Appendix 5 Pinewood Restoration *– regeneration and restocking*

Map 9 illustrates the results of an Autumn 2025 natural regeneration survey to assess progress towards LTP Future Habitat and LTP Objectives. Resultant survey data - presented overleaf - is grouped for regeneration zones shown on the map (A to H) and colour-coded as per the map's legend/symbology.

The survey focused primarily on clear-felled i.e. fallowing ground much of which had resulted from clearfelling undertaken between 2009 and 2015 (i.e. before the last LMP period) when a programme of extensive "sanitation felling" was undertaken to remove DNB-infected Lodgepole pine afforestation in proximity to potentially vulnerable core Caledonian pine (CPI) woodland areas. The follow-on management prescription was for re-establishment of a CPI-appropriate native woodland by natural regeneration to be achieved from seed rain from residual or remnant native trees that had persisted through the non-native conifer rotation in rides, riparian zones or at tree-line and plantation sub-compartment margins.

The 2025 walkover survey recorded all component tree species present (non-native and native), modal height, evidence of tree seed sources, browsing impact and site condition (i.e. competitive vegetation). This allowed determination of native tree species recruitment density and any likely hindrances – in order to assess progress toward Future Habitat objectives (**Map 7**) as well as adherence to SF Guidance '*Restocking Density for Native Broadleaves*. Additional survey observations included a browsing impact assessment (low, medium or high), abundance/paucity of native seed trees and the condition of the terrain (allowing assessment of vegetation density, competitiveness, shading or mechanical interference e.g. grasses, dense heather, bracken, mire etc.).

{Note: the survey has also informed a programme of non-native tree and INNS removal (ongoing: 2024 to c.2028) - under Scottish Rainforest Alliance project funding – to conserve native integrity of priority open ground and regenerating PAWS and CPI habitat.}

The following observations, and follow-on management recommendations, have been made for the surveyed areas:

Zone A *(11.6 ha surveyed)*

- 6.0 ha of seven-year fallowing ground. The remainder: failed first-rotation conifers (i.e. still Open) and Open Ground.
- NMB recruitment is >2,000 stems/ha for 59% of the area (modal heights: 90 to 300 cm) - to be formally surveyed to update sub-compartment database (SCDB) in 2027.
- 3.8 ha (33%) has NMB recruitment at 1,100/ha (modal height 300 cm) and 1.0 ha (9%) has 825 to 1,100 stems/ha. These <1,600 stems/ha areas will be surveyed for SCDB update in 2031 (LTP Phase 2) in anticipation of further regeneration recruitment by that date. *N.B. natural tree regeneration on Open Ground (i.e. afforestation) is considered in Appendix 3: EIA SOR.*

Zone B *(6.5 ha surveyed)*

- 5.6 ha was eleven-year fallowing and the remainder Open Ground.
- NMB recruitment ranges from 240 to 525 stems/ha (though 0.8 ha is 1,350/ha).
- On account of poor (<1,600/ha) recruitment, the fallowing ground will be enrichment planted to achieve minimum 1,600 stems/ha in 2026/27 planting season (with upland birchwood species) and consequently monitored under FLS SDAs and contingency beating up as required to achieve successful establishment.
- The 1.0 ha 'Open Ground' area (surveyed: 525 stems/ha) will remain under natural regeneration monitoring and be surveyed for SCDB update in 2031 (and therefore envisaged as Phase 2 woodland creation).

Zone C *(Areas 1 and 3 surveyed: 13.6 ha; Area 2: 5.9 ha – felled 2025 - not surveyed)*

- 12.5 ha was eleven-year fallowing (area 1), 5.9 ha felled in 2025 (area 2) and 1.1 ha Open Ground (area 3).
- Area 1 NMB recruitment was recorded at only 240 to 950 stems/ha and with low to medium browsing impacts. This area was consequently enrichment planted in the 25/26 planting season to >1,600/ha and will be surveyed for SCDB update in 2027 as well as monitored under SDA programme (with any required beat up) to ensure it meets minimum stocking density of representative upland birch- and oak wood composition.
- Area 2 (felled 2025) will be monitored for regeneration by 2028 with any required intervention (i.e. enrichment planting) to achieve requisite 1,600/ha stocking density determined at that time.
- Area 3 has 4,750 stems/ha NMB recruitment (modal ht: 160 cm) and will be SCDB surveyed in 2027 (N.B. also afforestation).

