



Forestry England

Gibside Estate Forest Plan 2024

North Forest District



Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)



Planning and District Context

The Strategic Plan for the Nation's Forests outlines the delivery of forest policy at a national level. At a regional level there are six Forest Districts covering the country that directly oversee the implementation of policy actions in the nation's forests. North Forest District (NFD) is an extensive area encompassing 9 county or unitary authority areas from the Scottish border to Durham and Lancashire (map 1).



Map 1: North Forest District Extent (green).

Our task is to realise the potential of each of the forests in our care for sustainable business opportunities, wildlife and nature conservation, and the enjoyment and well-being of local people and visitors. Each of our forests supports the economy through local jobs, sustainable timber production and the provision of recreation and tourism opportunities. All are funded by revenue from raised by timber sales and recreation provision.

The woodlands of the district are currently arranged in 59 management areas, and their management is covered by individual ten-year forest plans that identify local issues and the broad silvicultural management of the woods. Forest plans are reviewed locally every five years.

These plans and their associated forest operations work within the requirements of the UK Forestry Standard (UKFS). Our activities are independently audited through the UK Woodland Assurance Standard (UKWAS) which is endorsed by the Forest Stewardship Council® (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC).

Our forests aim to deliver a range of public benefits with achievable objectives that deliver the three drivers of sustainable land management outlined in the North Forest District Strategy. Forestry England recognises its obligations under UK legislation and regulations such as the Natural Environment and Rural Communities Act 2006; as amended by the Environment Act 2021 (Sec 102)'.



These key drivers are supported by the following Forest District Policy:

- We will optimise the financial return from timber production compatible with achievement of other forest district objectives while complying with the UK Forestry Standard and meeting the requirements of the UK Woodland Assurance Standard.
- We will provide public access to all our forests and woodlands where there are no legal or safety restrictions. We will encourage and permit a wide range of recreational activities from walking and quiet enjoyment to more specialised activities.
- We will ensure that rare and threatened habitats are protected and managed to maintain or enhance their conservation value.

Gibside Estate Forest Plan 2024

This is the fifth revision of the design plan for Gibside and includes proposals working towards achieving the management objectives as previously agreed in joint consultation between the Forestry England and the National Trust. There are no significant changes to the plan through the current review but brings it up to date in terms of work achieved over the last 10 years and ongoing delivery of the management objectives.

Part 1 Background Information

Introduction

Situated 6 miles Southwest of Gateshead, Gibside estate is regarded as one of the greatest examples of 18th Century landscape design. Owned and managed by the National Trust, the Forestry England holds a leasehold interest in 110.2 ha of the woods on the estate on a reducing basis as woodland is felled and the responsibility for restocking passes back to the landowner, the National Trust.

The forest lies in the Gateshead District Council area, in the North East of England.

Background Information and Woodland status

The woods on the estate form the background structure within which a series of formal vistas and drives were placed. The landscape was created by George Bowes between the years 1730 to 1767 but became derelict around the time of the Second World War, when most of the woods were clear-felled. Remnants of the original landscape plantings still survive notably some common lime and yew planting along the vistas and drive, and beech and oak within the woodlands. Work to restore elements of the 18th century designed landscape of the estate is ongoing and will be a long-term process.

The Forestry Commission gained a leasehold interest in the woods in the mid-1950s. Following the conclusion of the devolution in the UK, Forestry Commission was restructured, and Forestry England was appointed to manage the nation's public forest estate. At Gibside, under a 'deed of surrender' Forestry England only maintains an interest in the trees on the estate until either the current crops are felled, or when management of the estate woods reverts to the National Trust in 2036.

Following the war time felling in the 1940s, the woodlands on the estate were restocked from 1950 onwards, with commercial species in line with government policy of the day to provide a strategic timber resource. This created a very even-aged forest structure across the land holding, with 86% of the plantation in post 1940 age classes, as indicated in Figure 1. The current woodland structure still reflects this restocking though a mixture of spruce, Scots and Corsican pine, larch and fir, with the broadleaf component including beech, oak, ash and wych elm (Figure 2).

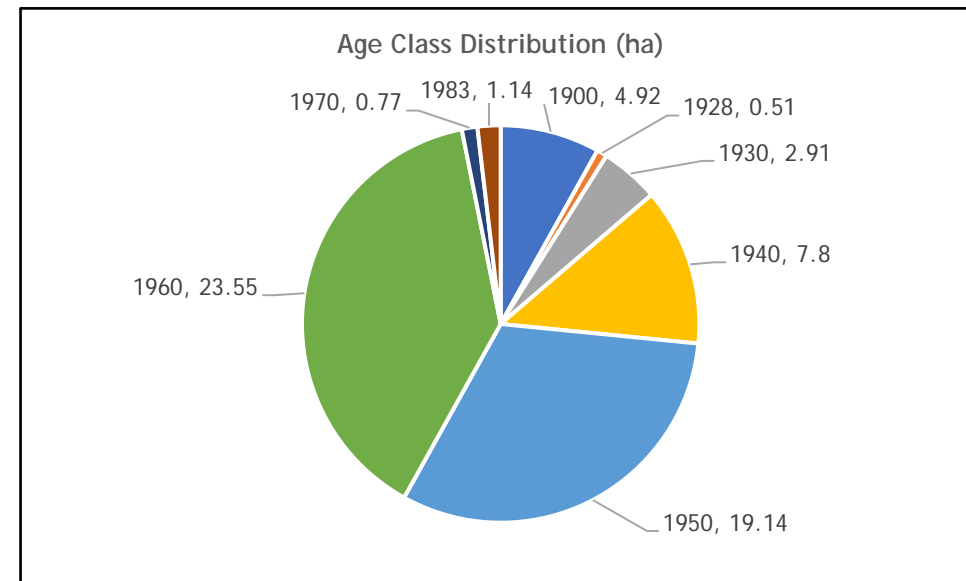


Figure 1: Forest Age Class Distribution by Area (ha)

