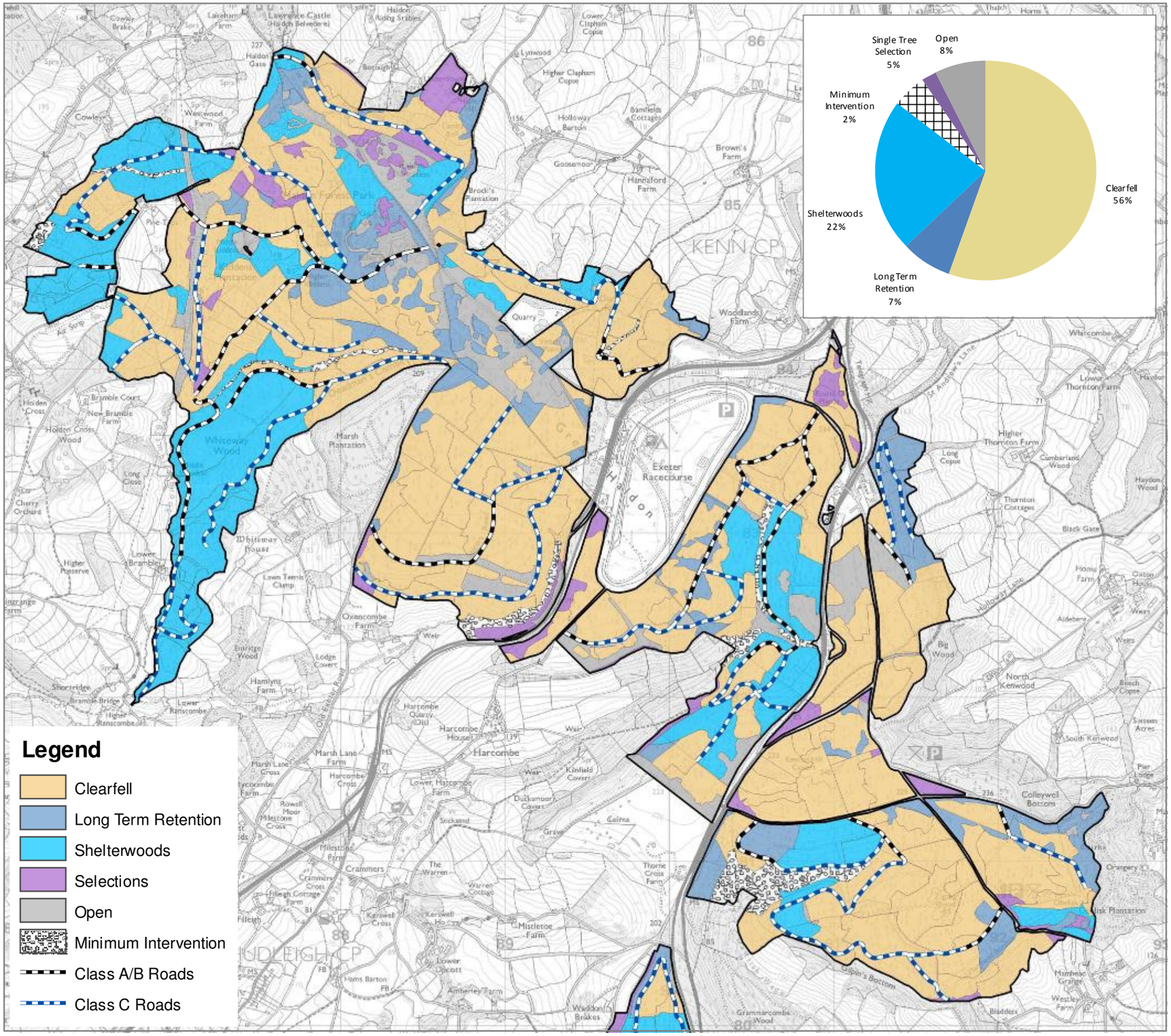
# PART 5 – Thinning, felling and future composition

# Silviculture






**Clearfell** coupes will simply be managed through clearcutting (of over 0.25ha) and restocked either through natural regeneration, replanting or a combination of the two.

**Long term retentions** are in place where the their ecological value for raptor habitat or landscape value are key.

**Open habitat** is managed to ensure forest cover does not exceed 2m in height, a tolerance of 20% forest cover will be accepted on some lower priority sites.

**Minimum Interventions** are predominantly inaccessible or ecological valuable areas where intervention will only occur to protect and ensure the future succession of key habitats and species—notably riparian areas.

**Continuous Cover Forestry** See more on Pages 41-42

**Uniform shelterwoods** are predominately sites which will be managed using seeding fellings with possible with under planting of site suitable species to control light levels and develop good timber quality.

**Strip shelterwoods** are often used on wind vulnerable sites which will be restocked through natural regeneration.

**Group shelterwoods** will look to develop a complex CCF structure through the proactive diversification of the woodland structure and composition through group felling, possibly through the use of enrichment replanting.

**Single-tree selections** are used on existing complex structured stands or sensitive sites often important for amenity value.

## SSSI — Silviculture

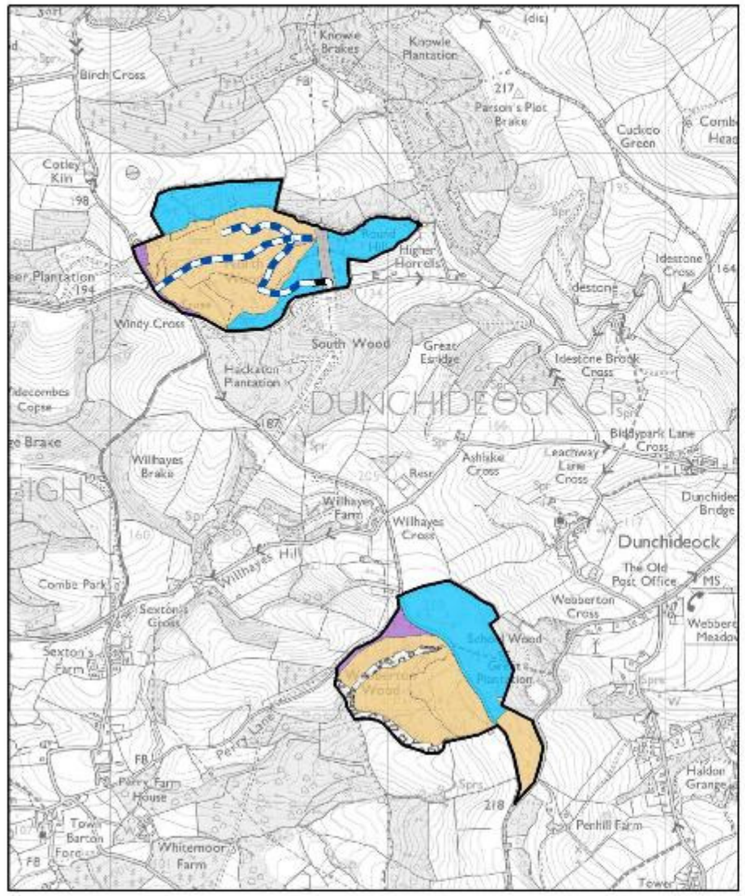
Standard silviculture will be practiced across the SSSI, as defined above and in line with Page 31, with the exceptions outlined below:

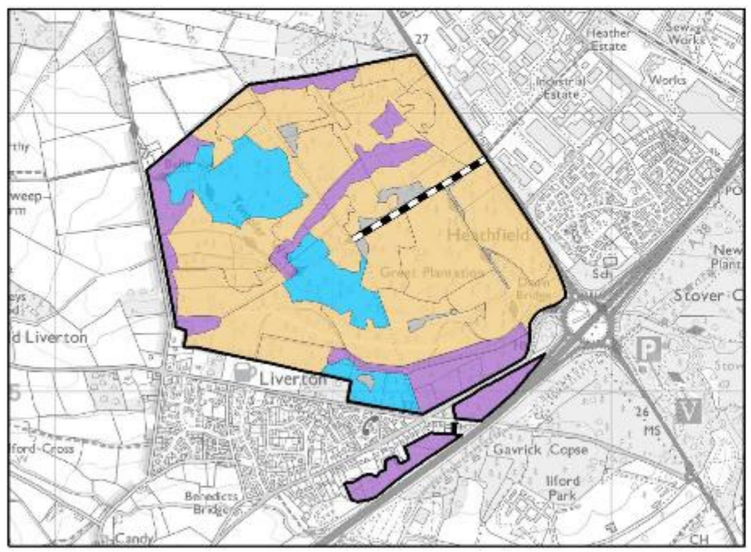
**Long term retentions** within most SSSI units will be managed with the objective of providing favourable raptor habitat into the future. Retentions in SSSI units where the intention is to restore to heathland will be managed to ensure edges create sheltered areas of suitable heathland habitat and pockets within crop heath are expanded before the over storey removal.