Zone D *(not surveyed)*

- Gross 60.2 ha (five-years fallow) was not included in the 2025 regeneration survey as it was intended for NMB restocking (prescribed in the previous LMP).
- A net area of 44.6 ha (Area 1) was mounded in summer 2025 and subsequently restocked in the 25/26 winter planting season.
- Area 2 (15.6 ha) is at close proximity to mature ASNW birch woodland and core CPI woodland and was left umounded or restocked for natural regeneration (as 30 to 120 m distance from seed source) on account of an ambition to recruit local provenance trees from CPI and ASNW remnants. To be surveyed in 2028 for progress or contingency intervention as required.

Zone E *(Areas 1 and 2 surveyed: 9.6 ha; Area 3: 2.6 ha – felled 2025 - not surveyed)*

- Areas 1 and 2 had been fallowing for six years.
- Area 2 (2.7 ha) has acceptable NMB recruitment at 1,800 stems/ha (modal ht: 15 cm, medium browsing impact and abundant seed source) and will be SCDB surveyed in 2027.
- Area 1 (6.9 ha) had just 194 stems/ha (modal ht: 40 cm, Medium browsing impact but fewer native seed trees). FLS consider comparatively less seed trees coupled with localised deer browsing during the first three years fallow (when perimeter deer fencing was temporarily breached on account of hydro penstock construction works) have delayed satisfactory recruitment.
- Area 1's proximity/adjacency to 'Core' CPI remnants – and so within the CPI regeneration zone – mean FLS would like further time to allow more natural regeneration to take place and establish. This is now being supported by more targeted deer cull effort in this vicinity as a result of the regeneration survey's findings. The next regeneration monitoring is due in 2028 and progress can be reviewed as to whether recruitment is increasing to acceptable levels or else enrichment planting required.
- Area 3 (felled 2025) will be monitored for regeneration in 2028 to inform similar decision-making in this 2.6 ha area.

Zone F *(92.3 ha surveyed)*

- Area 1 (9.21 ha) and Area 2 (17.1 ha) are adjacent areas on the eastern flank of Coire Bhanidh that have been fallowing for 14 years. NMB recruitment varies from 1,020 to 8,600 (see data table) but collectively average 1,606 stems/ha across the gross 26.3 ha – grading from denser riparian zone to the more open 1,020/ha tree-line. To be SCDB surveyed in 2027.
- Area 3 (48.2 ha) has been fallowing for five years. NMB recruitment 90 to 693 stems/ha. As the previous LMP prescribed restocking here, areas of sparse or non-existent regeneration were mounded and restocked in 25/26 to achieve minimum 1,600 stems/ha. The area will therefore be included in routine SDAs with beat up to maintain minimum 1,600 stems/ha.
- Area 4 (10.9 ha) had been fallowing for 16 years but achieved gross 1,333 stems/ha in this riparian zone (modal hts: 80 to 300 cm). FLS wish to consider this acceptably stocked for this vicinity and will undertake SCDB survey in 2027.
- Area 5 (6.5 ha) also fallowing for 16 years but with NMB recruitment at 1,800 stems/ha (modal ht: 320 cm). SCDB survey will be undertaken in 2027.

Zone G *(39.5 ha surveyed)*

- As with Areas 1 and 2 in Zone F, Zone G's areas 1 and 2 represent lower/riparian and upper/tree-line terrain fallowing for 14 years. NMB recruitment at 4,308 stems/ha (Area 1) and 675 stems/ha (Area 2) respectively. Collectively this represents 3,032 stems/ha - grading from dense thicket lower contours (modal ht: 180-200 cm) to a more open tree-line margin (ht: 200 cm).