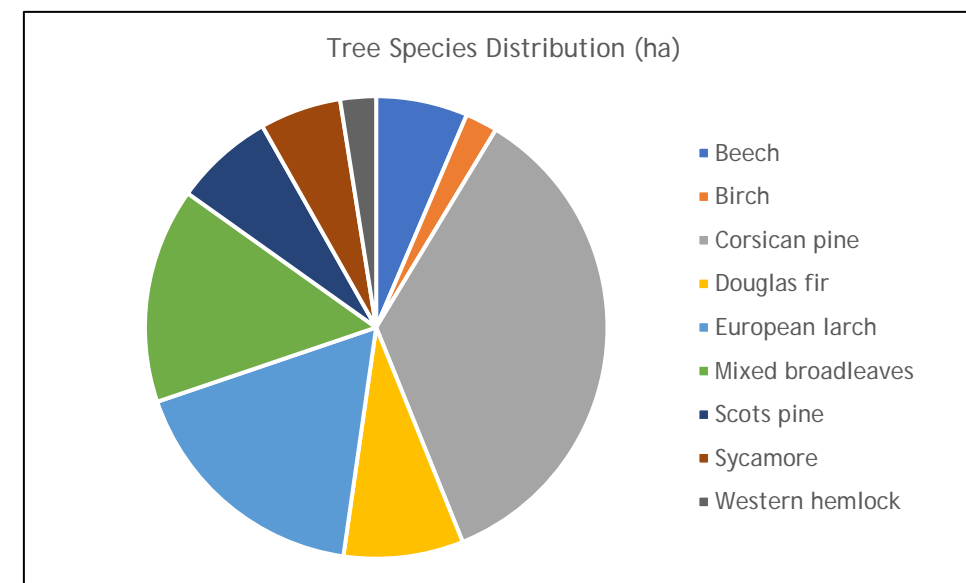


Figure 2: Forest Tree Species Composition by Area (ha)

The soil type across the woodland area is typical surface water gleys. The growth rates in the plantations are typical for this type for site, with the conifers ranging between yield

classes¹ 6 and 22. Scots pine and larches perform at around yield class 8 to 10, whilst Corsican pine and Douglas fir come in at in the 10-14 yield classes. Western hemlock is a high performer at yield class 14-22. The broadleaved species are dominated by beech and sycamore which grow in yield classes 4-8. As the forest moves more toward native species, such as oak, it will be expected that yield class will decrease closer to 4.

The woods are within windthrow hazard classes² 2-4, and the Forest Research climate model describes the site as sheltered. This and current experience show the wood to be stable and receptive to ongoing silvicultural thinning. A proportion of the trees planted are already mature from the standpoint of commercial harvesting.

Most of the conifer species are now approaching their point of maximum mean annual increment (MAI) and could be removed during the thinning operations.

The landform of the site is generally a northwest facing slope from 160 m above sea level, that slopes gently down towards the River Derwent, where there are some very steep zones along the banks which would require specialist felling and extraction equipment. The terrain across the wider land area does not present significant challenge to modern harvesting systems, so is not a barrier to silvicultural operations. The greater challenges to managing operations is the planning and controls needed to work around the historic infrastructure, conservation interests and the day-visitors to the National Trust attraction.

Historical Environment

The historic interest of the Gibside estate is significant and it is listed as Grade 1 in Historic England's "Register of Parks and Gardens of Special Historic Interest in England". Additionally, most of the estate's buildings are listed, with Gibside Hall also being a scheduled monument.

The estate woodlands are most noted for the 18th century designed landscape of vistas and formal drives placed within them (see Historic vista map), which are undergoing a process of restoration, as resources become available. The majority of the vistas have now been reopened although a number of the drives still require significant work. The 1767 map of the estate (copied from the original survey by James Stephenson) identified an additional historic vista not identified in the previous forest plan, shown in Plate 1.



Plate 1: 1767 Map of Gibside Estate

Many other structures of archaeological interest are known to exist, listed below (see Historic archaeological features map). In preparation for forest operations these features are identified and assessed, and mitigation plans are put in place to protect them during operations.

¹ Yield class is a measure of the amount of wood one hectare of trees will increase by in one year as an average over its life.

² Wind hazard class is a measure of how stable a site is for growing trees it ranges from 1 to 6, 1 being the most stable. Wind hazard class 6 sites would normal be considered too exposed to plant trees.

Number	Feature	Number	Feature
600	Chapel	638	Drift mine entrance
601	Former walled garden and associated structures	639	Former quarry (sandstone)
602	Shell of "Green house"	640	Lower reservoir
603	Stable block	641	Remains of field walls
604	Ruined building	642	Site of brick/tile kiln
605	Column/landscape feature	643	Cutwater, leap and site of mill
606	Restored garden building	644	Level and spoil mound
607	Earthworks of levelled terrace/axis	645	Wee/spring surround
608	Water feature	646	Course of wagonway
609	Water feature	647	Causeway/culvert
610	Causeway/culvert/former waggonway	648	Well/spring
611	Causeway/culvert	649	Gatepost
612	Bridge/causeway (restored)	650	Well/spring surround
613	Drift mine	651	Former quarry (sandstone)
614	Drainage adit entrance	652	Stone trough
615	Holloways	653	Site of gate piers
616	Earthworks of former drive	654	Hollow way
617	Remains of lodge/cottage (buried foundations)	655	Shallow shaft workings (coal)
618	House	656	Former drive/ possible wagonway
619	Remains of ornamental pond	657	Site of iron working forge
620	Causeway/culvert	658	Earthworks at crossing of vistas "round point"
621	Ice house	659	Course of former drive/ track
622	Planting mound and stone basin	660	Site of building
623	Remains of "little house"	661	Riverside walls
624	Remains of bath house (buried foundations)	662	Former drive/ bridge abutments
625	Footbridge on Gunners walk (rebuilt)	663	Stone culvert
626	Retaining walls (part rebuilt)	664	Paved stream
627	Riverside walls	665	Buttress wall/ culvert
628	Burial ground enclosure and sundial	666	Site of sawmill
629	Former reservoir	667	Brick building
630	Terraces of former amphitheatre	668	Old kennels/ blacksmiths shop
631	Spring surround	669	Culverts
632	Footbridge (rebuilt)	670	Buttress wall/ culvert
633	Course of walk (restored)	671	Landscape walk
634	Stone steps (2 flights)	672	Ha-ha wall and ditch
635	Remains of gate piers	673	Sheepwash site
636	Three retaining walls	674	Boundary stone
637	Higher reservoir	675	Culvert

Figure 1: Gibside Historic Environment Features

Natural Environment

The northern part of the estate is a site of special scientific interest (SSSI) and the southern part holds a county wildlife designation as a local wildlife site (formally known as a Site of nature conservation interest (SNCI)). Both of these designations are a reflection of the ancient semi-natural woodland (ASNW) interest of the site. The full extent of these designations is shown on the Nature Conservation map.

The SSSI information is summarised in Table 1.

Table 1: Designations		
Designation	Influence on Site	Actions required
SSSI, Gibside, Snipes Dene Wood. Unit ID 1009628.	SSSI is a part of the Gibside forest estate, 1 unit, 90.31 ha. Broadleaved, mixed and yew woodland - lowland. Unfavourable - recovering, last assessed 11.04.2011. 6 features comprising amphibians (favourable) reptiles (unfavourable) and invertebrate assemblages (passed).	No specific actions needed, both units in favourable condition. Opportunity to develop riparian woodland along river system. The management strategy for the forest is moving the SSSI woodland towards a native woodland structure, which will benefit the SSSI features.