# Silviculture

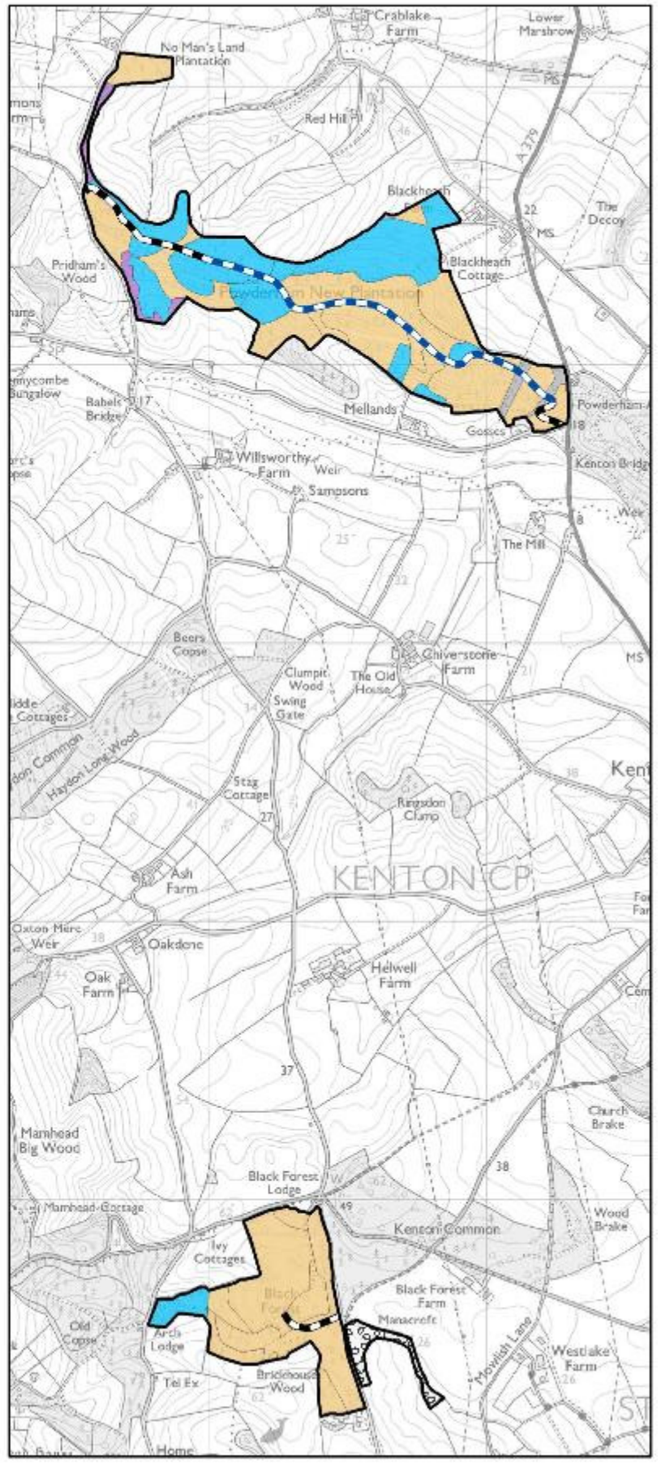
## Legend

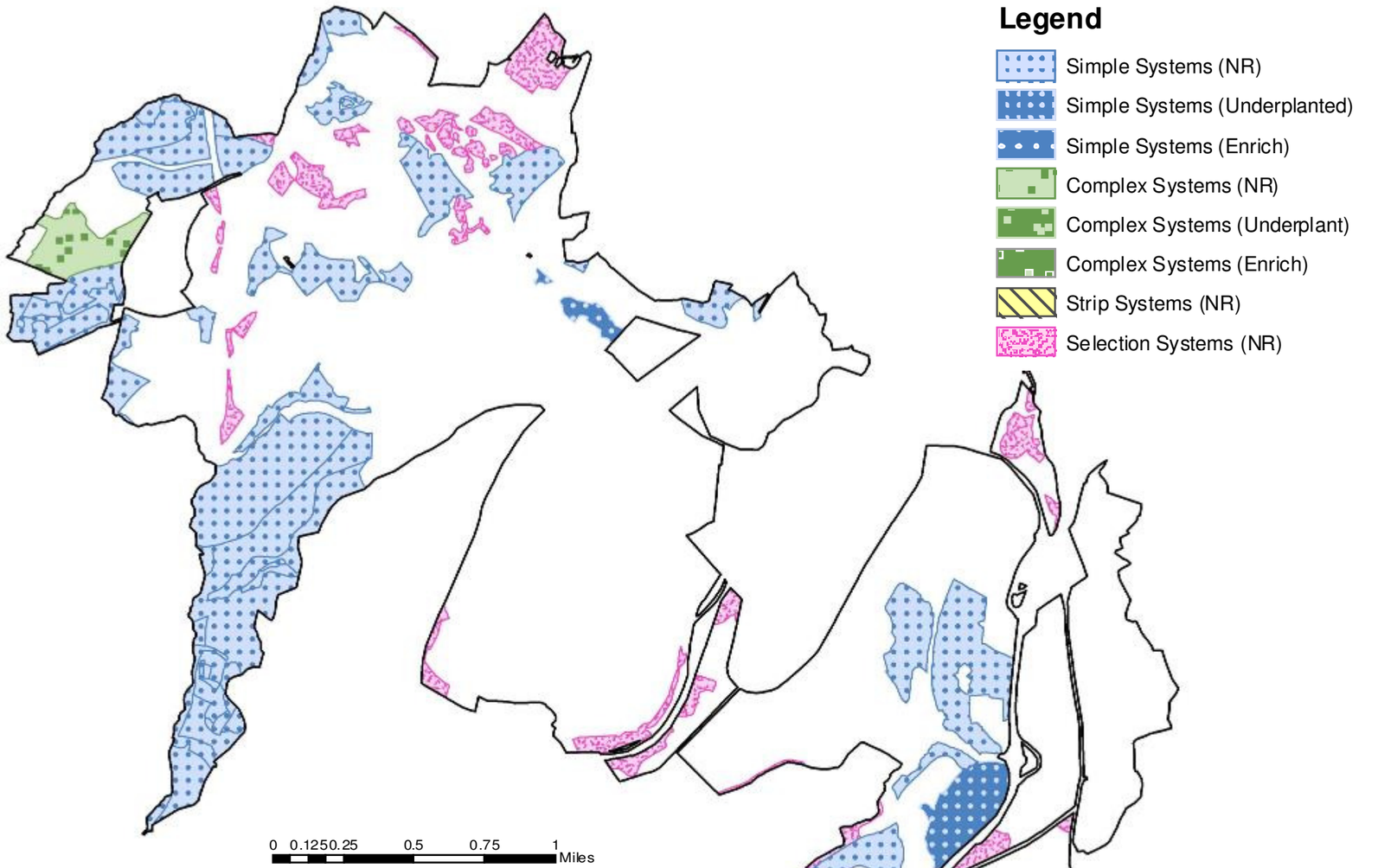
Clearfell | Long Term Retention | Shelterwoods | Selections | Open | Minimum Intervention | Class A/B Roads | Class C Roads









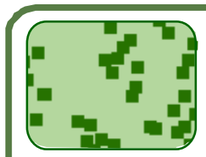



# Continuous Cover Forestry

The Haldon Plan area has some limited sites suitable for CCF management. The poor soils, high wind speeds and exposure mean that site conditions limit the potential for CCF management.

The fact that a national significant population of nightjar is found in many parts of the Plan area, means that a strong clearfell / restock programme is still required to maintain and support this population through transient open habitat creation. There is no net increase in areas managed through CCF proposed in this Plan.

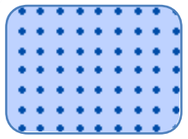
The use of CCF as a management prescription will continue to be utilised, and enhanced where feasible, so as to develop a more economically and ecologically resilient set of forests.



**Complex (or Group) Systems —** are mainly used occasionally as a alternative to the simple system application. The complex system requires stands to be more windfirm given the exposure group fellings will inflict. Soils must be deep and established crops thinned to CCF regimes whereby crown and root development is established. Through the felling of small groups and clusters of trees at multiple interventions the complex structure is initiated.

The phased felling of groups, and resultant regeneration over a prolonged period will ensure that a complex system of storeys is established over time. Groups may be distributed randomly or evenly across the coupe and multiple interventions can look to extend the size of the gap.

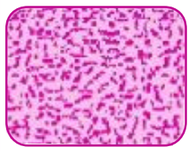
Restocking will predominantly be through natural regeneration (NR) unless where specified. Underplanting will occur on sites unlikely to achieve any suitable natural regeneration establishment and enrichment planting will be used to aid and diversify the understorey.



**Simple (or Uniform) Systems —** are prescribed on PAWS sites and on secondary woodland conifer crops which are more exposed and have either been thinned to CCF prescriptions or on young crops which can be converted to CCF over time through thinning. Whilst they have the crown and root development to be wind stable, potential rooting depth means that these crops can not withstand group felling.

The aim is to establish an evenly spread understorey before removing the overstorey in one or two interventions, whilst the understorey is established but still robust enough to endure operations. If the understorey is not >2m felling approval is required.

Restocking will predominantly be through natural regeneration (NR) unless where specified. Underplanting will occur on sites unlikely to achieve any suitable natural regeneration establishment and enrichment planting will be used to aid and diversify the understorey using shade tolerant species.



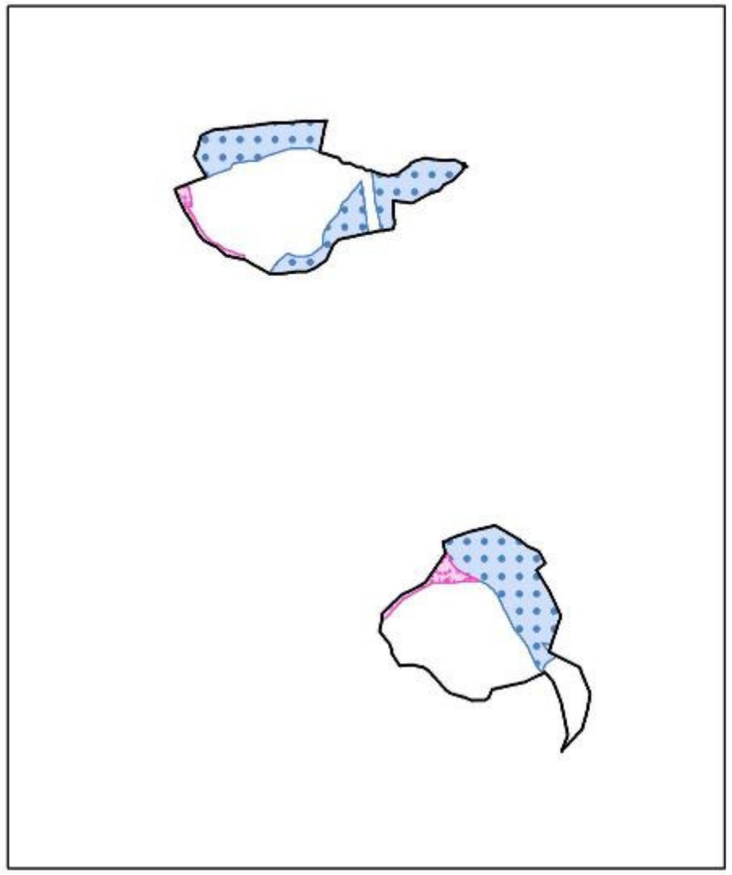
**Selection Systems —** are used on windfirm, crops to proactively maintain the woodland structure and composition Single tree selections are used on established edge crops with an established understorey where the overstorey is intended to be retained.

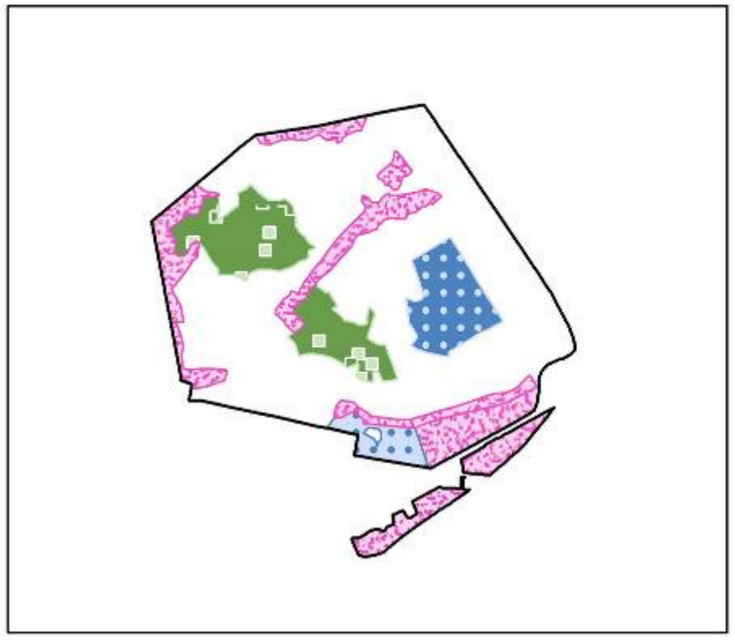
**Strip Systems -** are employed sparingly on Scots pine crops. They will be worked north to south and east to west to ensure that felling occurs on the leeward edge. These fellings will be restocked through natural regeneration of surrounding seeding pine crops. Where more than the recognised seed broadcasting distance is felled wind stable blocks will be retained as a seed source.