Zone H *(49.1 ha surveyed)*

- Most of Area 1 (12.7 ha) has been fallowing for 15 years with NMB recruitment at 715 stems/ha (modal ht: 250 cm). This will be enrichment planted in 26/27 winter season to minimum 1,600 stems/ha when Area 3 (below) is restocked.
- A further 1.7 ha of Area 1 is four years fallow with 1,026 stems/ha NMB recruitment. This will also be enrichment planted in 26/27 winter season to minimum 1,600 stems/ha.
- Area 2 (17.9 ha) is four years fallow with NMB recruitment at 609 stems/ha. This area (and felled/fallowing parts of Area 3) has been mounded in summer 2026 for restocking to minimum 1,600 stems/ha in winter 26/27 planting season.
- Area 3 (16.8 ha) includes 2.6 ha of felled/fallowing-for-four -years ground for restocking as per Area 2. The remaining 14.2 ha of Open Ground has NMB recruitment at 715 stems/ha and will be enrichment planted to 1,600/ha (N.B. afforestation).

Achnashellach - Natural Regeneration Survey Data (Autumn 2025) – see LTP 2026-2036 **Map 9**

Survey Zone	Future Restock Cpe ref. no.	Years Fallowing @ 2025	Area (ha)	Regen. stems/ha	Non-nat cons %	NBLs %	NBLs/ha	Modal Ht (cm)	*Comments/Follow-on Actions*	Spp 1 %	Spp 2 %	Spp 3 %	Spp 4 %	Spp 5 %	Spp 6 %	Spp 7 %	Spp 8 %	Browsing Impact	Tree Seed Source	Seed Spp.	Seed Source Distance (m)	Site Condition
A.1	1/3 of 09025A	7	1.77	**4000**	50	50	**2000**	250	*Established. SCDB survey/update 2027.*	ROW 15	BI 30	WH 20	SS 10	GtWLW 5	WRC 20			Low	Abundant (>20%)	BI/ ROW/WLW/WH/WRC/SS	2	Dense Heather
A.1	1/3 of 09025A 1/2 of 09025B 1/3 of 09261B	7 7 n/a	4.27	**6000**	56	44	**2640**	300	*Established. SCDB survey/update 2027.* *Established. SCDB survey/update 2027.* *Phase 1 Wdlnd Crtn, SCDB survey 2027.*	WRC 10	BI 40	WH 45	SP 2	SS 1	ROW 2			Low	Abundant (>20%)	WH/BI/ROW/SP	1	Dense Heather
A.1	Part of 09025A	7	0.32	**2800**	9	91	**2548**	90	*Established. SCDB survey/update 2027*	ROW 10	BI 80	WH 5	SS 4	SP 1				No Impact	Scattered/Occasional (5-19%)	BI/ROW/WH/SP	2	Dense Heather
A.1	09025B	7	0.47	**3000**	4	96	**2880**	250	*Established. SCDB survey/update 2027.*	CAR 10	BI 45	WH 35	SS 2	SP 2	WRC 2	GtWLW 2	GyWLW 2	No Impact	Abundant (>20%)	WH/BI/CAR	10	Scrub
A.1	1/6 of 09025A	7	0.13	**2500**	56	44	**1100**	180	*Phase 2 Wdlnd Creation, SCDB survey 2031*	WRC 40	BI 25	ROW 15	WH 10	SP 4	SS 6			No Impact	Scattered/Occasional (5-19%)	SP/BI/WRC	2	Dense Heather
A.2	2/3 of 09261B	n/a	3.77	**2000**	45	55	**1100**	300	*Phase 2 Wdlnd Creation, SCDB survey 2031*	WRC 10	BI 3	WH 35	SP 45	SS 5	ROW 2			Low	Abundant (>20%)	SP/SS/WH/WRC/BI	1	Dense Heather
A.3	1/3 of 09025A	7	0.85	**1500**	45	55	**825**	200	*Balanced by 2,548/ha area. SCDBsurvey 2031*	ROW 10	BI 30	WH 20	SS 20	SP 3	WRC 3	GtWLW 2	LP 2	Medium	Scattered/Occasional (5-19%)	WH/SP /SS/BI/ROW/WRC	2	Dense Heather
