially wooded open areas of the Allt Mhuic Butterfly Reserve including the control section around the Allt Cheanna Mhuir.

Areas of lower potential for deadwood are found in the higher, more exposed areas of conifer crop.

3.3 Open Land

Open land dominates the LMP area occupying just under 1846ha (over 61% of the LMP). The bulk of the open land lies in “Clunes hill”, comprising the summits, coires and slopes of Meall na Teanga (a Munro at 917m elevation), Meall Odhar, Meall Coire Lochan, Sron Bhreac, Meall Breac, Ruighe na Beinne, Creag Dhonn, Creag Liath, Leac Chorrach and Cisteachan Dubha. The Allt Mhuic Butterfly Reserve areas make up the rest of the main open land areas. See section 3.7: Habitats and Species for the breakdown of the priority open habitats found in these locations.

Montane scrub dominated by willow species are found in locations on the SE and NW facing slopes of the hill land: between 450 and 860m elevation on the SE slopes and between 550 and 670m on the NW facing slopes. Much of the Clunes Hill ground has potential for significant mountain and montane woodland expansion enabling native woodland habitat succession to transition from sheltered fertile sites at 30m elevation to montane scrub at 680m+ elevation. See Appendix XV – Clunes Mountain Woodland Project for details.

There is an area of hagged blanket bog which is identified for restoration in 2024/25 in upper Chia-Aig in the northern section of Coupe 61074. This will enable it to be converted from being a carbon emitter to eventually becoming a carbon sink.
Elsewhere there are extensive high elevation areas of hagged blanket bog in parts of Coupe 61076 ON Meall Breac and Coire Bhan. Ideally these bogs will be restored if access for machines and availability of funding permits.
There are no areas of forest-to-bog restoration.

3.4 Deer Management

(see Appendix V, Deer Management Plan)

3.5 Public Access

Formal visitor facilities provided in the LMP are the car parks at the Allt Mhuic Butterfly Reserve and beside the Chia-Aig Falls within Loch Arkaig Forest. Management will continue to maintain these facilities.

Informal facilities include the car park at Clunes Forest, the trails around the Allt Mhuic Butterfly Reserve, at Chia-Aig waterfall and the Chia-Aig and Clunes hill access tracks. These hill access tracks and forest roads LK1 and CS1 also follow ScotWays claimed historic rights of way – HL0022, HL0024 and HL0025. Management will be restricted to maintenance for forest road and ATV operational access, with the trails at Allt Mhuic and Chia-Aig to resort to SOAC.
Where new ATV tracks are constructed to facilitate establishment and deer management operations, greater consideration will be given to link with existing forest trails and roads to further improve public access within the forest.
A review of the Clunes car park will take on board the antisocial behaviour associated with this location and the impact it has on the neighbouring Clunes community.

Scottish Canals manage a basic informal “Trailblazer” campsite – a slight step up from wild camping - within Coupe 61026 which serves the GGW long distance walkers and cyclists along forest road CS1 close to the shore of Loch Lochy. It also serves those kayaking the Great Glen route. It includes a few level areas on which to pitch tents, a basic shelter structure and a compost toilet. These facilities are restricted to those who book places.
The Coire Glas development in the Kilfinnan section of Clunes Forest impedes full access along forest road CS1 so SSE created the GGW diversion through Coupes 61023 and 61025 to gain access to Kilfinnan via upper forest road CS11.

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. 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 Viewpoints Map/ visualisations).

Woodland Management and public access

Visitor access and safety will managed by thinning interventions. Approved thinning includes areas of minimum intervention, LISS and Long Term Retentions such as Coupe 61026 where the Trailblazer campsite is located. It also includes thinning of trees within 25m of forest roads, the GGW diversion and ATV tracks as well as the entire lower section of the Allt Mhuic Butterfly Reserve.

3.6 Heritage Features

(See Map 13 - Heritage and Conservation)
There are a number of Monuments listed under the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) found in the LMP area. None are described as being scheduled monuments or listed buildings. A battlefield site lies adjacent to the part of the Coire Glas pumped storage development zone and will be considered as part of Planning Permission approvals sought by SSE.

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. Prior to operations the FLS Environment staff will ground truth the heritage features and mark the protective buffers on the ground. Mitigation measures will be input into the FLS work plan system and will form part of the pre-commencement agreements and operational plans.

In general the LMP heritage features can be described in terms of importance, as per the FLS guidance, with the following associated protective buffers:

- Regional importance – 10m protective buffer
- Local importance – 5m protective buffer
- Other – no protective buffer with no action necessary.

If new sites are found these will be mapped and recorded and protected from operations. Additionally the LMP restocking proposals (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. The heritage features in the LMP do not feature within this plan.