Most of the woodland in this forest plan is either Plantations on Ancient Woodland Site (PAWS) or Ancient Semi Natural Woodland (ASNW). Whilst this is not a legal designation in its own right, it is Forestry England's policy to manage these woods towards a native broadleaved woodland structure. This is compatible with the SSSI designation.

Ancient woodlands have been scored against semi-naturalness (SN) and the results for Gibside are:

- SN 1: 11.4% - 80-100% native tree species.
- SN 3: 14.2% - 20-50% native species.
- SN 4: 74.4% - less than 20% native species.

The transition towards a SN1 native woodland this will be achieved through continued silvicultural thinning and group felling practices to progressively remove the non-native conifer species. This approach of progressive change is seen as being less impactful to the environment and amenity interests of the location. This approach allows for the intensity and pace of interventions can be varied according to need.

Regeneration of the next generation of trees will be achieved through a combination of natural regeneration and planting.

The rate of ancient woodland restoration needs to be considered in the context of the main elements of the 18th century designed landscape, and this will be greatly aided by the application of continuous cover thinning systems.

Gibside is particularly important for amphibians, reptiles and invertebrates and this is reflected in the SSSI designation. All species of newt, including great crested newts (*Triturus cristata*) are present as well as common frogs, toads and four species of reptile. Most notably, the grass snake (*Natrix natrix helvetica*) maintains a breeding population here, close to the northern limit of their distribution in the British Isles. They feed around the existing water bodies and on the ride edges wherever there is sufficient cover.

Older areas of woodland also support a diverse invertebrate fauna including several notable species of fly (for example *Scolioecentra caesia* and *Neolaria ruficeps*) the nationally rare beetle, *Pterostichus cristatus*, and the ancient woodland lemon slug, *Limax tenellus*.

Bats are present on the site, including populations of natterer's and noctule bats, which utilise natural tree roosts. The woodland also supports a breeding population of Red Kite, sparrowhawk and pied flycatcher. Red squirrels are known to be present, and this could be one of the locations in Gateshead within which they remain.

It is standard practice for the planning phases for forest felling operations to survey for species and habitat interest and adapt plans to suit the needs of the site.

Recreation and infrastructure

The Gibside estate is managed by the National Trust as a visitor attraction for its members and the public. Although there are no public rights of way through the estate public access is provided in the woodland areas and actively encouraged throughout all parts of the estate.

The recreational development of the estate includes a car park, cafe, and shop together with waymarked walks and there are regularly organised events including open air concerts and guided walks.

Forestry England work closely with the National Trust when planning and implementing forest operations to minimise disturbance to visitors and manage health and safety.