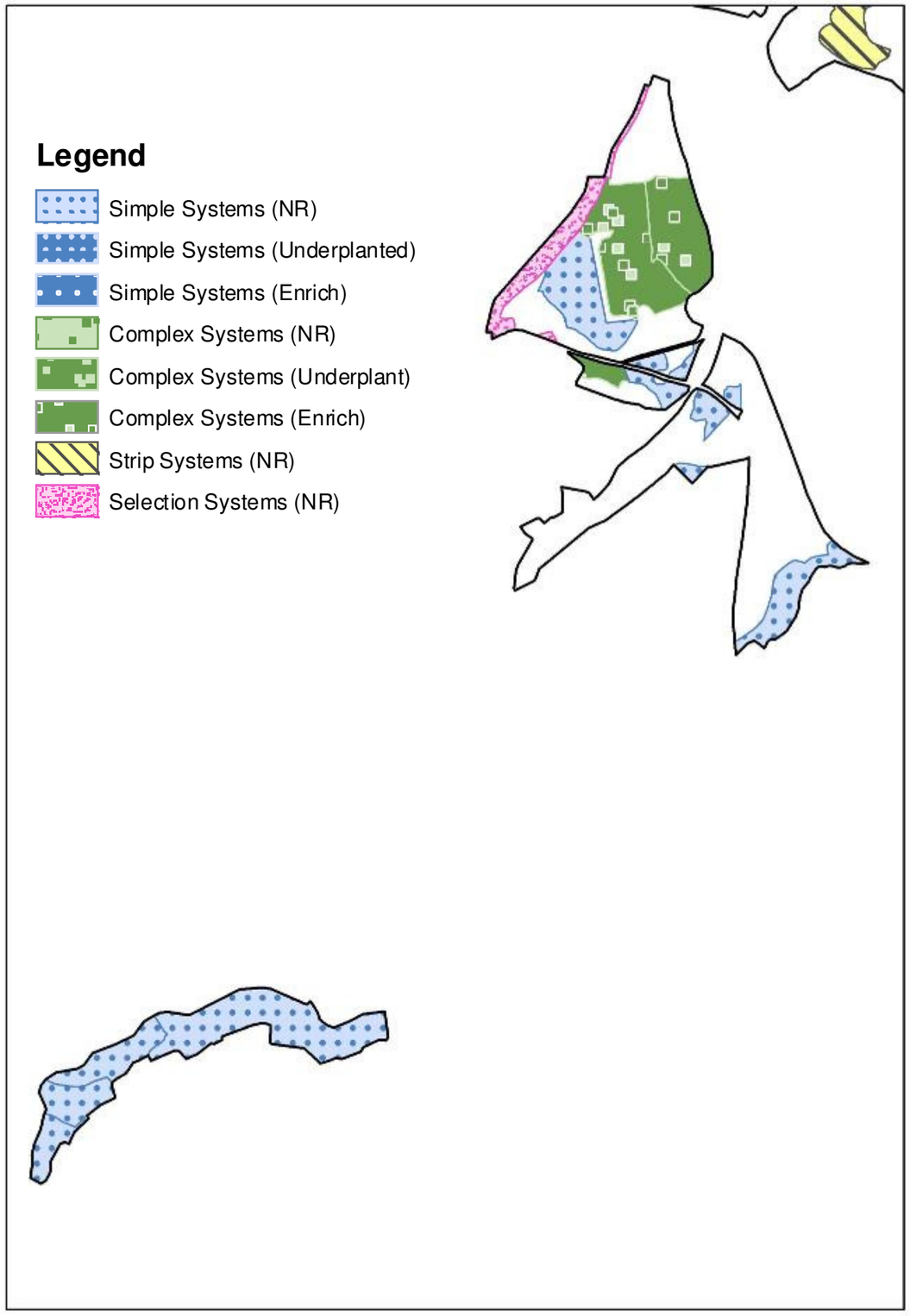
0 0.125 0.25 0.5 0.75 1 Miles

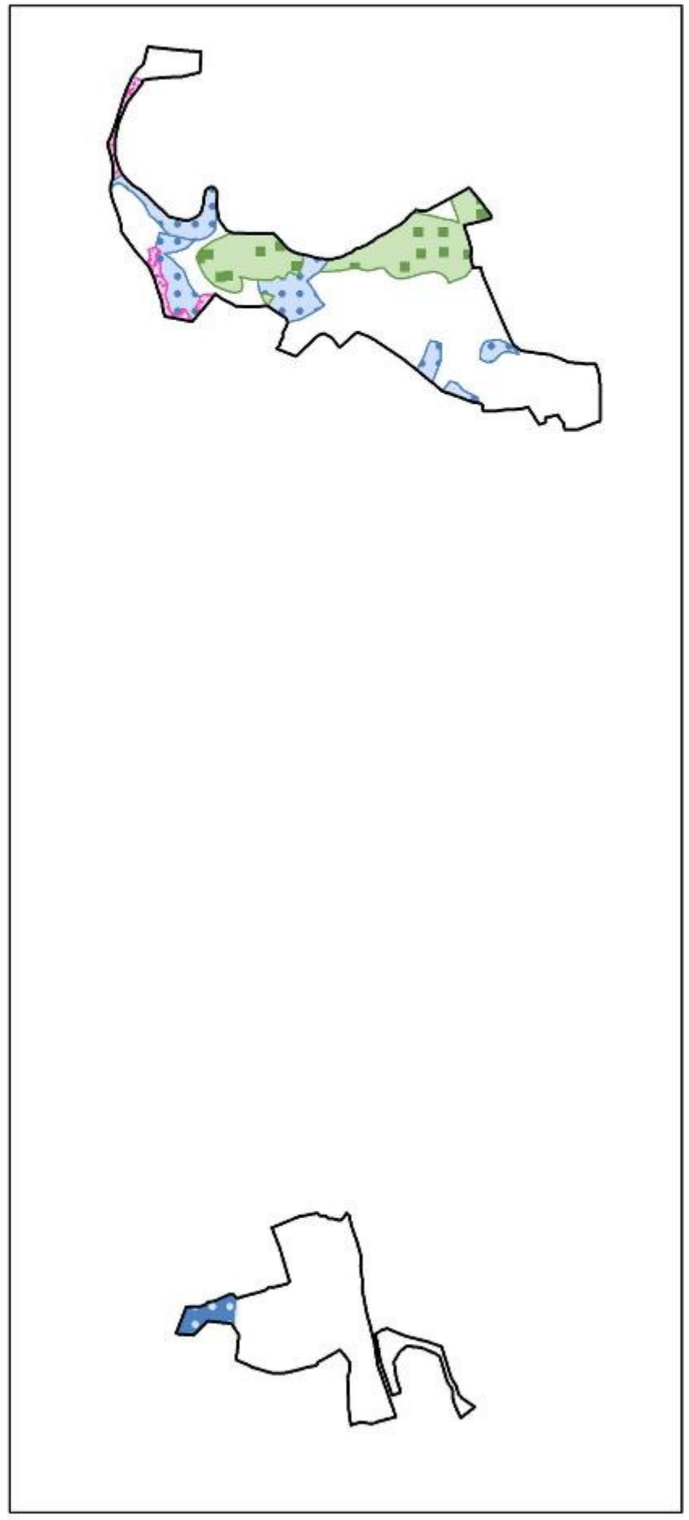


# Continuous Cover Forestry

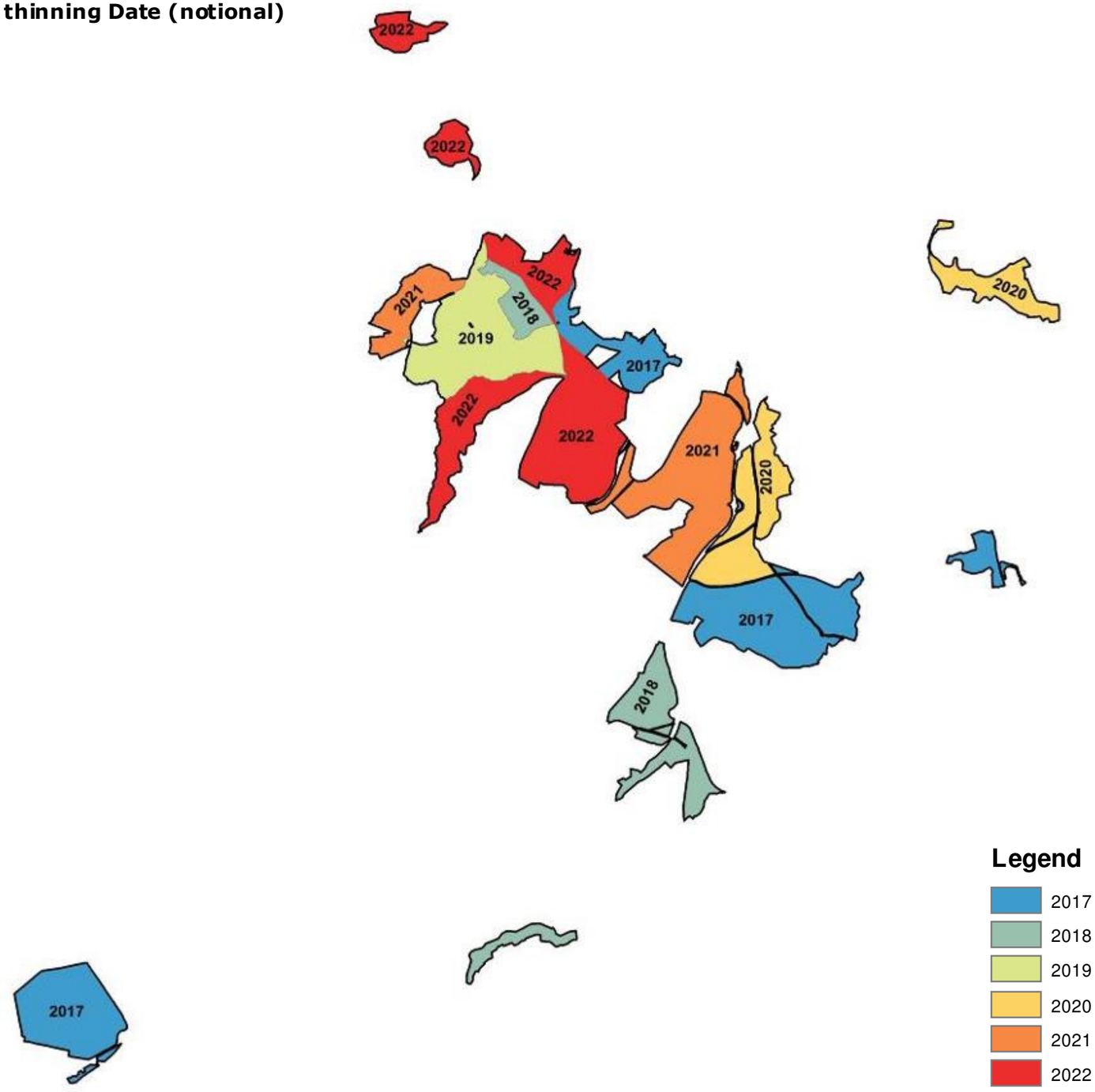






**Next thinning Date (notional)**




0 0.1250.25 0.5 0.75 1 Miles



# Thinning

There is a presumption towards thinning in all stands and that these stands will be thinned as early as possible (circa 16-18 years). Areas are assessed for thinning every 5 years with the removal of larch species a key objective, due to its susceptibility to *Phytophthora ramorum*. Other factors such as the quantity, condition, age and distribution of any broadleaf content, will also help decide if an area of conifer is to be thinned or not, with light levels, existing ground vegetation and any evidence of natural regeneration also impacting on how many trees are marked for removal.

Broadleaf high forest will be assessed for thinning every 10 years with a visual inspection of the stand. Thinning will allow sub-dominant broadleaves sufficient light and space to mature or will release existing advanced regeneration.

## SSSI — Thinning

The intensity and nature of thinning within the SSSI will be determined by the remnant flora condition and management objective.

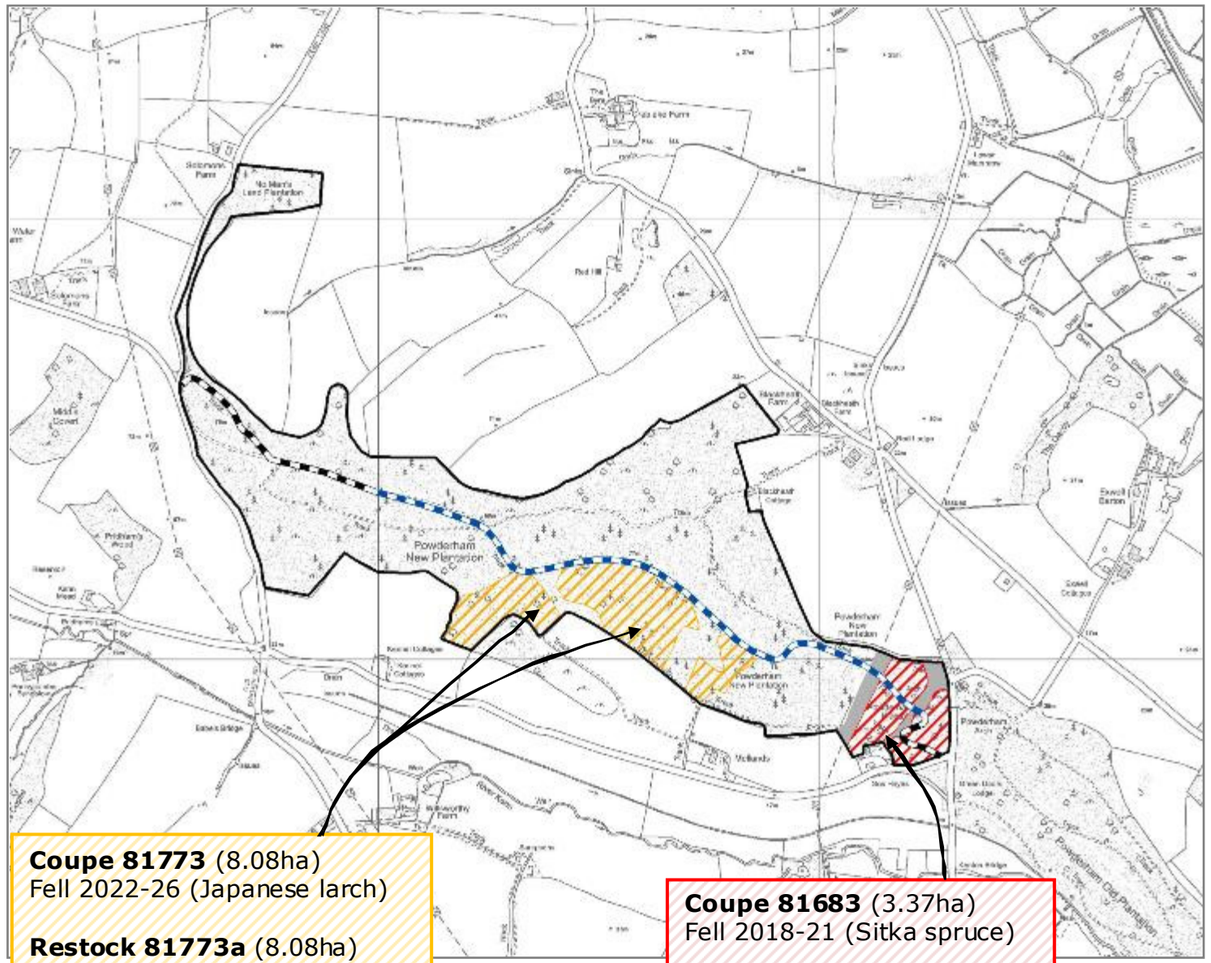
Areas for heathland restoration

Whilst production will remain key in these areas, the creation of heathland ecotones is the main thinning objective. These will be thinned more heavily, where stability allows, with focus on creating a more patchy open structure before overstorey removal. Rides and roads will be opened up with crop edges experiencing the most thinning to create a graded edge. Pine crops will be thinned with the intention of creating stable retentions which can form habitat and the necessary microclimate for a number heathland associated species. This prescription is in line with FC Open Habitats Policy, 2010.