B.1	1/4 of 09024A	11	1.89	**1000**	76	24	**240**	180	*Enrichment plant to 1,100/ha (treeline): 26/27*	WRC 1	BI 20	ROW 1	SS 75	POK 1	BCH 1	GtWLW 1		Low	None (0%)		20	Dense Heather
B.1	1/4 of 09024A	11	1.01	**3000**	90	10	**300**	250	*Enrichment plant to 1,100/ha (treeline): 26/27*	SS 90	BI 5	ROW 2	GtWLW 3					Low	Rare (<5%)	SS	5	Dense Heather
B.1	1/2 of 09024A	11	2.75	**3500**	85	15	**525**	350	*Enrichment plant to 1,100/ha (treeline): 26/27*	SS 85	BI 10	ROW 3	GtWLW 2					Medium	Scattered/Occasional (5-19%)	SS	20	Tall Ruerdals
B.2	09879C	n/a	0.8	**3000**	55	45	**1350**	300	*Phase 1 Wdlnd Creation, SCDB survey 2031*	SS 30	BI 30	WH 20	WRC 5	GtWLW 5	ROW 10			Low	Rare (<5%)	SS/BI/WH	2	Dense Heather
C.1	Part of 09006A	11	2.97	**1000**	5	95	**950**	150	***Enrichment planted 25/26 to min 1,600/ha***	BI 80	SS 5	GtWLW 5	ROW 5	BE 5				Low	Rare (<5%)	BE/BI	10	Tall Ruerdals
C.1	Part of 09006A	11	1.77	**400**	40	60	**240**	30	***Enrichment planted 25/26 to min 1,600/ha***	BI 40	SS 40	GtWLW 10	ROW 10					No Impact	None (0%)		20	Dense Bracken
C.1	Part of 09006A	11	0.34	**4500**	80	20	**900**	400	***Enrichment planted 25/26 to min 1,600/ha***	HL 10	SS 30	WH 35	WRC 5	BE 10	BI 5	SYC 1	GtWLW 4	Low	Abundant (>20%)	SS/BE/LARCH/WH	20	Dense Woodrush
C.1	Part of 09006A	11	7.41	**1000**	14	86	**860**	60	***Enrichment planted 25/26 to min 1,600/ha***	BI 80	SS 14	GtWLW 2	ROW 2	BE 2				Low	None (0%)		20	Dense Heather
C.2	09603A	**Felled 2025**	5.94						*Monitor regen 2028 for progress/remedial ops*													
C.3	Part of 09009A	n/a	1.13	**5000**	5	95	**4750**	160	*Phase 1 Wdlnd Creation, SCDB survey 2027*	BI 90	CAR 1	SS 5	WH 1	ROW 1	BE 1	GtWLW 1		Low	Rare (<5%)	BE/ROW	5	Dense Bracken
D.1	n/a	5	44.64						***Restocked 25/26***													
D.2	09571B,C&D	5	15.6						*Monitor regen 2028 for progress/remedial ops.*													
E.1	09034A	6	6.87	**200**	3	97	**194**	40	*SF Q: 3 more yrs nat regen? (CPI Regen zone)*	BI 80	GyWLW 10	ROW 5	**SS 3**	SP 2				Medium	Rare (<5%)	BI	20	Weedy Clearfell
E.2	09034B	6	2.72	**1800**		100	**1800**	15	*Established. SCDB survey/update 2027.*	BI 80	SP 17	GyWLW 3						Medium	Abundant (>20%)	BI/SP	5	Generally suitable for regeneration
E.3	09905B	**Felled 2025**	2.62						*Monitor regen 2028 for progress/remedial ops.*													
F.1	Lower 09028B	14	6.29	**2200**	13	87	**1914**	170	*Established. SCDB survey/update 2027.*	BI 70	GyWLW 5	**SS 10**	ROW 5	SP 7	**LP 3**			Low	Abundant (>20%)	5	90	Dense Heather
F.1	Lower 09028B	14	2.92	**3800**	19	81	**3078**	230	*Established. SCDB survey/update 2027.*	BI 65	**SS 15**	GyWLW 6	**LP 4**					Medium	Abundant (>20%)	100	70	Dense Heather
F.1	Lower 09028B	14	0.44	**8600**		100	**8600**	250	*Established. SCDB survey/update 2027.*	SP 50	BI 40	CAR 5	ROW 2	GyWLW 3				Low	Abundant (>20%)	SP/BI	5	Mature Woodland