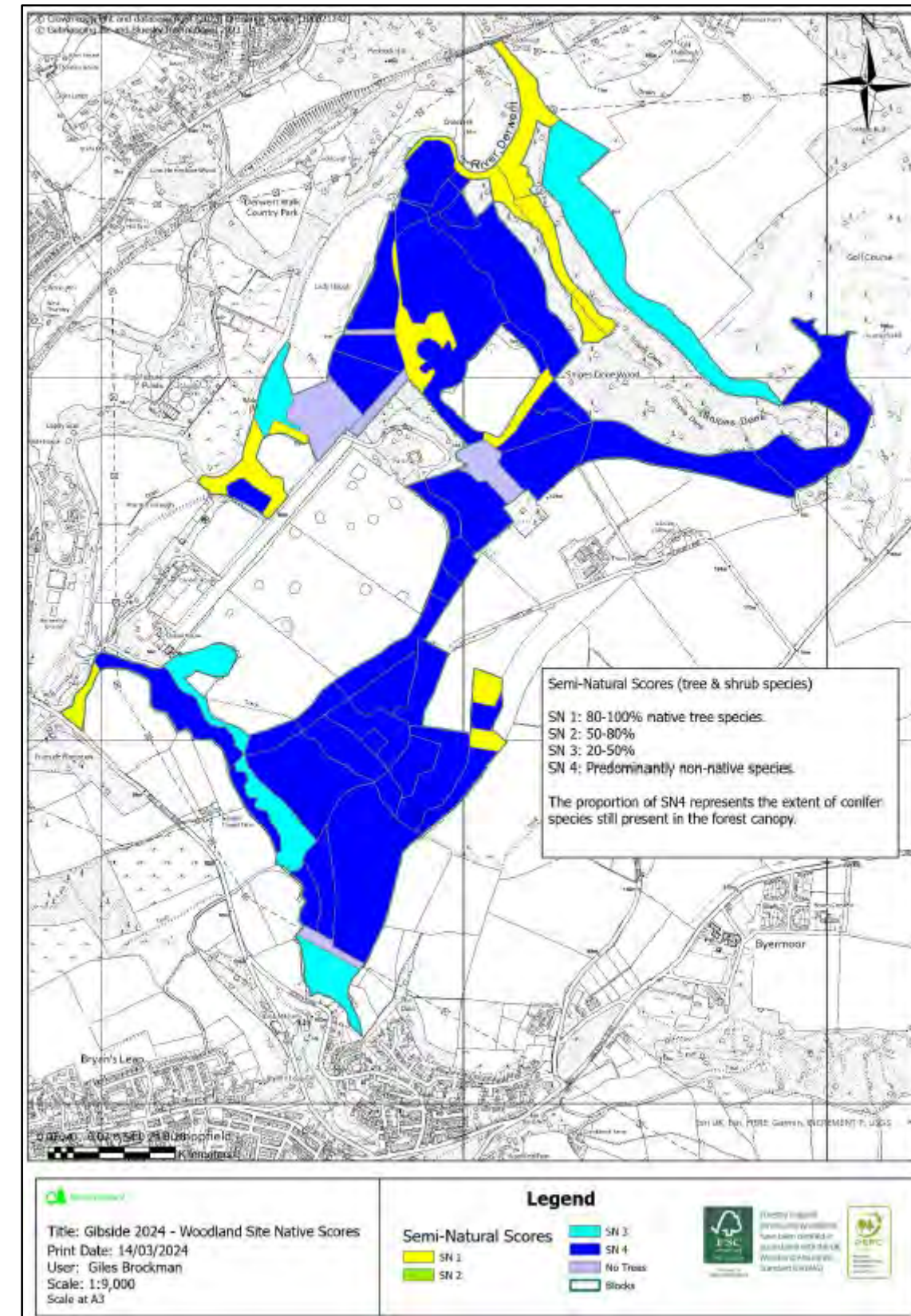


Figure 2: Ancient Woodland: Semi-Natural Scores

Part 2 Review of Previous Plan

Table 1: Previous plan objectives

Objective	Comment
<p>Landscape and Natural Environment</p> <p>Restoration of the historic grade 1 listed Park & Garden</p> <p>Plantation on ancient woodland restoration.</p>	<p>Operations in the last plan period focused on removing of tree species not planted in the original designed landscape.</p> <p>As a PAWS site the restoration of native woodland is an objective where this does not conflict with the landscape restoration.</p> <p>Two small areas of Western Hemlock remain to be felled.</p> <p>Evidence suggests that natural regeneration of broadleaves is progressing well: overseen by the National Trust.</p>
<p>Economic</p> <p>Production of timber</p>	<p>Clearfells and thinnings since the 2008 plan have produced a positive economic return and produced timber for local markets.</p> <p>The plantations provide the opportunity to continue to thin to produce economically attractive parcels of mixed timber species at c25 tonnes/ha over c98 ha.</p>
<p>Social</p> <p>Dove tail forest operations into the visitor and National trust requirements</p>	<p>Forestry England the National Trust held regular meetings to discuss forest operations to ensure they are arranged to minimise visitor disturbance.</p>

Part 3 Analysis and Concept

The factors outlined in Part 1 present various opportunities and issues. These are summarised in Table 2.

Table 2: Analysis of opportunities and issues

Factor	Opportunities	Issues
Current & Future Tree Species	Conifer species generally growing well which will provide a sustainable yield throughout the conversion process. Conifer thinning volumes can be expected to yield 25-35 tonnes/ha.	Plant health. Larch is at risk from Phytophthora Ramorum, and ash regeneration (at risk from Chalara) will need regular monitoring. As a result, neither species can be relied on to be a substantial part of the future forest structure and substitutes need to be identified. Dothistroma needle blight (Dothistroma septosporum) has been recorded on the pine species. Scots pine can tolerate this disease and the mixed structure of the woodlands will help reduce the potential impacts of this disease. The proportion of Corsican pine

	The restoration to native mixed broadleaved species is positive for the objectives of the site, but supplementary planting may be needed to introduce a wider range of species.	<p>will reduce through future thinning operations.</p> <p>Beech and sycamore will be accepted and retained as part of the woodland structure. This can be supplemented using oak, small-leaved lime and hornbeam. Protection for woodland trees from grey squirrel damage will be an essential part of the management actions.</p> <p>Western Hemlock is highly shade tolerant and can regenerate densely under a canopy. Its removal from the current forest structure is an objective and regeneration will need to be managed to prevent it becoming dominant in the future.</p>
Forest management type & timber harvesting	<p>The forest is quite sheltered and continuous cover management through thinning is possible throughout the estate.</p> <p>Long term retention of native mixed broadleaved areas managed with minimum intervention will enhance biological value.</p>	<p>Thinning intensities need to recognise the important historic and biological features throughout the woodland.</p> <p>Group felling will create a more diverse structure.</p> <p>Clearfelling of Western Hemlock will remove this species from the wood promptly, before it can mature as a seed source.</p> <p>The conversion to largely broadleaved species will reduce future thinning volumes.</p> <p>Deer management must be implemented to ensure that palatable broadleaved species are able to regenerate and develop.</p>
Biodiversity and heritage	<p>Protection of features associated to ASNW, such as veteran and feature trees or ground flora provide opportunity to target thinning operations for greatest benefit.</p> <p>Recognition of historic landscape and garden features.</p> <p>Development of the historic vistas.</p>	<p>Some exotic tree species or groups of non-natives may be of historical significance and need to be retained. These will be assessed during the preparation for thinning.</p> <p>Red squirrels have not been recorded at Gibside for some years. Control measures against grey squirrels remains important to contribute towards conserving the red squirrel zone as well as for tree protection.</p> <p>Deer management will reduce browsing pressure on the ground flora.</p>
Access/Roading	There is an adequate internal network of forest roads.	Forest roads are shared with the public requiring careful planning and adherence to the highest standards of health and safety.

Public access	Close proximity to large urban area and location within Great North National Forest.	Leasehold restrictions limit expansion of public access
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Design Concepts

1. Restoration of the main elements of the 18th century designed landscape notably opening the remaining planted vistas and re-establishing the formal drives.
2. Restoration of woodland to recreate a structure more in keeping with the earliest reliable record of 1866, and a move away from 20th century commercial forestry to a forest structure more in keeping with the commerce of the 18th and 19th century.
3. Though related to change in woodland structure a specific issue relates to the presence of Western hemlock (*Tsuga heterophylla*) within the woodlands. This species creates a very dense canopy shade and can produce prolific natural regeneration, which are a risk to developing native woodland. The aim is total removal of this species from the estate, and the progress made throughout the period of the previous plan should be continued.
4. Staged conifer removal: As Gibside is an ancient woodland site a general revision of the felling proposals has been made to schedule conifer removal from the estate. This objective will be achieved using a thinning programme that favours removal of conifers over the broadleaved species present, over two to three cycles. This approach will keep the impact of change at a low level and take full consideration of the historical context of the woodland.

Part 4 Objectives

The following objectives have been identified based on Forestry England National Policy, 'Growing the future: 2021-2026'.

Table 3: Forestry England goals supported by this Forest Plan	
Growing the future vision	How this Forest Plan delivers
<p>For Climate</p> <p><i>'We will offer over one million cubic metres of sustainable timber to market each year, maintain world-class forest management practices, externally accredited to international standards.'</i></p> <p><i>'greater structural and tree species diversity in the nation's forests to support adaptation to climate change and securing a sustainable timber supply for future generations.'</i></p>	<p>The proposals maintain woodland cover which ensures that the site continues to sequester carbon in timber.</p> <p>Felling proposals are based on the implementation of a continuous cover regime. Interventions will involve thinning the conifer and non-native broadleaf components to transition towards a largely native woodland structure.</p> <p>In the period 2024-2026 2.0 ha of Western Hemlock will be felled (coupes 36228 & 36235) and c0.9 ha of mixed conifer (west of the banqueting suite) felled to open-up the historic vista identified in the 1767 survey.</p> <p>The restocking phase is the responsibility of the National Trust. Currently their objectives are to encourage native woodland to regenerate naturally. However, this will need to</p>