Areas for continued forest production

These areas are recognised for their value to raptors which use the coniferous woodland habitat. These areas will be thinned more conventionally, with the intention of ensuring a substantial the lifecycle and provision of well thinned crops which provide ample raptor nesting sites. Areas closer to watercourses may be thinned more intensively to create wider spaced large conifers to provide habitat for hobby. Areas prescribed as retentions will be crown thinned more heavily in early

# Felling and Restocking 2018 - 2028
## Powderham




**Coupe 81773** (8.08ha)
Fell 2022-26 (Japanese larch)

**Restock 81773a** (8.08ha)
60% Evergreen conifer
40% Broadleaf

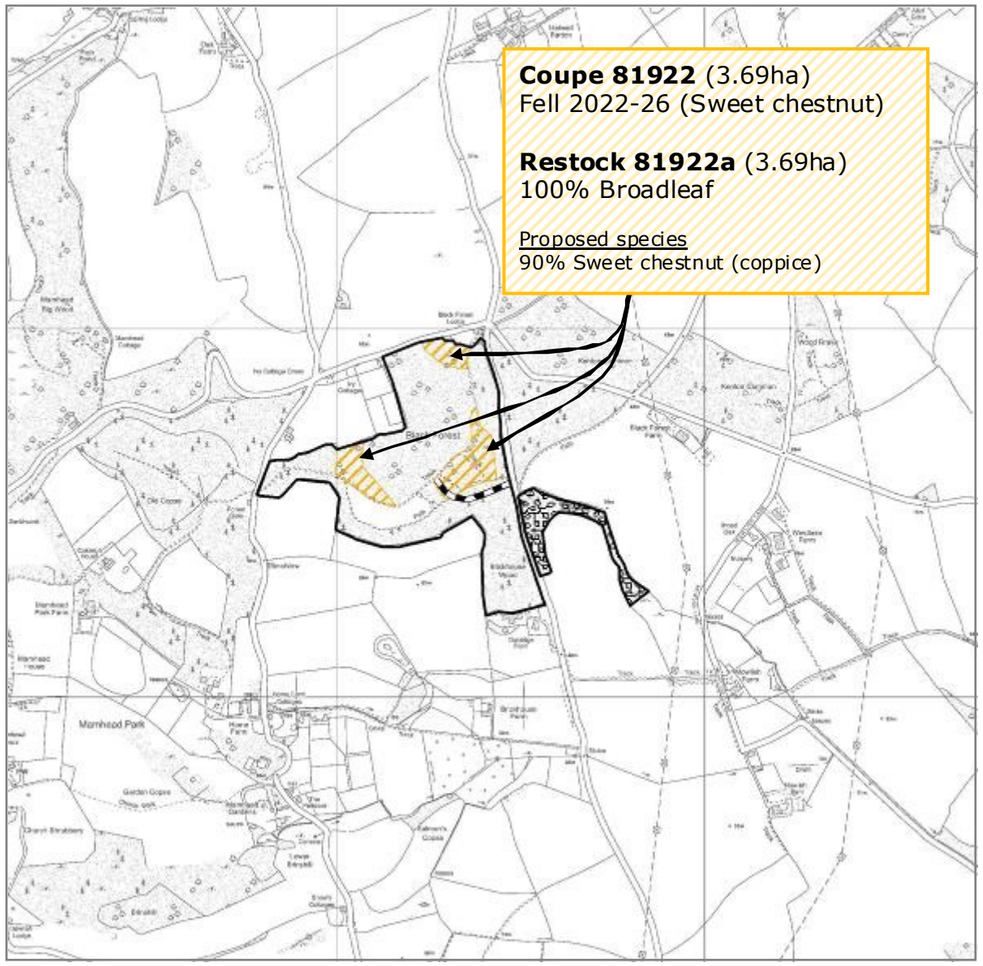
Proposed species
50% Douglas fir (planted)
25% Coast redwood (planted)
15% Black walnut (planted)

**Coupe 81683** (3.37ha)
Fell 2018-21 (Sitka spruce)

**Restock 81683a** (3.37ha)
100% Evergreen conifer

Proposed species
90% Douglas fir
10% Red oak NR

# Felling and Restocking 2018 - 2028
## Black Forest




**Coupe 81922** (3.69ha)
Fell 2022-26 (Sweet chestnut)

**Restock 81922a** (3.69ha)
100% Broadleaf

Proposed species
90% Sweet chestnut (coppice)

- Fell 2018 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2028
- Retentions
- Minimum Intervention
- Natural Reserve
- Open



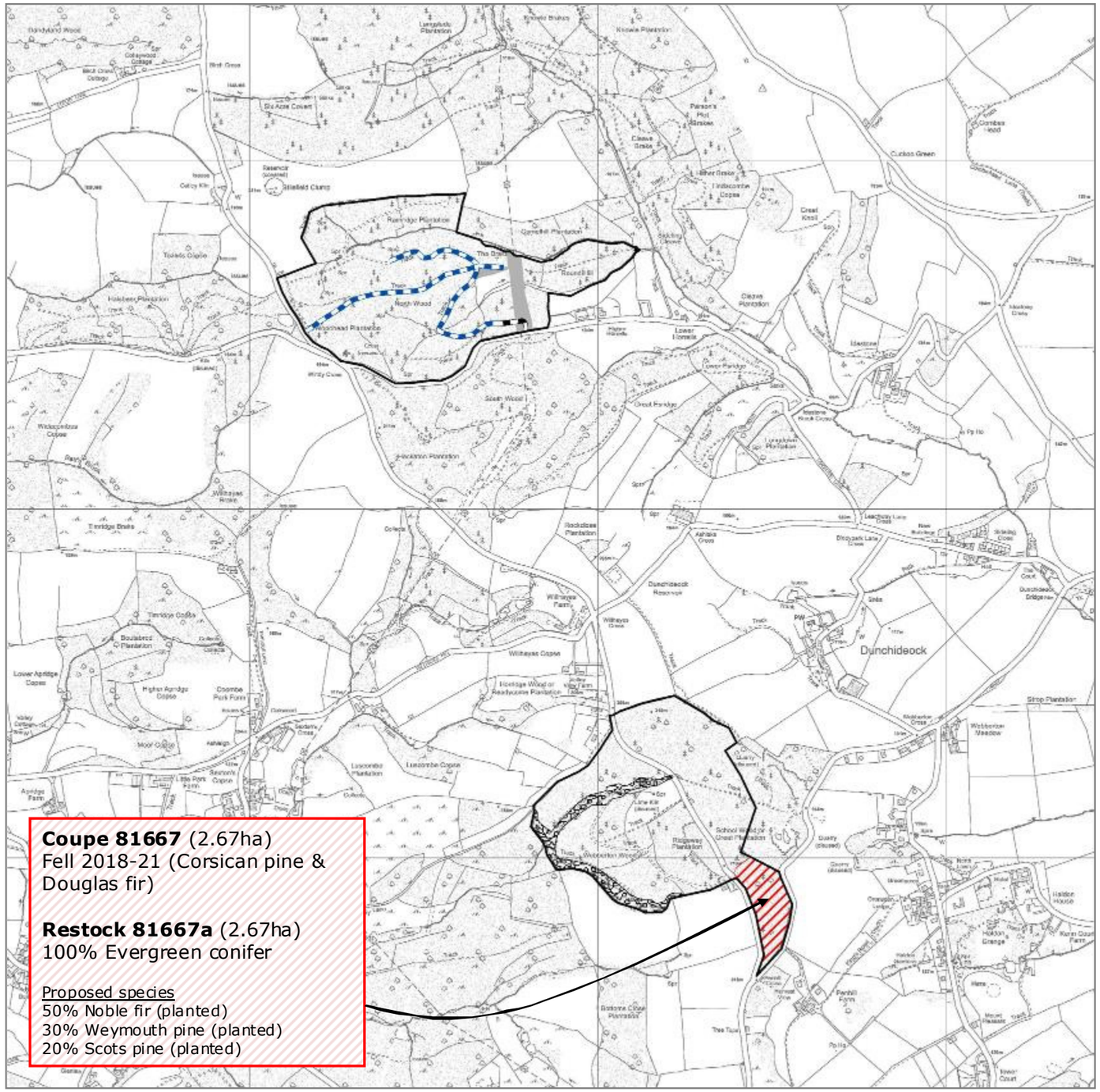
0 0.050.1 0.2 0.3 0.4 Miles

**Declaration by FC as an Operator.**

**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)**

# Felling and Restocking 2018 - 2028

## North Wood & Webberton




- Fell 2018 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2028
- Retentions
- Minimum Intervention
- Natural Reserve
- Open



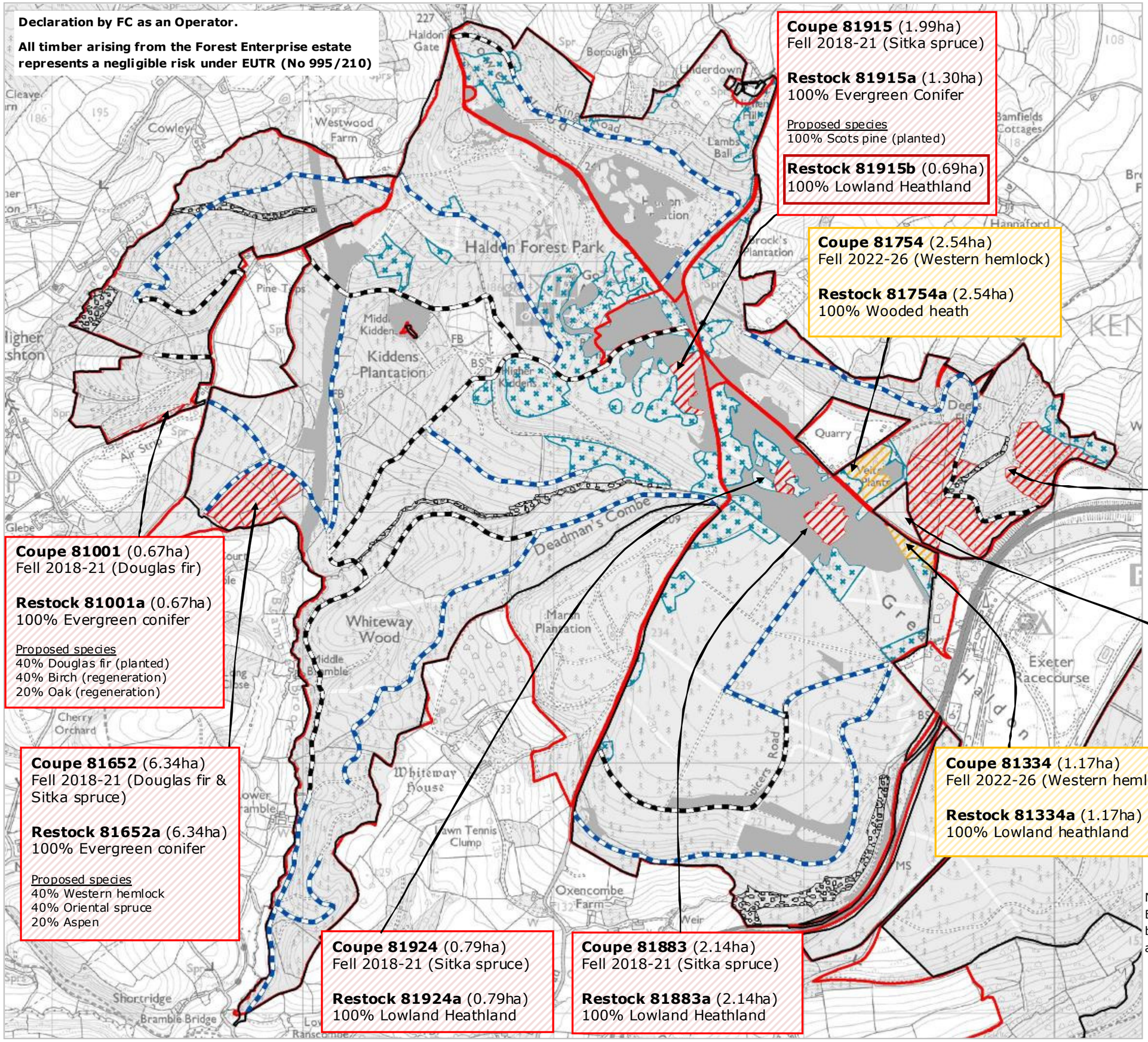
0 0.050.1 0.2 0.3 0.4 Miles

**Declaration by FC as an Operator.**

**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)**

# Felling and Restocking 2018 - 2028

## Main Block — North

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**Coupe 81915** (1.99ha)
Fell 2018-21 (Sitka spruce)

**Restock 81915a** (1.30ha)
100% Evergreen Conifer

Proposed species
100% Scots pine (planted)

**Restock 81915b** (0.69ha)
100% Lowland Heathland

**Coupe 81754** (2.54ha)
Fell 2022-26 (Western hemlock)

**Restock 81754a** (2.54ha)
100% Wooded heath

**Coupe 81659** (5.57ha)
Fell 2018-21 (Grand fir, Douglas fir)

**Restock 81659a** (5.57ha)
100% Evergreen conifer

Proposed species
50% Coast redwood (planted)
50% Grand fir (planted)

**Coupe 81839** (11.35ha)
Fell 2018-21 (Corsican pine, Douglas fir)

**Restock 81839a** (11.35ha)
100% Evergreen conifer

Proposed species
50% Douglas fir (planted)
50% Sitka spruce (planted)

**Coupe 81001** (0.67ha)
Fell 2018-21 (Douglas fir)

**Restock 81001a** (0.67ha)
100% Evergreen conifer

Proposed species
40% Douglas fir (planted)
40% Birch (regeneration)
20% Oak (regeneration)