Best practice in the management of heritage features in the LMP area will comply with the following best practice:

- UK Forestry Standard, in particular Forests and the Historic Environment
- FLS Practice Guide – Archaeology and the Historic Environment (2022) which is aligned to:
    - FCS Forests and historic environment – information and advice
    - FCS Historic Environment Resource Guide
    - FCPG101 – Identifying the historic environment in Scotland's forests and woodlands.

3.7 Habitats & Species

(See Map 13 Heritage & Conservation map and Map 14 – Habitats)

Priority Habitats

Priority native woodland habitats:
All native woodland habitats are impacted to a greater or lesser degree by herbivores, NNR (large and small) and INNS. The management of deer to sustainable levels associated with native woodland and sensitive open habitats will be ramped up in the earlier stages to the LMP period and this should have a positive impact on the priority native woodland habitats.
With consideration to restricted resources, management of NNR (notably, SS, WH and beech), and INNS will be prioritised as follows:

- Priority 1:
    - ASNW (including the protective buffer) & CPI core areas and associated regeneration zone.
- Priority 2:
    - Establishing & established PAWS restoration sites
    - Natural Reserve
- Priority 3:
    - Semi-natural woodland out with PAWS
    - Riparian areas within PAWS designations out with the restored areas.
- Priority 4:
    - Riparian areas out with PAWS

Priority Open Habitats

As with the priority wooded areas deer, NNR and INNS are the greatest threats to these habitats. The carbon emitting hagged blanket bogs have been addressed in Section 3.3: Open Land.
Areas which are regeneration with NNR and INNS will be identified by the FLS Environment team as well as the contract Habitat Surveys. This will identify a programme of removal operations. The LMP thinning maps have identified some areas for NNR removal, which coincides with areas requiring INNS removal. They are as follows:

- Selective felling of NNR in Coupes 61000 (small section), 62051 and 62080
- Thinning:
    - Along the forest roads in the Allt Mhuic Butterfly Reserve in Coupes 62029 and 62031.
    - In the wood pasture areas of the Butterfly Reserve in Coupe 62029

Priority Species

There are areas of the forest that are known habitat for bats, otters and raptors which are covered by the European Protected Species regulations. Prior to forestry operations, FLS Environment staff will undertake a pre commencement survey in the coupe to check for the presence of any protected species. They will

advise on the mitigation measures to be followed which will be added to the FLS work plan system and pre-commencement agreements.

There is a resident population of red squirrel in the LMP area. Restructuring of the forest combined with windblow of suitable habitat has impacted on this population. Long term retentions and the Natural Reserve of Plantation origin as well as the CPI core areas and priority woodland habitat offer a variety of sources of food and drey locations.

This LMP offers a prime habitat for chequered skipper and pearl-bordered fritillary with the Allt Mhuic Butterfly Reserve set up specifically for their management. The reserve contains a rich habitat of bracken, bog myrtle and molinia as well as wood pasture mature trees and small regenerating birch which creates the permanent low height woodland edge for chequered skipper. The reserve also supports a range of moths which also benefit from the management of the butterflies. The area of the reserve to the south of the forest road will continue to be managed for their conservation through managed cattle grazing in partnership with the Butterfly Conservation charity. Forest Research have completed their research into cattle grazing regimes on this site. See Appendix VIV – Allt Mhuic Butterfly Reserve for further details.

The oceanic ravine habitats and other native woodland priority habitats support Scottish rainforest bryophyte and lichen assemblages. The lichen assemblages associated with the upland mixed ashwood habitats are particularly rich, some of which are legally protected. Removing the threats to these woodland by NNR and INNS removal will improve the habitat for these species as will building resilience into riparian habitats to cope with predicted changes in climate to sustain humidity levels to support the bryophytes.

The upland mixed ashwood ASNW and priority woodland habitat adjacent to the B8005 and C1153 and neighbours along the start of the Clunes forest road CS1 is impacted by Chalara infection causing die-back. This poses a public health and safety issue. It is proposed that a safety inspection is carried out on these trees with proposed management to improve public health and safety balanced with the need to retain as much of the infected ash tree as possible to retain habitat niches and legally protected lichens.

LISS Coupe 62054 in east Achnasaul contains NS and veteran oaks and birches. All of these species are important for bryophyte assemblages with the NS crop enabling the required humidity levels. This NS will be retained for this purpose with only the minor SS component to be removed at the same times as the felling of the adjacent Coupe 62056. The veteran native species will be halo thinned to protect the crowns and associated lichen assemblages.

A similar approach will apply to CPI core are 6 within LISS Coupe 62084 where the NS dominated core area will be retained during this plan because of the special bryophyte communities it is supporting. The removal of localised SS will take place within this CPI core area as will the halo thinning of scots pine.