	be supplemented by planting of nursery stock in order to increase the diversity of tree species. Tree provenance from other seed zones may need to be considered to counter future climate risks relating to changes in growing conditions.
<p>For Wildlife</p> <p><i>'Continuing action to protect, improve and build the resilience of our most special habitats, including ancient woodlands and Sites of Special Scientific Interest.'</i></p> <p><i>'The rich, diverse and connected habitats in the nation's forests will continue to be improved and enhanced by our sustainable forest and land management.'</i></p>	<p>Continue to thin the woodland to encourage more light penetration to stimulate natural regeneration. In particular, this is likely to benefit the notified amphibian, reptile and invertebrate species by reducing shading and introducing glades to the woodland structure to provide strategic undisturbed locations for grass snakes and other reptiles to bask. Protection and retention of veteran trees is important within the SSSI in supporting the notified invertebrates.</p> <p>ASNW restoration - timing and yield of operations will be guided by how the woodland is responding to change. Re-survey of ASNW is planned for 2024.</p> <p>Features of interest associated to the ASNW, such as veteran or feature trees, will be protected and enhanced during operations through sympathetic management.</p>
<p>For People</p> <p><i>'we will provide public access to all our forests and woodlands where there are no legal or safety restrictions...'</i></p>	<p>We will continue to work collaboratively with the National Trust to ensure that our operations minimise disturbance to visitors to the estate.</p> <p><i>Historic Environment</i> - the primary aim of thinning and felling interventions will be to recreate woodland structure more in keeping with the 1866 Gibside report including restoration of the main elements of the 18th century designed landscape notably opening up the remaining planted vistas and re-establishing the formal drives.</p> <p>Historic features will be routinely identified and protected during our planning and implementation of forest operations.</p>

Felling prescriptions. The principal objective for tree harvesting is to remove the non-native conifer components to favour transition to native broadleaved woodland. A proportion of Scots pine can be retained as a component of this native mixture as it provides good diversity for nature.

The Western Hemlock stands will be removed in a single clearfelling operation. This could be combined in a wider thinning programme to ensure it is economically viable.

For the rest of the woodland the transition will be delivered through silvicultural thinning of the forest under a continuous cover regime. Interventions should favour the removal of non-native conifers over broadleaved species. Thinning should also seek to create gaps in the canopy that could allow for underplanting to introduce species diversity into the woodland components. Species such as oak are light-demanding therefore the canopy gaps must be at least one tree length to provide adequate species for these trees to develop.

Part 5 Forest Plan Maps

- Map 1 Location - 1:50,000 scale showing location in context of other woodland in the local area.
- Map 2 Current Species - species composition of Forestry England landholding in 2024.
- Map 3 Planting Year - age class distribution of the woodland.
- Map 4 Heritage - statutory and non-statutory heritage and historic landscape features.
- Map 5 Hazards & Constraints - formal public rights of way, electricity, gas and water services, third party access rights and buildings.
- Map 6 Design Concepts - indicating the main objectives of management.
- Map 7 Felling Proposals - proposed areas of minimum intervention, continuous cover management and clear felling.
- Map 8 Future Habitats - the future species composition based on a programme of natural regeneration and planting to achieve restoration of ancient woodland composition.

Part 6 Forest Plan Outcomes

Felling Proposals

The principal objective for tree harvesting is to remove the non-native conifer components to favour transition to native broadleaved woodland. A proportion of Scots pine can be retained as a component of this native mixture as it provides good diversity for nature.

The Western Hemlock stands ((coupes 36228, 1.8 ha and 36235, 0.17 ha) can be removed in a single clearfelling operation, which could generate approximately 780 m³ of timber. However, the economics of working in this sensitive landscape and visitor zone are likely increase working costs, therefore it will make better economic sense to package the felling up with part of the thinnings programme to make a better parcel.

For the rest of the woodland the transition will be delivered through silvicultural thinning of the forest under a continuous cover regime. Interventions should favour the removal of non-native conifers over broadleaved species, but the broadleaved canopy will need to be opened-up as well.

The last thinning intervention was undertaken in West Wood in 2017 and therefore the next intervention is due. The thinning cycle will operate on a 5-10 year interval which should produce around 2400 tonnes across the whole wood. The finer detailed decisions on coupe size and distribution for each operation will be based on a scale that will ensure each intervention is self-financing. This will take place at the point of operational planning, which will also manage the implementation of work in the visitor zone.

Thinning should also seek to create gaps in the canopy that could allow for underplanting to introduce species diversity into the woodland components. Species such as oak are light-demanding therefore the canopy gaps must be at least one tree length to provide adequate species for these trees to develop.

Pre-operational site planning processes will ensure that environmental protection measures for protected species, habitats and heritage features are identified and built in to work specifications.

Restocking proposals

Restocking and long-term future structure is the responsibility of the National Trust and therefore does not form a detailed part of this plan by Forestry England.

The restock intention for the National Trust is to move towards a largely broadleaved woodland using natural regeneration from existing broadleaved species, supplemented with planting where it is necessary to broaden the range of tree species present.

Forestry England's contribution to this objective is to ensure that the felling programme creates the conditions to provide light and growing space for natural regeneration to develop and establish. Forestry England and National Trust are looking at putting a deer management plan in place to protect the natural regeneration.

Restoring the series of historic vistas and drives is relatively straightforward, as details of their structure are well documented, and will be delivered through felling back the edges of the plantation in the relevant locations.

Part 7 Monitoring plan

The objectives identified in section 3 will be monitored in the following ways;

Table 4: Monitoring plan		
Objective	Criteria for success	Assessment
For Climate Wood production Maintenance of a viable woodland structure.	Marketable parcels of timber on offer to the market. A healthy, well stocked woodland.	Contract and sales records. Year 5 mid-term forest plan review assessment of felling against programme. Sub-compartment database records changes in woodland composition. Growing stock attributes survey.
For Wildlife SSSI Favourable Condition PAWs restoration	Favourable condition. Delivery of forest plan felling & thinning proposals. Improved semi-natural scores from Ancient Woodland survey.	Review of SSSI management plan. Year 5 mid-term forest plan review & analysis of the sub-compartment database. Re-survey of PAWs planned for 2024. Species records.
For People Visual enhancement to visitors. Historic features; enhancement/protection.	Maintenance of Ancient woodland and historic landscape characteristics and ongoing restructuring of the woodland. Protect and enhance historic features.	Year 5 mid-term forest plan review. Feedback from National Trust. Operational planning records.