**Coupe 81652** (6.34ha)
Fell 2018-21 (Douglas fir & Sitka spruce)

**Restock 81652a** (6.34ha)
100% Evergreen conifer

Proposed species
40% Western hemlock
40% Oriental spruce
20% Aspen

**Coupe 81334** (1.17ha)
Fell 2022-26 (Western hemlock)

**Restock 81334a** (1.17ha)
100% Lowland heathland

**Coupe 81924** (0.79ha)
Fell 2018-21 (Sitka spruce)

**Restock 81924a** (0.79ha)
100% Lowland Heathland

**Coupe 81883** (2.14ha)
Fell 2018-21 (Sitka spruce)

**Restock 81883a** (2.14ha)
100% Lowland Heathland

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen (Ev.) Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

0 0.050.1 0.2 0.3 0.4 Miles

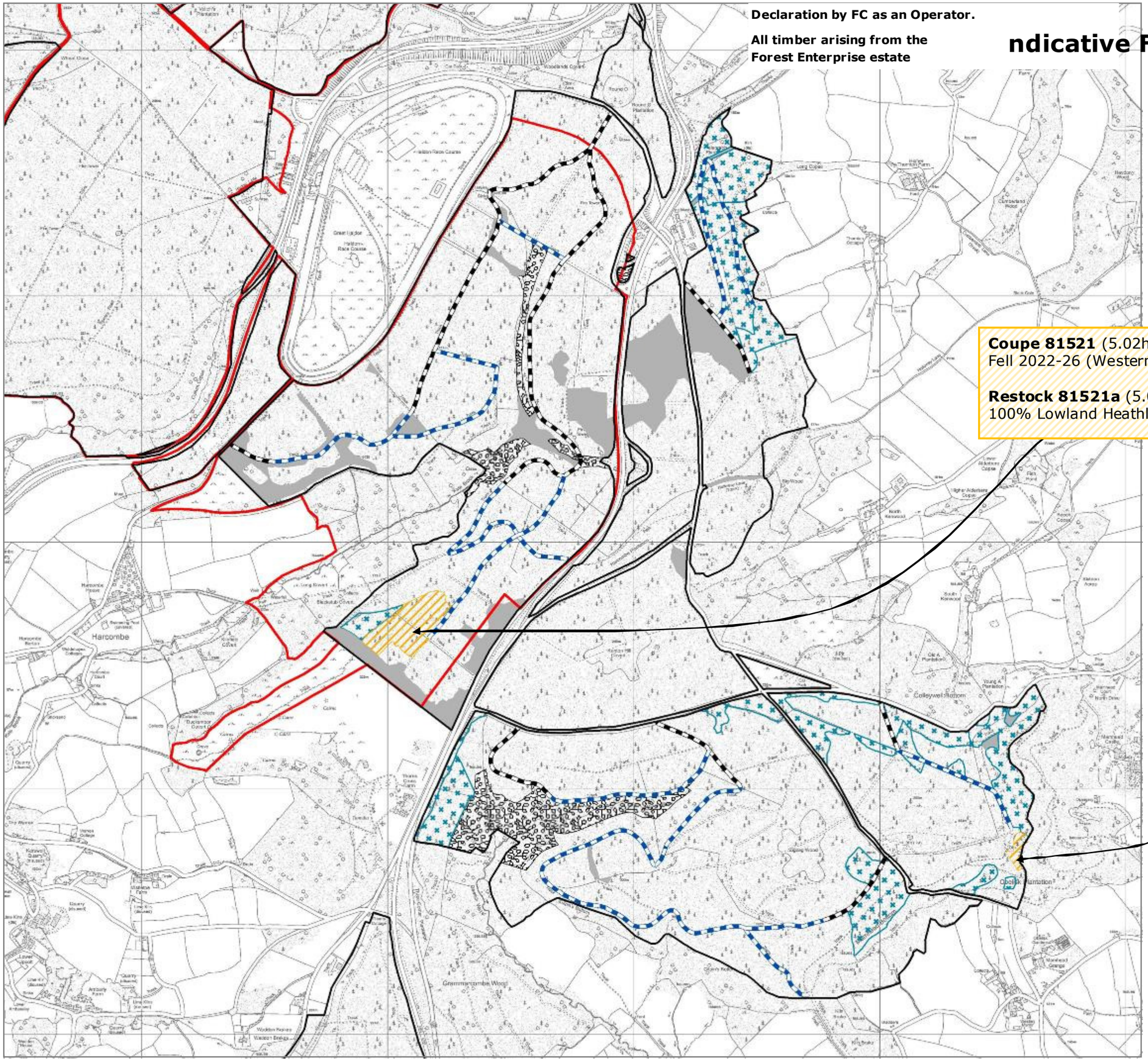
**Declaration by FC as an Operator.**

**All timber arising from the Forest Enterprise estate**

# ndicative Future Species 2028

## Felling and Restocking 2018 - 2028

Main Block — South




**Coupe 81521** (5.02ha)
Fell 2022-26 (Western hemlock)

**Restock 81521a** (5.02ha)
100% Lowland Heathland

**Coupe 81932** (0.64ha)
Fell 2022-26 (Douglas fir)

**Restock 81932a** (0.64ha)
100% Open

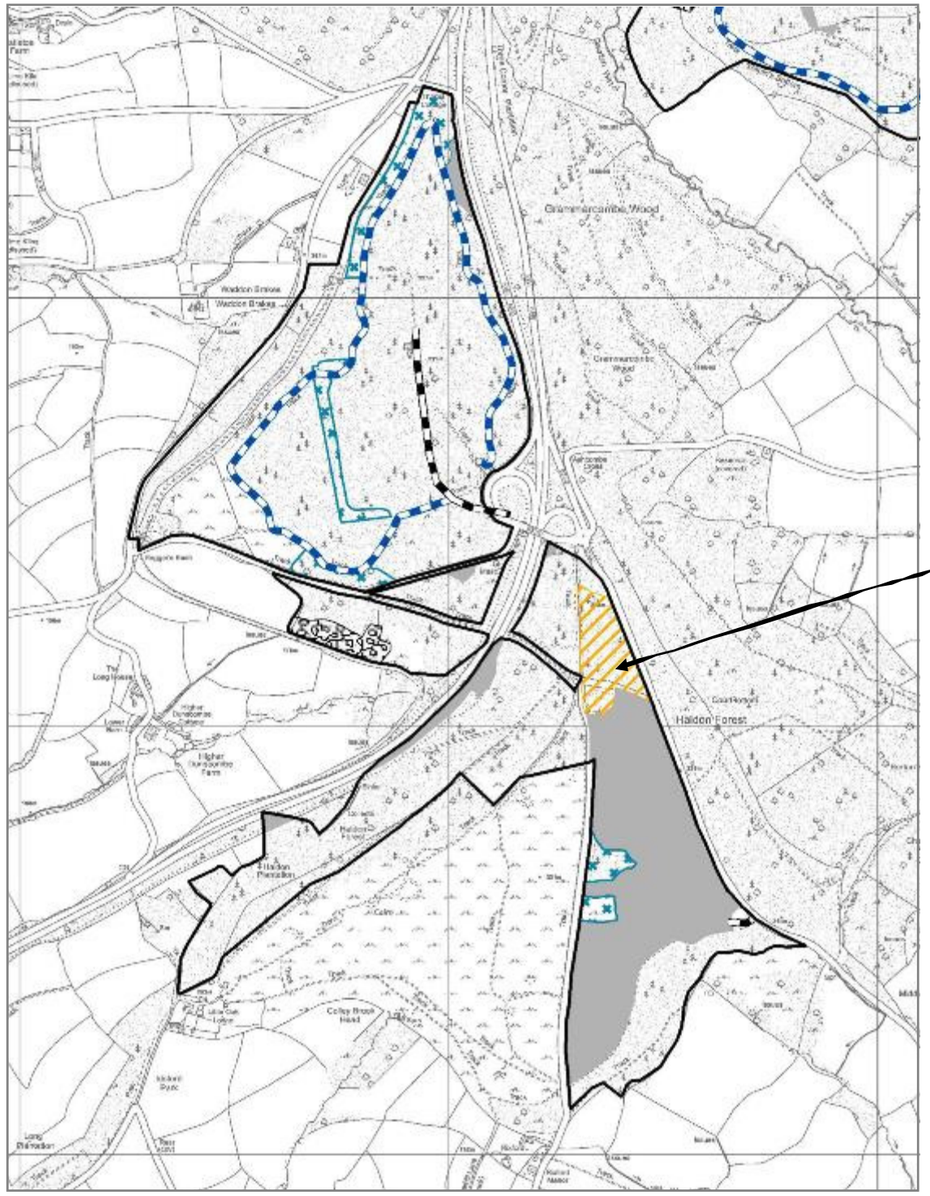
- Fell 2018 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2028
- Retentions
- Minimum Intervention
- Natural Reserve
- Open

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen (Ev.) Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

0 0.050.1 0.2 0.3 0.4 Miles

# Felling and Restocking 2018 - 2028

## Ideford & Waddon Brake




**Coupe 81827** (2.99ha)
Fell 2022-26 (Corsican pine & Western hemlock)

**Restock 81827a** (2.99ha)
100% Wooded Heath

Fell 2018 - 2021
Fell 2022 - 2026
Fell 2027 - 2028
Retentions
Minimum Intervention
Natural Reserve
Open

**Declaration by FC as an Operator.**

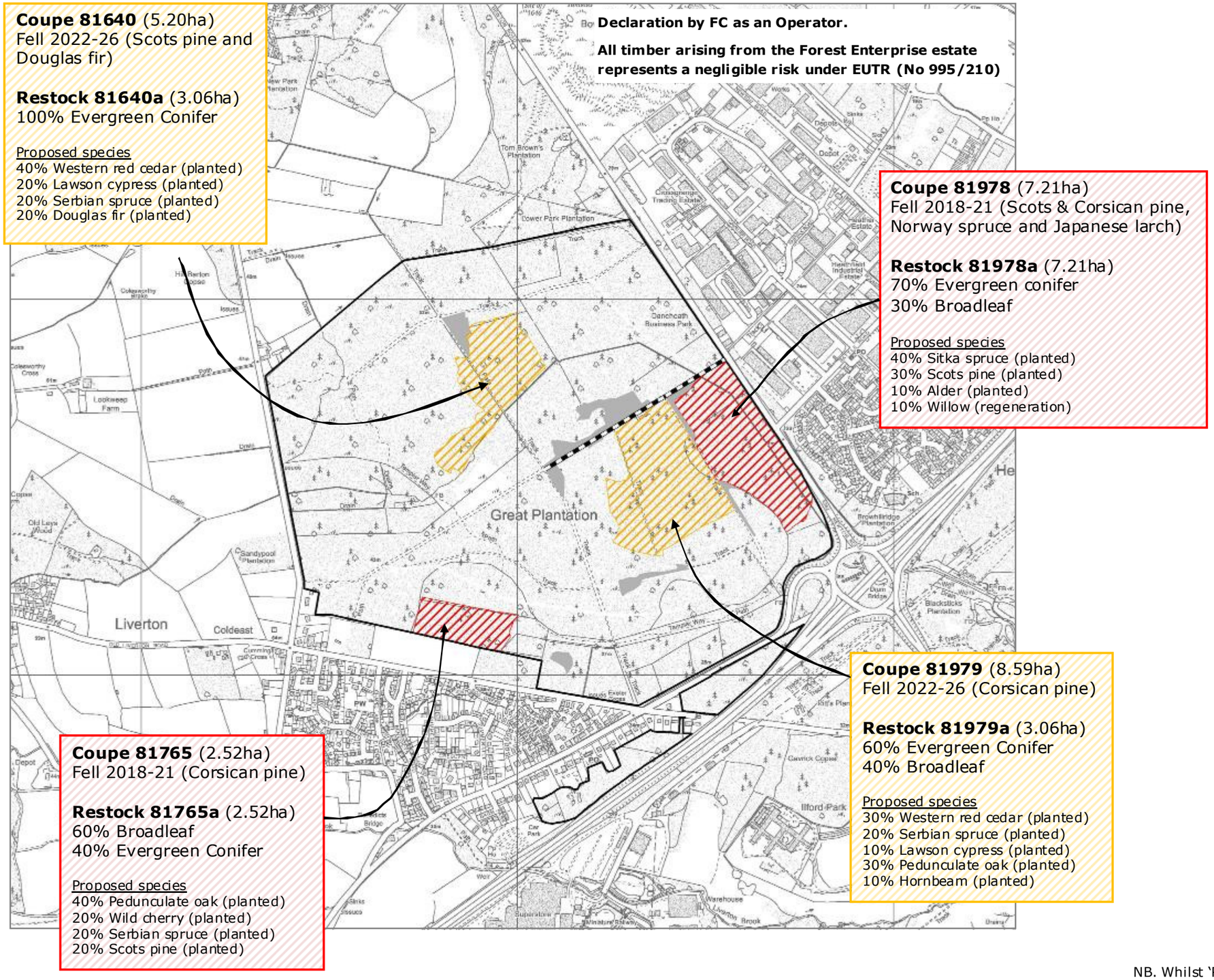
**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)**

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen (Ev.) Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.