Management and planning will comply with the following best practice:

- UK Forestry Standard, in particular, biodiversity

- FCS – Strategic guide for the conservation management of open habitats on Scotland's National Forest Estate.
- FCPG024 – Managing open habitats in upland forests
- FCS guidance notes: Wildlife and Forest. Operations 31- 35d
- Species Licensing – Guidance Notes for Application for a licence for European Protected Species
- NatureScot Guidance – Disturbance Distances in Selected Scottish Bird Species
- FCP101 – Managing Forests for White Tailed Eagles
- FCPG9 – Forest Operations and Badger Setts
- FCS Species Action Notes – chequered skipper
- FCS Species Action Notes – pearl-bordered fritillary
- FCS Species Action Notes – red squirrel

3.8 Invasive Species

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

- Rhododendron ponticum: widespread and scattered in forested and open areas
- Gaultheria shalon: localised and scattered in east Loch Arkaig – Achnasaul, the entrance to LK1 at the Dark Mile and in the CPI regeneration zone around cores areas 1 – 4.
- Buddleia: localised and scattered along forest roadsides in Loch Arkaig Forest. In Clunes Forest it is localised and becoming prolific in the felled areas and forest roadsides of upper south Clunes.

Following their identification a plan for their initial removal will be drawn up. This should be followed up after removal to ensure there is no recurrence. This will mainly be addressed as part of restocking and forest road verge management. A zero tolerance approach will be given to Gaultheria shalon. Any further areas identified will be mapped as reports are received by FLS.
Management and planning will align with the following best practice:

- UK Forestry Standard, in particular, biodiversity and climate change
- FCS – Managing invasive and non-native forestry species
- FCS Guidance for delivering invasive non-native plant control projects
- FCPG017 – Managing and controlling invasive rhododendron

3.9 Water Supplies

Public Water Supplies

The LMP is not affected by public water supply catchments.

Private Water Supplies

Private water supplies (PWS) 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 have been identified and ground truthed as well as checking the Highland Council Private Water

Supply open map data. The PWS catchment associated with the surface water abstraction for local communities has been identified. The 50m protective buffer around the borehole does extend onto part of the adjacent forest road.

This information will be fed into all worksite planning well in advance of any operations to ensure there is no detrimental impact on the water supply. The water catchment zone associated with the stream fed abstraction point will 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 endeavour to identify all supplies and any further points found will be added in to the database to give a comprehensive coverage.

The long term conversion to native woodland will provide future resilience for the PWS water quality and quantity. In the short term, Phase 2 felling and the removal of the SS component in the Natural Reserve will improve the riparian habitat of the PWS, as well as securing the native restocking. Where resources permit, the removal of beech along the lower extent of this catchment will further improve resilience.

Discussions with the local community regarding the management of antisocial behaviour associated with the Clunes Forest car park and PWS has been initiated as part of the LMP consultation process.

3.10 Critical Success Factors

- The successful lowering of herbivore impact achieved, ideally, by the lowering of the deer population to below 5/km2 by the end of the LMP period is critical to the success of native woodland establishment and the health of open priority habitats. The strategic fence that currently protects Glengarry and Clunes Forests and the east section of Loch Arkaig Forest will need to be replaced or undergo a major upgrade in the near future. Successful establishment of the afforestation area will be dependent on a protective deer fence whilst the deer population on the adjacent open hill is being reduced during this plan.
- The removal of all non-native invasive seed sources, in particular the mature SS in difficult to access areas around the CPI core areas on outcrops as well as from the wider CPI regeneration zone. This will likely require several methods of removal to manage health and safety of contractors, managing fuel loads and managing the visual impact of deadwood in a prominent position within an iconic local landscape.
- Safe harvesting and extraction of timber from the steep slopes above local infrastructure and housing at the Dark Mile and Clunes hamlet.
- Haulage of timber along the vulnerable C1153 public road from Loch Arkaig Forest fell sites.
- Removal of non-native regeneration and invasive non-native species from the LMP area, in particular from the ASNW and protective buffer, CPI core and regeneration areas, Natural Reserve, PAWS areas, riparian and semi-natural woodland out with PAWS. This is essential to the restoration of native woodland and open habitats. Operate a zero tolerance of outbreaks of Gaultheria shalon. Success will be enabled by the wider efforts to restore native habitats at the landscape scale.
- Successful beat-up of the hydro site and afforestation site in Gleann Chia-Aig to improve ecological connectivity of native woodland habitats within and out with the LMP in this Glen.
- The hot planting of desirable species where natural regeneration is unlikely to occur within acceptable time constraints. This is especially important on the steep slopes of Clunes Forest and the Loch Arkaig Forest Dark Mile and Achnasaul slope instability areas where ground preparation to manage vegetation is impossible. This includes riparian areas within these locations.
- Good communication and cooperation with local landowners and the local Community to deliver sustainable deer management and native woodland restoration at a landscape scale throughout the wider Arkaig catchment, which will benefit the outcomes of the LMP.