UKWAS compliance table

Table 5: UKWAS Figures				
	Forest Plan Area (ha)	Forest Plan Percentage	Forest District Area (ha)	Forest District Percentage
Total area	110.3	100 %	85907.8	100 %
Total wooded area	105.0	95.2 %	59109.4	68.8 %
Area of conservation value*	110.0	99.8 %	21073.2	24.5 %
Long-term Retentions and Low Impact Silvicultural Systems	101.3	91.9 %	11410.1	13.3 %
Open space†	3.9	3.5 %	32558.7	37.9 %
Natural Reserves - Plantation	0.6	0.6 %	424.6	0.5 %
Natural reserves - Semi-natural	2.0	1.8 %	456.9	0.5 %

*Area of conservation value is the sum of designated areas including Ancient Woodland, Long-Term Retentions, Low Impact Silvicultural Systems, and areas of Natural Reserve.

† Area of open space in Forestry England ownership is lower than UKFS requirements due to unique resumption process with National Trust. As land is felled it is returned to the National Trust, meaning Forestry England hold a small area of open ground at any time in Gibside.

Because of the complexity of the landowning relationship in this woodland the proportion of open space cannot be applied in this situation. The measure of open space of 3.5 % falls below the UK forest standard for a minimum of 10%. When an allowance for internal forest roads and rides is applied open space rises to 7.6 %. Whilst the UK standard for 10% cannot be met at the defined land use level for forest/woodland, the property at the landscape scale surpasses the standard when the area of parkland and wood pasture managed by National Trust is taken in to account.

The United Kingdom Forest Standard (UKFS)

The UK Forest Standard is the reference standard for sustainable forest management in Britain. The UKFS is supported by a series of guidelines which define standards and requirements and provides a basis for regulation and monitoring. These include General Forestry Practice, Forests and Biodiversity, Climate Change, Historic Environment, Landscape, People, Soil and Water.

Gibside Forest Plan can demonstrate that relevant aspects of sustainable forest management have been considered and the stated objectives in Part 3 show how sustainable forest management will be achieved. The plan provides a clear means to communicate the proposals and to engage with interested parties and serves as an agreed statement of intent against which implementation can be checked and monitored.

In addition to conforming to general sustainable forest management principles UKFS is demonstrated in the following key areas:

Productivity Productive potential for timber is optimised through the delivery of the thinning programme. The plan also delivers ecosystem services and other non-market benefits in biodiversity, climate change mitigation, water quality, people, and landscape.

Structure Future species composition of this site is to be decided by the National Trust as felled is returned their ownership for restocking.

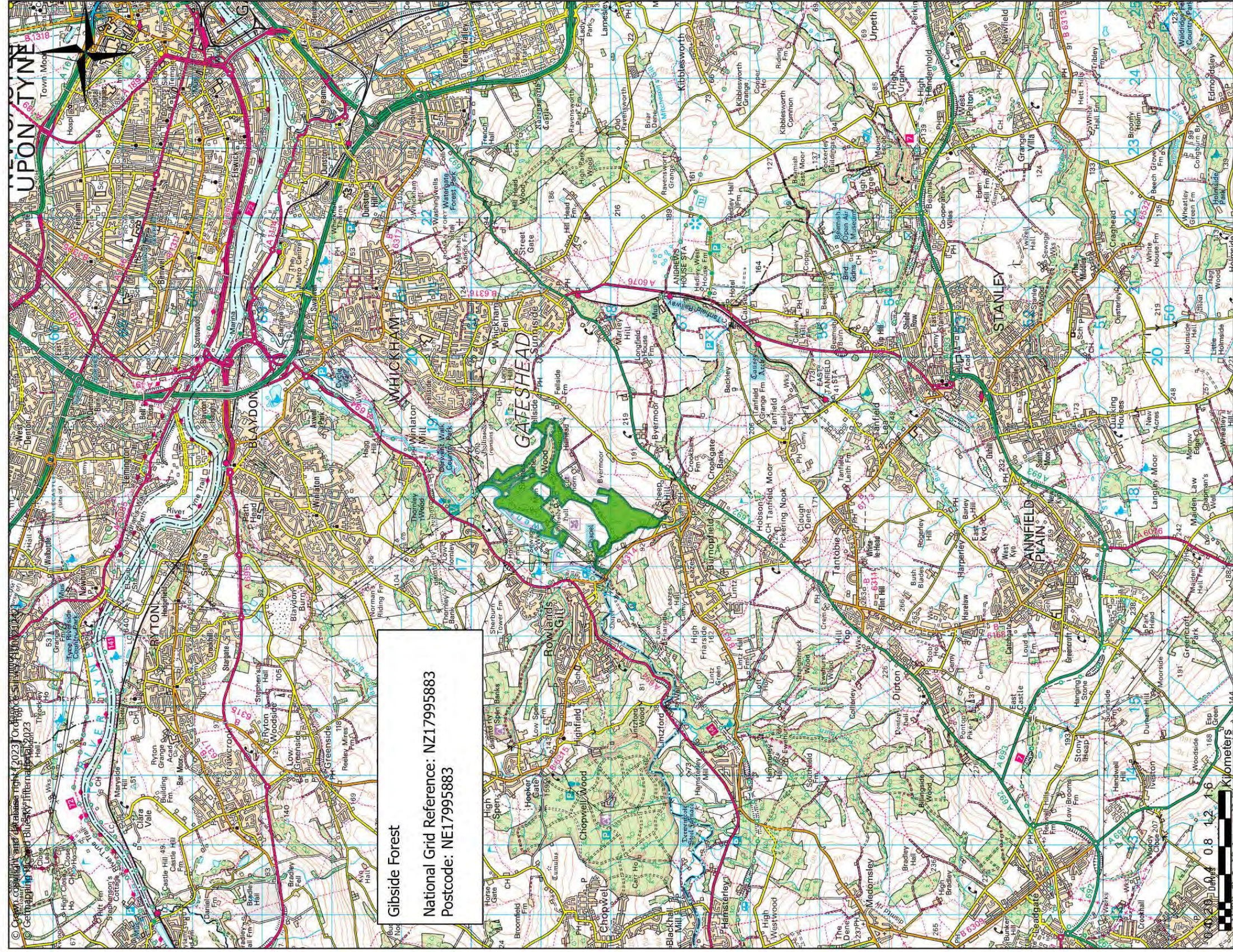
Silvicultural Continuous cover forestry principles will be adopted with the management of the forest as it transitions from a largely coniferous composition to native broadleaved woodland. This approach will improve species and age class diversity over time.

Biodiversity Management of priority habitats and species are an important objective. Ecological connectivity achieved by extending and linking areas of native broadleaved woodland and open space will be enhanced ensuring that the area is managed with conservation and biodiversity as a major objective. The proportion of deadwood habitats will increase over time.