0 0.050.1 0.2 0.3 0.4 Miles

# Felling and Restocking 2018 - 2028
## Great Plantation



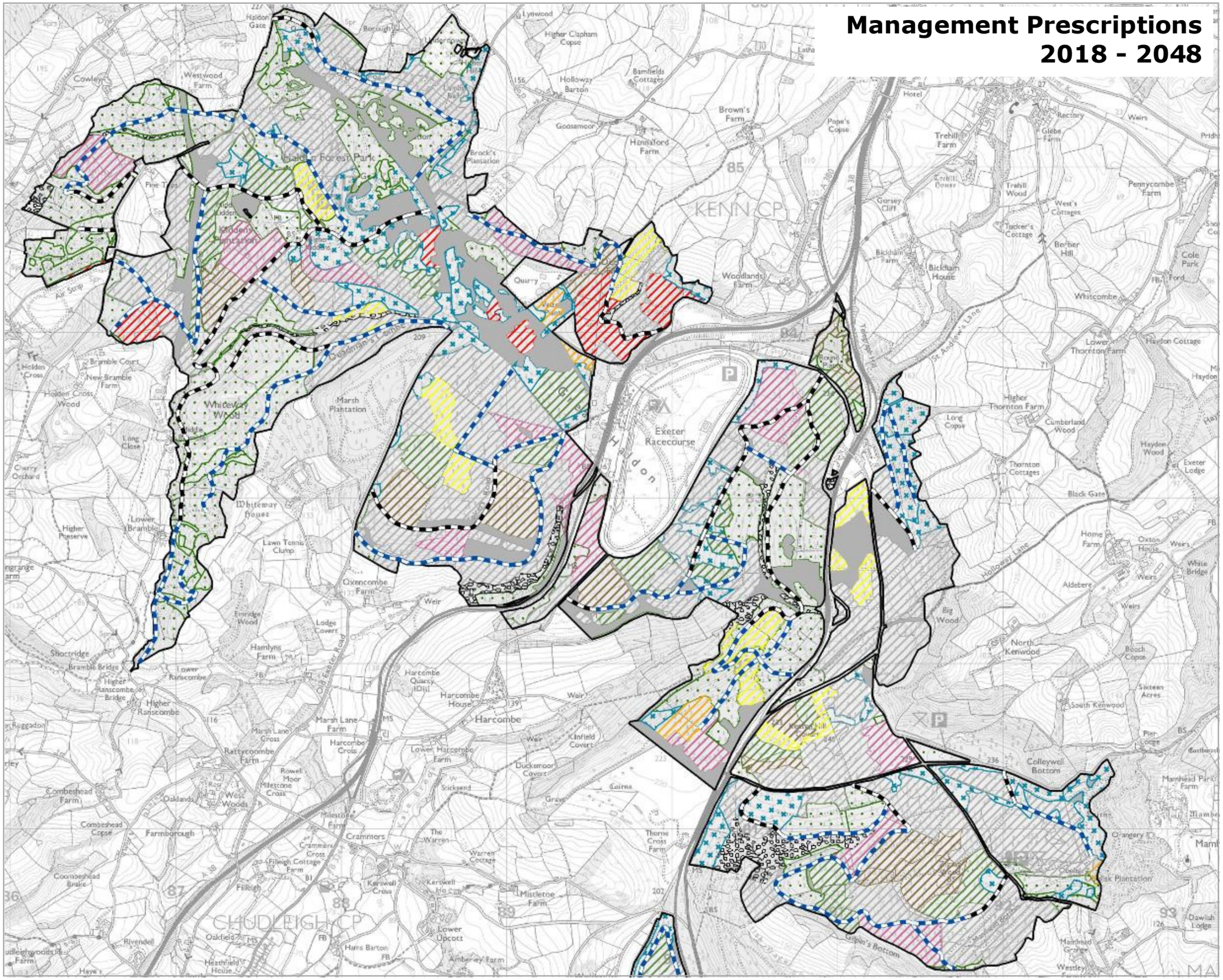

Fell 2018 - 2021
Fell 2022 - 2026
Fell 2027 - 2028
Retentions
Minimum Intervention
Natural Reserve
Open

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen (Ev.) Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.



0 0.050.1 0.2 0.3 0.4 Miles

# Management Prescriptions 2018 - 2048




## Legend

- Continuous Cover Forestry
- Fell 2017 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2031
- Fell 2032 - 2036
- Fell 2037 - 2041
- Fell 2042 - 2046
- Fell post 2046
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Open
- Class A/B Roads
- Class C Roads