F.2	Upper 09028B	14	17.13	**1200**	15	85	**1020**	150	*With other 09028B parts. SCDB survey: 2027.*	BI 70	**LP 5**	GyWLW 5	ROW 5	**SS 10**	SP 5			Medium	Scattered/Occasional (5-19%)	BI/SS/LP/ROW/GWL/SP	5	Dense Heather
F.3	n/a	5	31.09	**300**	70	30	**90**	80	***Restocked 25/26***	BI 10	**LP 25**	**SS 45**	ROW 5	GyWLW 5				Medium	Scattered/Occasional (5-19%)	SS/ LP/BI	10	Generally suitable for regeneration
F.3	n/a	5	15.62	**400**	15	85	**340**	70	***Restocked 25/26***	BI 30	**LP 20**	GyWLW 20	ROW 7	**SS 15**	CAR 5	SP 3		Medium	Scattered/Occasional (5-19%)	CAR/SS	50	Generally suitable for regeneration
F.3	n/a	5	1.39	**900**	23	77	**693**	60	***Restocked 25/26***	BI 52	GyWLW 15	SP 2	ROW 3	**LP 15**	CAR 5	**SS 8**		Medium	Scattered/Occasional (5-19%)	AS ABOVE	50	Generally suitable for regeneration
F.4	9/10 of 09030A	16	10.01	**1400**	2	98	**1372**	300	*Ask SF approval: min. 1,300 stems (riparian)*	BI 80	GyWLW 15	CAR 3	**SS 1**	**LP 1**				Medium	Abundant (>20%)	BI/GWL/CAR	5	Dense Heather
F.4	1/10 of 09030A	16	0.9	**900**	0	100	**900**	80	*Balanced by larger 1,372/ha area*	BI 60	GyWLW 25	ROW 10	CAR 5					Medium	Scattered/Occasional (5-19%)	Bi/GWL/ROW	10	Boggy
F.5	09027C 09913A	16	6.53	**1800**	0	100	**1800**	320	*Established. SCDB survey/update 2027.* *Phase 1 Wdlnd Creation, SCDB survey 2027*	SP 15	BI 60	GyWLW 15	ROW 10					Medium	Abundant (>20%)	SP/GWL/BI/CAR/ROW	10	Generally suitable for regeneration
G.1	Lower 09027B Lower 09028 A	14	24.35	**5200**	16	84	**4368**	180	*2025 monitoring: Established.*	BI 70	GyWLW 5	CAR 5	ROW 3	**LP 6**	**SS 10**	SP 4		Medium	Abundant (>20%)	1	50	Dense Heather
G.1	Part of 09032A	14	1.25	**3500**	10	90	**3150**	200	*Phase 1 Wdlnd Creation, SCDB survey 2027*	SP 80	**SS 10**	BI 10						Medium	Scattered/Occasional (5-19%)	25	100	Dense Heather
G.2	Upper 09027B Upper 09028 A	14	13.68	**1500**	55	45	**675**	210	*Treeline bits: 675/ha (OK with lwr bits)*	BI 20	GyWLW 10	CAR 5	ROW 5	**LP 20**	**SS 35**	SP 5		Medium	Abundant (>20%)	25	150	Dense Heather
H.1	9/10 of 09027A	15	12.67	**1100**	35	65	**715**	250	*Enrichment plant 26/27*	**SS 35**	**LP 25**	BI 20	GyWLW 10	CAR 5	ROW 5			Medium	Abundant (>20%)	SS/LP/BI/CAR/SP/ROW	10	Dense Heather
H.1	1/10 of 09027A	4	1.73	**1800**	43	57	**1026**	600	*Enrichment plant 26/27*	**LP 30**	**SS 15**	BI 30	GyWLW 12	ROW 5	**HL 3**	CAR 3	SP 2	Medium	Abundant (>20%)	SS/LP/BI	25	Dense Heather
H.2	8/10 of 09104A	4	17.92	**700**	13	87	**609**	60	***Mounded 2026*** *for Restock 26/27*	BI 50	GyWLW 20	SP 12	ROW 5	**SS 4**	**LP 6**	**HL 3**		Medium	Scattered/Occasional (5-19%)	SP/BI	50	Weedy Clearfell
H.3	2/10 of 09104A 09028C	4 n/a	16.84	**1100**	35	65	**715**	320	Enrichment plant 26/27. Phase 2 Wdlnd Crtn, SCDB survey 2031.	SP 40	BI 20	**SS 15**	**LP 20**	ROW 2	GyWLW 3			Medium	Scattered/Occasional (5-19%)	SP/ LP/BI	10	Dense Heather