Climate change	Continuous cover systems will minimise soil disturbance. Natural regeneration and species diversification will benefit forest resilience.
Landscape	The historic landscape character is recognised and used to inform the appropriate woodland management and design.
Historic	Historic features are well recorded and will be safeguarded during operational management.
People	The plan is consulted with individuals, the local community, and organisations with an interest in the management of the area.
Water	Quality will be protected through adherence to Forest and Water guidelines as a minimum during all harvesting and forest management operations.


Longer term management proposals

The proposals in this plan continue to build on the success of previous plans to support the management of Gibside and the restoration of the main elements of the 18th century designed landscape. Continued thinning under a continuous cover management regime will gradually restore the woodland to native species whilst also continuing to provide timber to markets across the region. In addition, the retention of groups or individual exotic trees of historical significance will progress toward the longer-term vision of restoring the estate woodlands to the structure found in 1866.



Title: Gibside 2024 - Location Map
 Print Date: 14/03/2024
 User: Giles Brockman
 Scale: 1:50,000
 Scale at A3

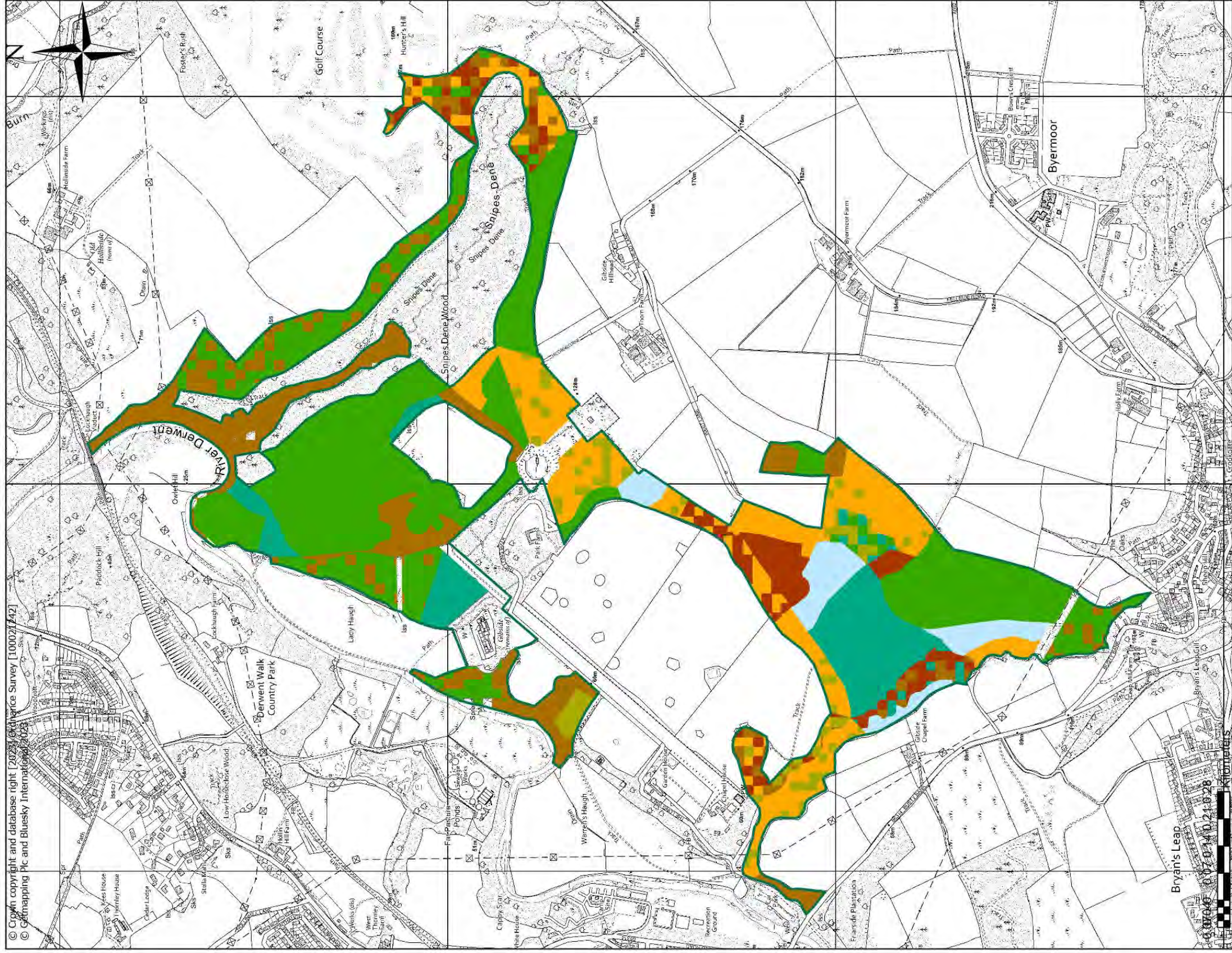
Legend

-  Forestry England - Gibside



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0 0.1 0.2 0.3 0.4 0.5 Kilometers



Title: Gibside 2024 - Current
 Species Distribution
 Current Time: 14/03/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