0 0.125 0.25 0.5 0.75 1 Miles

**Declaration by FC as an Operator.**

**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)**

**Declaration by FC as an Operator.**

**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)**

0 0.125 0.25 0.5 0.75 1 Miles

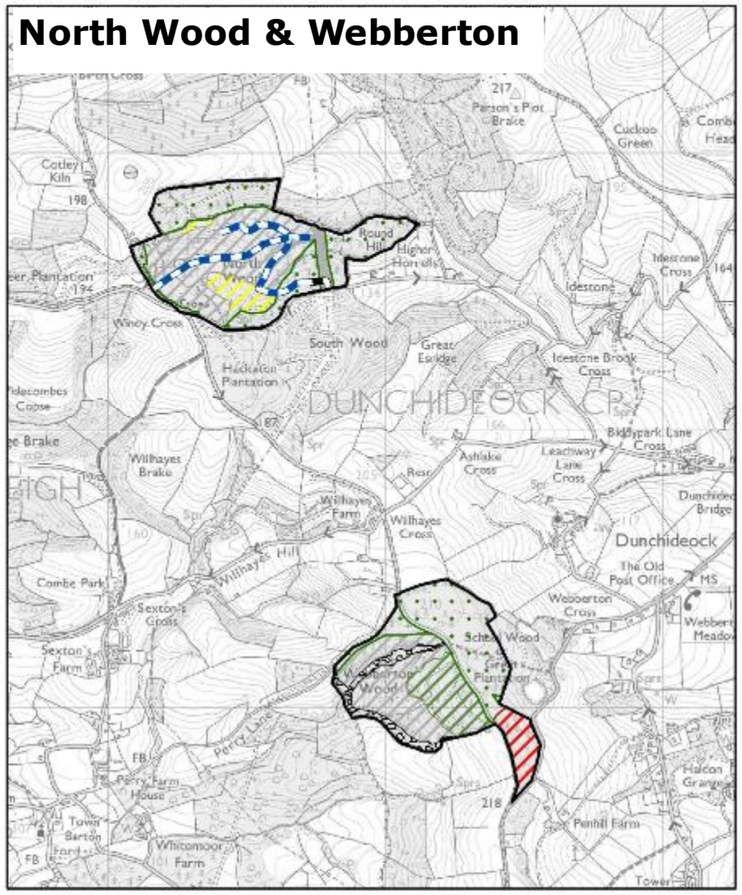
# Management Prescriptions 2018 - 2048

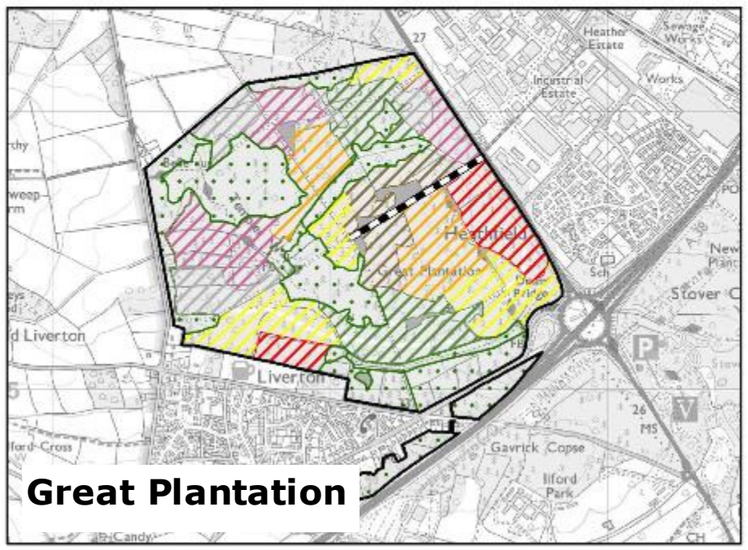


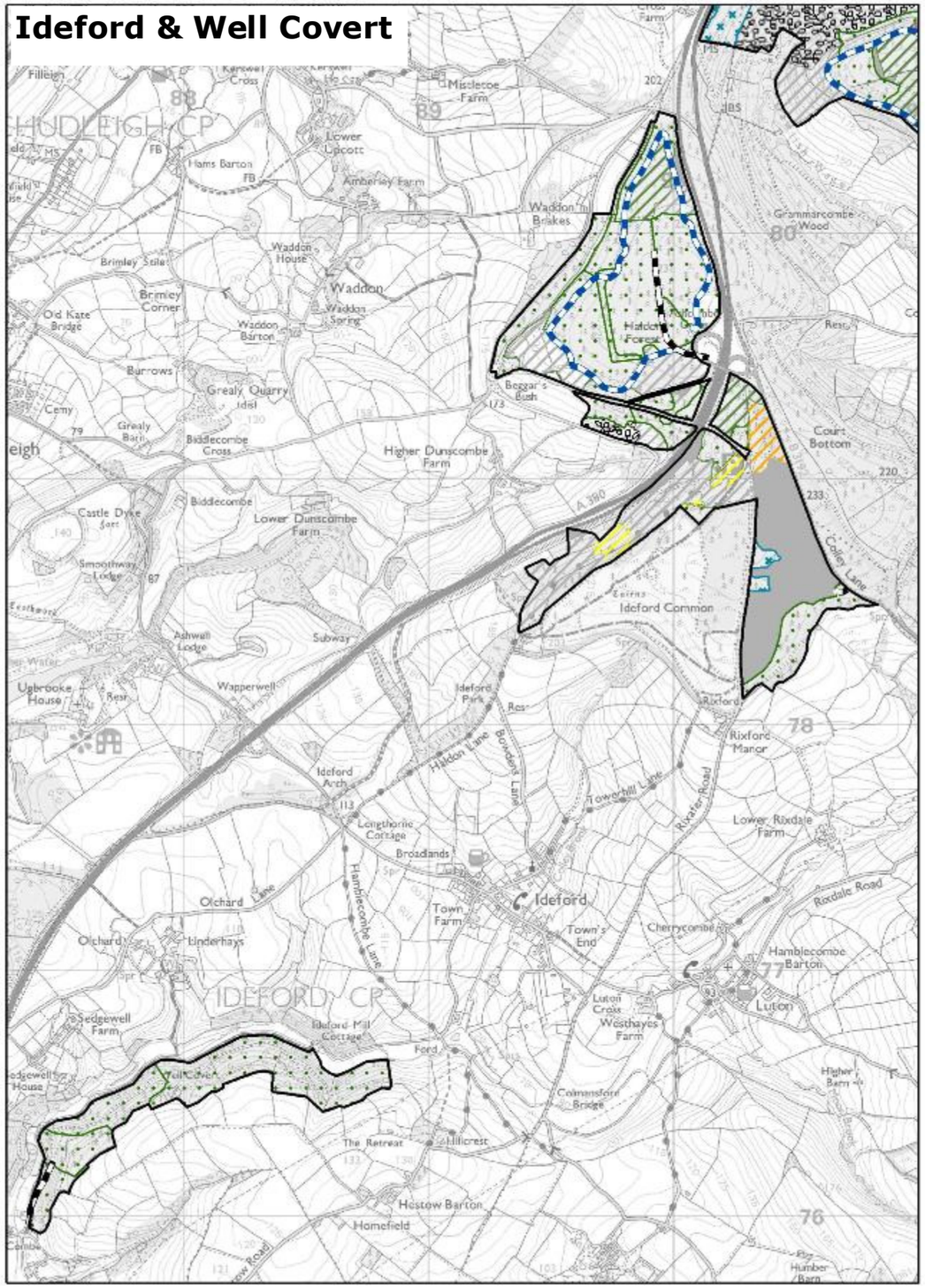
## Legend

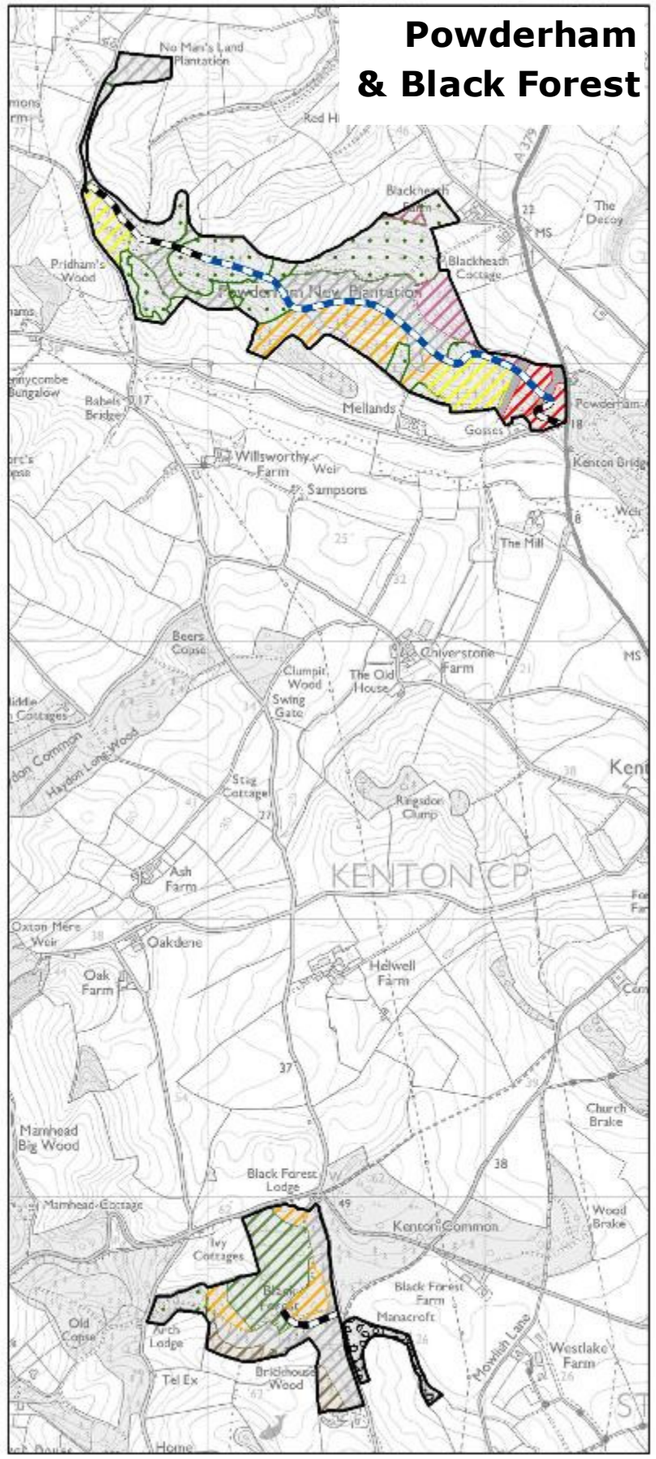
- Class A/B Roads
- Class C Roads
- Continuous Cover Forestry
- Fell 2017 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2031
- Fell 2032 - 2036
- Fell 2037 - 2041
- Fell 2042 - 2046
- Fell post 2046
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Open





# Restock Prescriptions

An outline of the intended restocking prescriptions through planting or natural regeneration for the next rotation, following the removal of the current stock.

## Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other



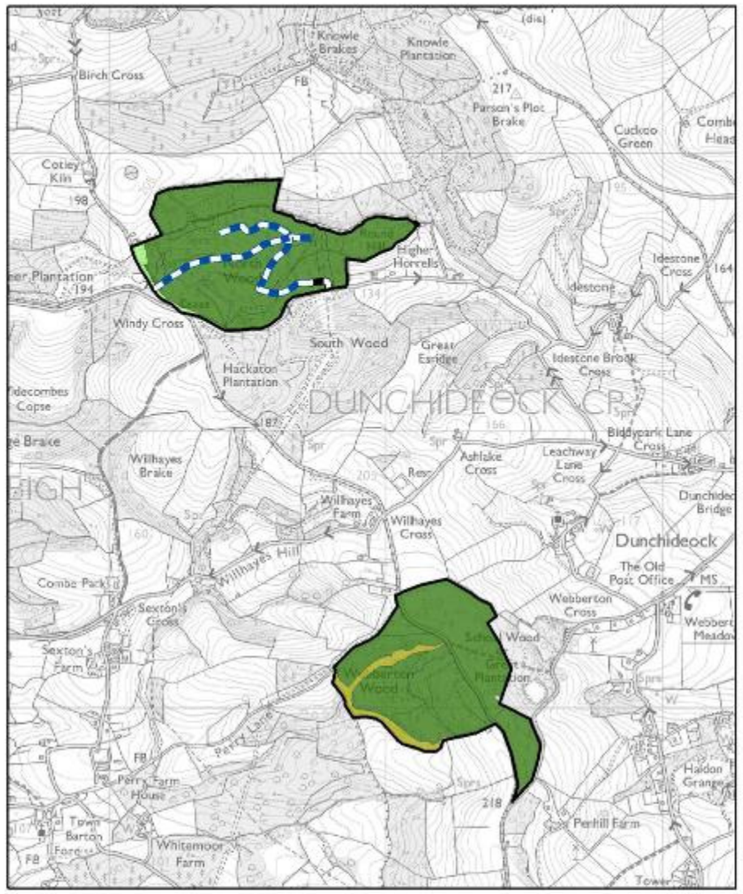
0 0.1250.25 0.5 0.75 1 Miles

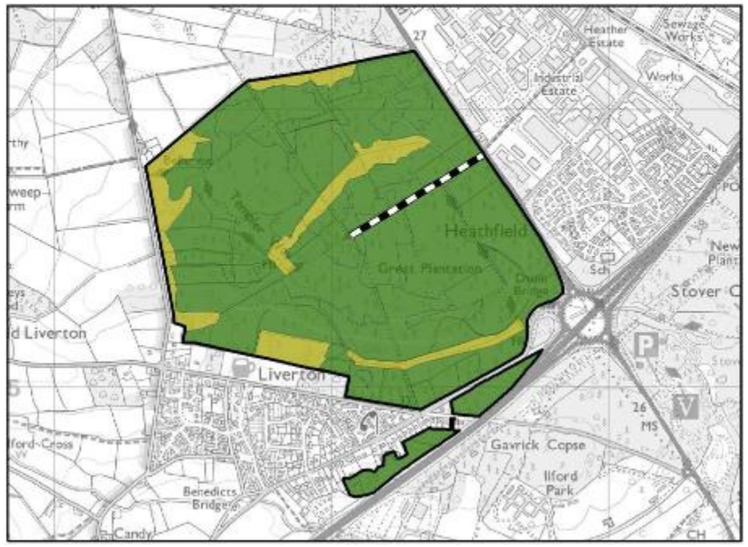
# Restock Prescriptions

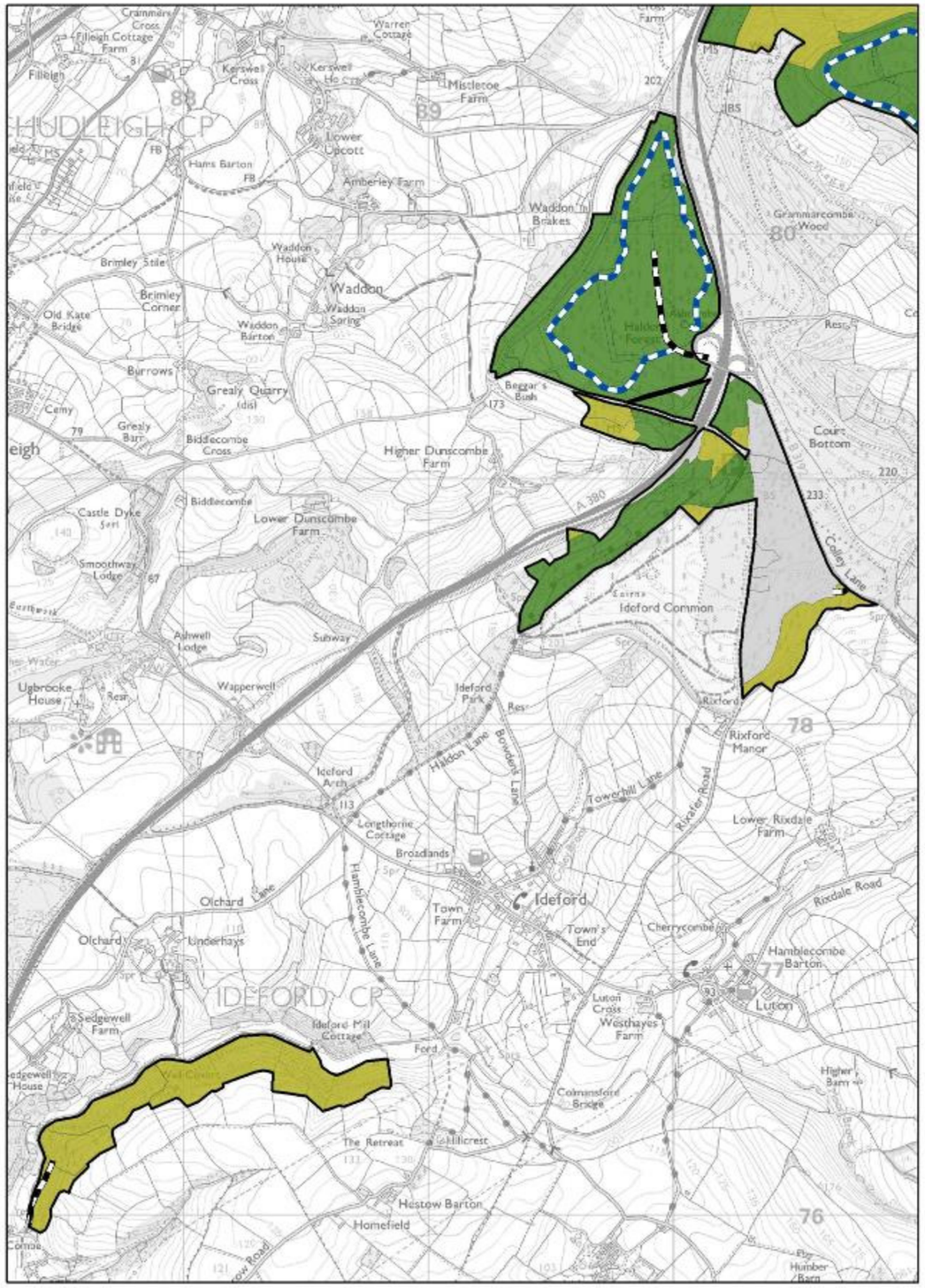
## Legend

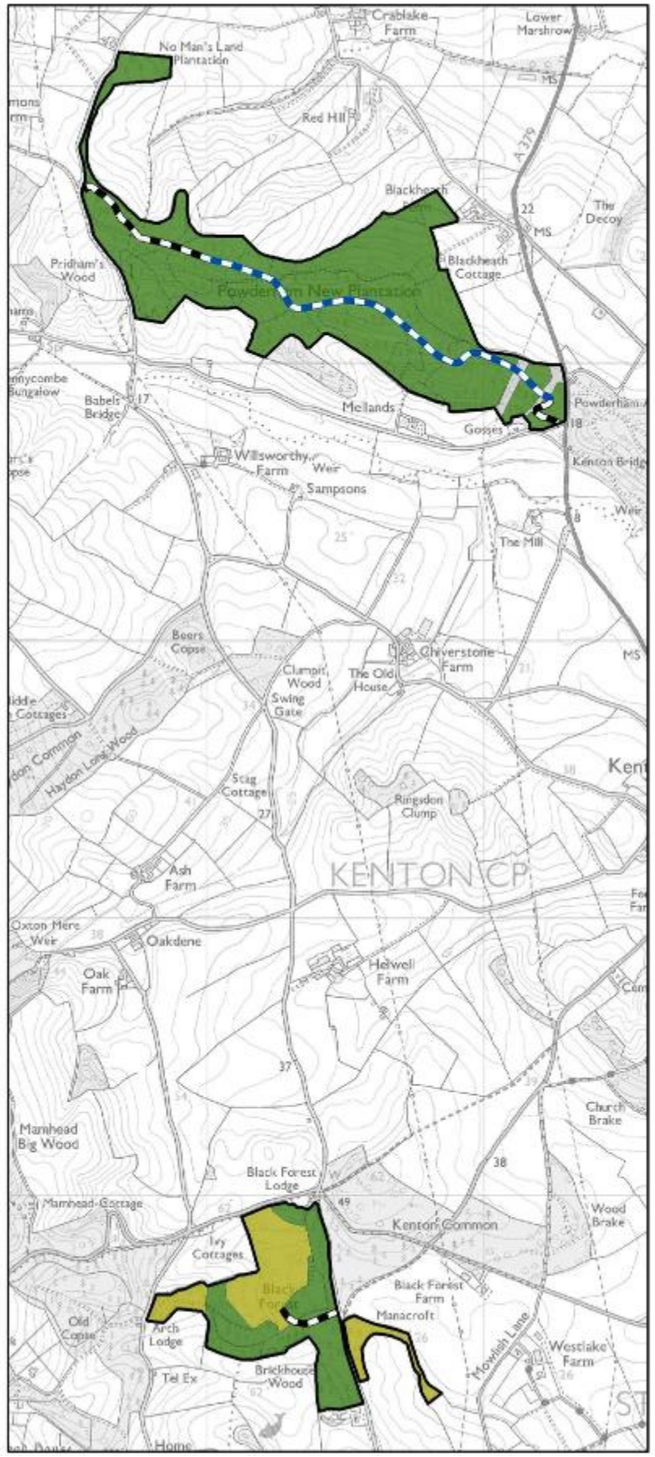
Evergreen Conifer | Deciduous Conifer | Native & naturalized broadleaves | Non-native broadleaves | Open/other

0 0.125 0.25 0.5 0.75 1 Miles



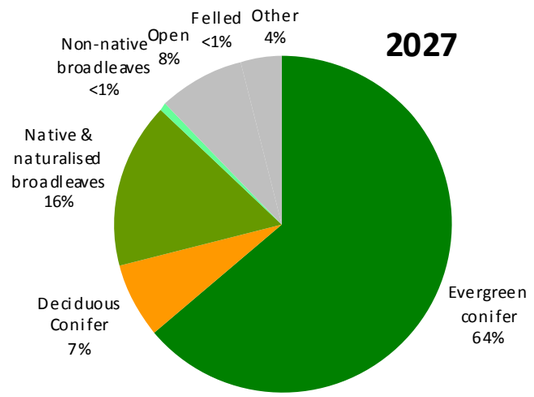



# Indicative Future Species 2028

The projections made are indicative of species composition in ten years time. They do not constitute a guarantee and merely act as an indicator of how the vision for the Plan area will be delivered over time.

In reality, greater larch removal is anticipated and a greater proportion of open habitat delivered, due to *Phytophthora ramorum* and dynamic internal space fluxes.




## Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other



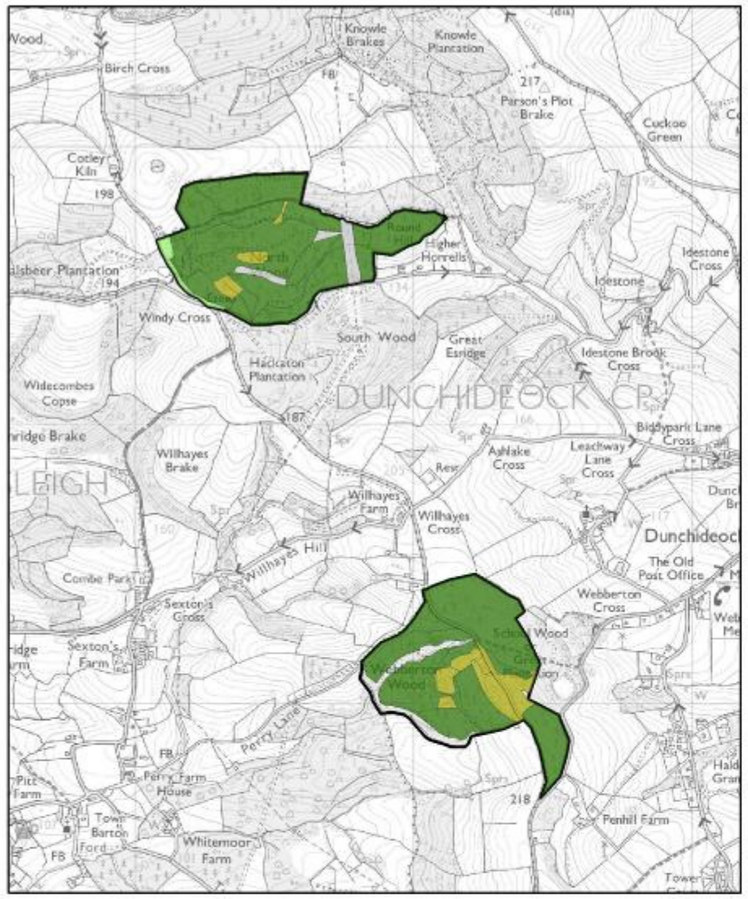
0 0.125 0.25 0.5 0.75 1 Miles

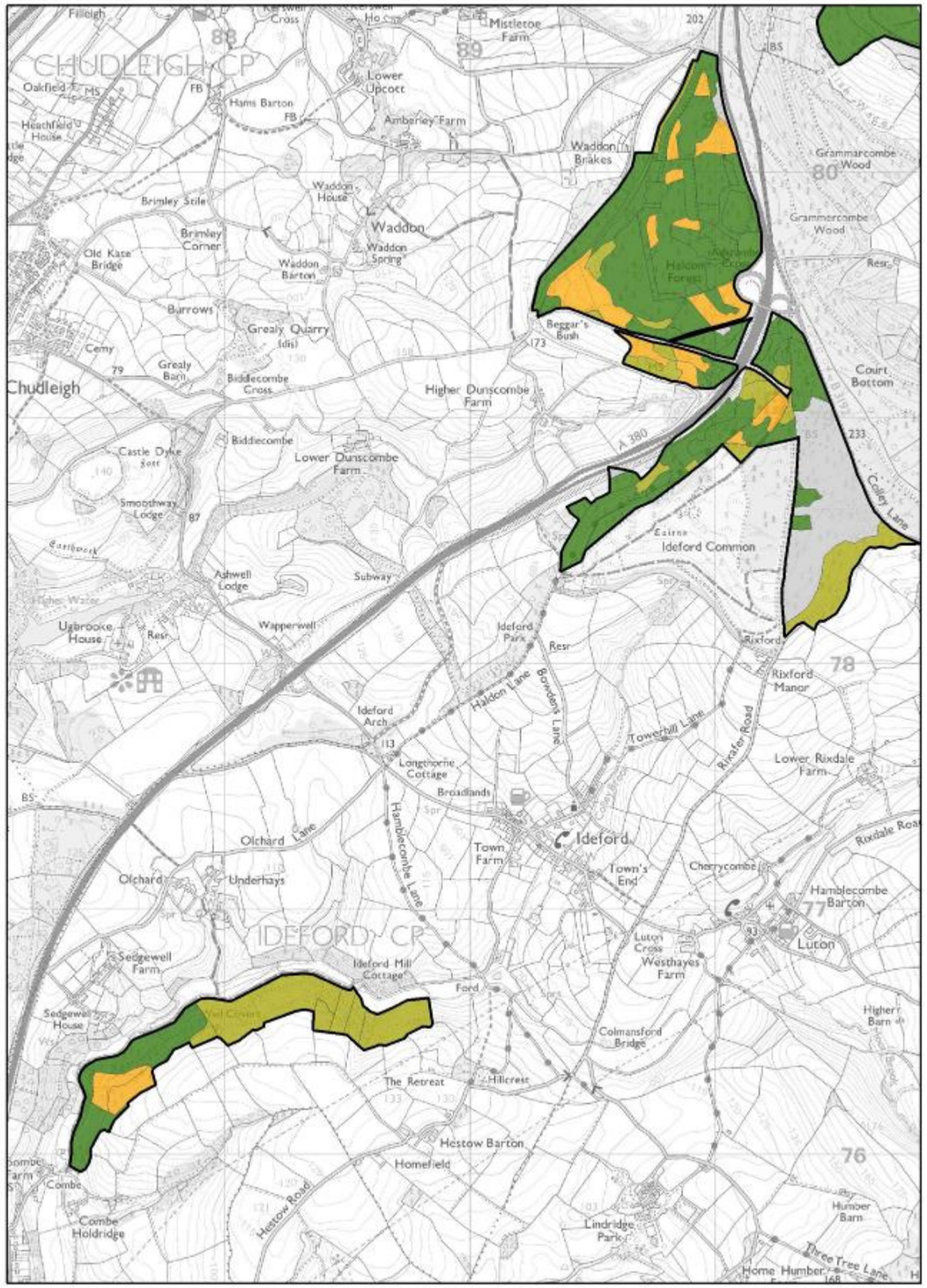
# Indicative Future Species 2028

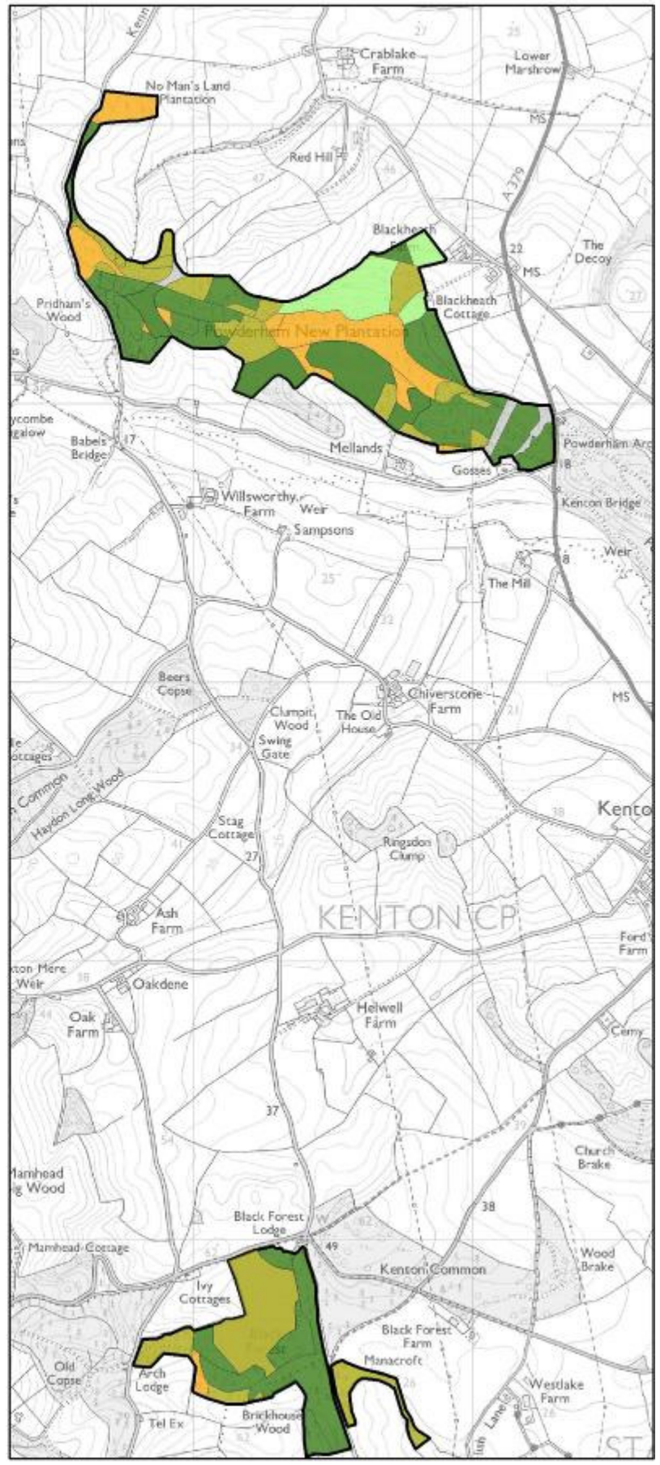
## Legend

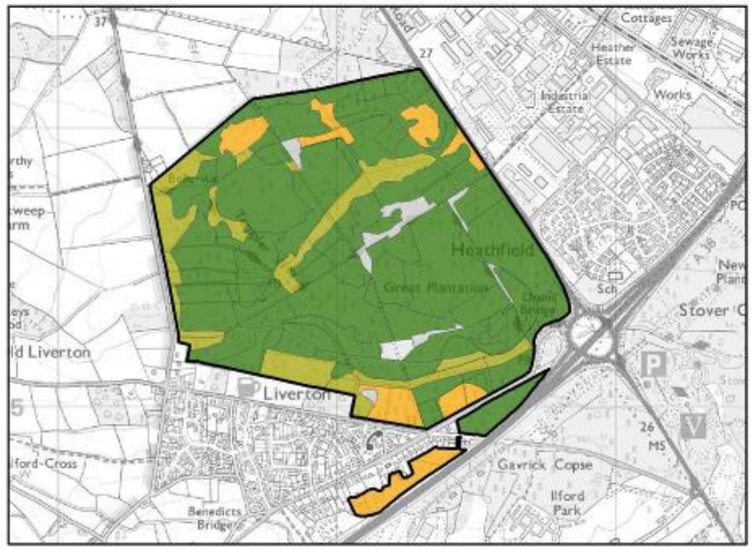
Evergreen Conifer | Deciduous Conifer | Native & naturalized broadleaves | Non-native broadleaves | Open/other

0 0.125 0.25 0.5 0.75 1 Miles



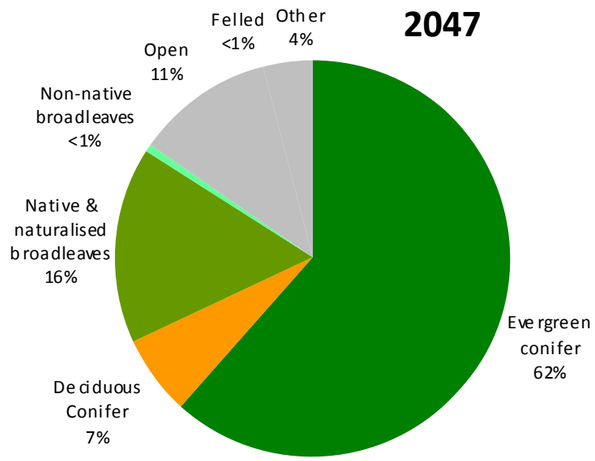



# Indicative Future Species 2048

The projections made are indicative of species composition in thirty years time. They do not constitute a guarantee and merely act as an indicator of how the vision for the Plan area will be delivered over time.

In reality, greater larch removal is anticipated and a greater proportion of open habitat delivered, due to *Phytophthora ramorum* and dynamic internal space fluxes.




## Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other



0 0.1250.25 0.5 0.75 1 Miles

# Indicative Future Species 2048

## Legend

Evergreen Conifer | Deciduous Conifer | Native & naturalized broadleaves | Non-native broadleaves | Open/other

0 0.125 0.25 0.5 0.75 1 Miles