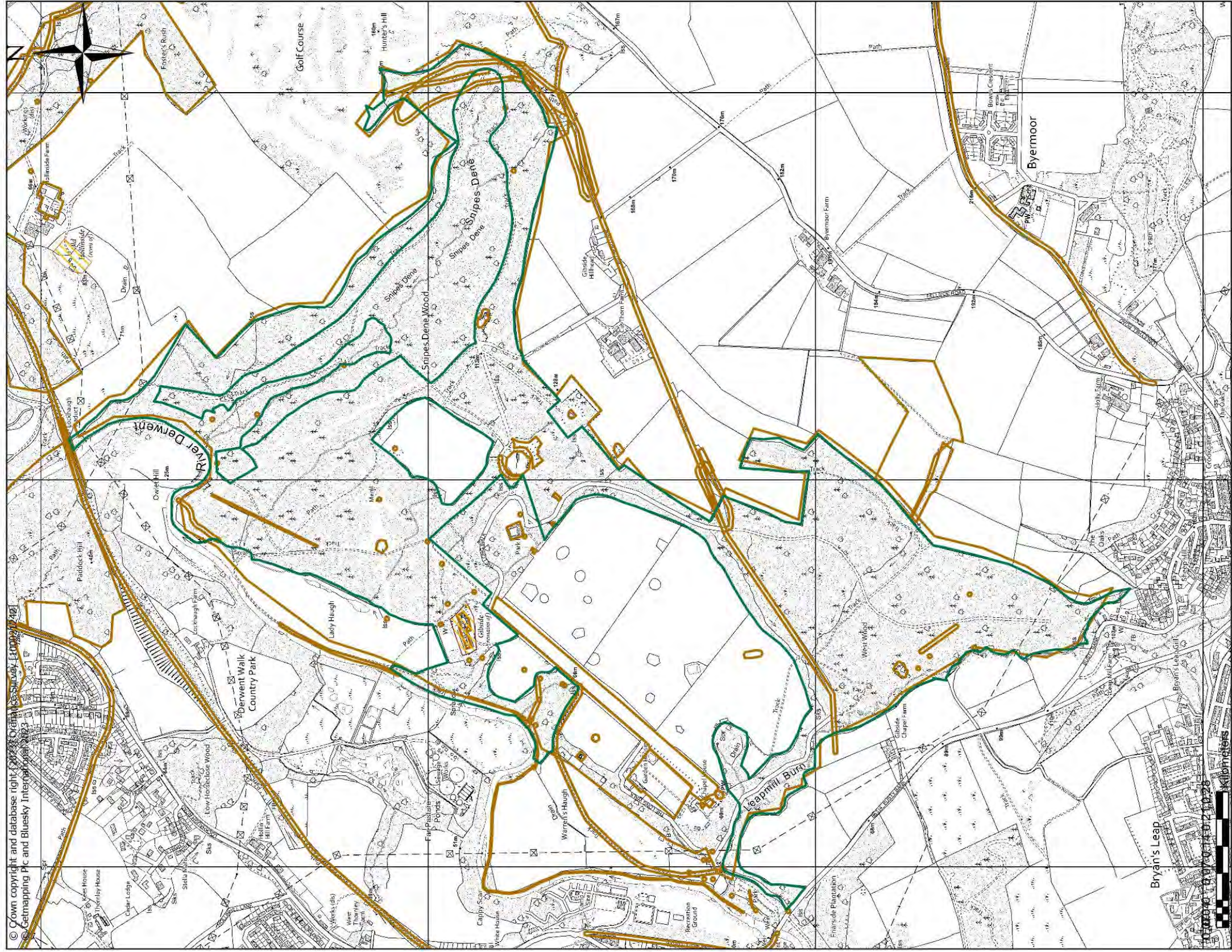
Legend

- FE Blocks
- Larch
- Mixed Blvds
- Open
- Other Blvd
- Other conifer
- Pine
- Regen
- Sycamore
- Current Species
Beech






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Title: Gibbside 2024 - Heritage
 Print Date: 10/05/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

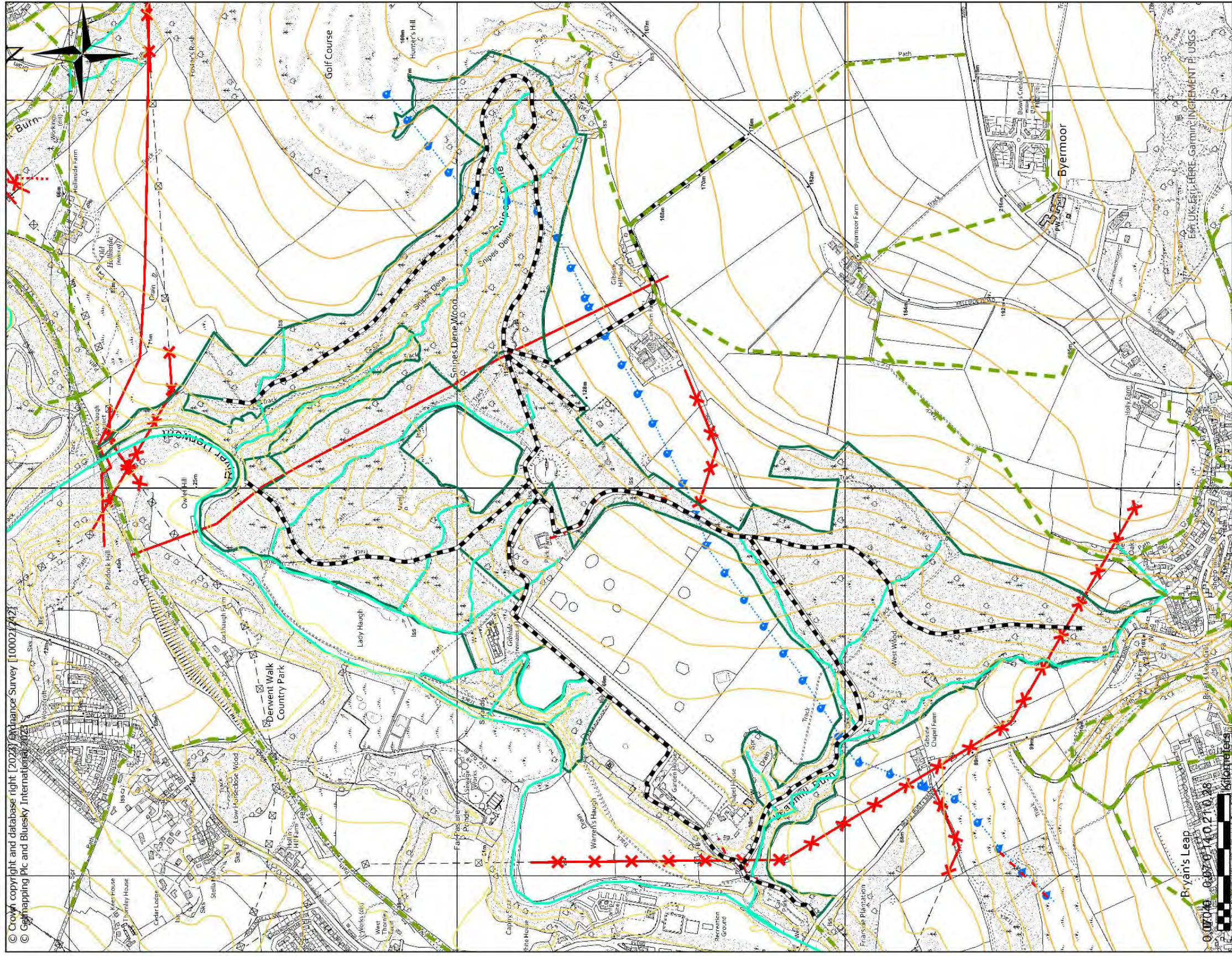
Legend

-  Blocks
-  Scheduled Monuments
-  Heritage



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Forest Roads selection
Watercourses
Blocks

Communications
Overhead telephone or fibreoptic

Electricity
Powerlines

Gas Pipelines
Masts/Aerials
Water Pipelines
Water Supply Points
Public Rights of Way

Legend

Underground telephone or fibreoptic

Overhead powerline

Underground powerline

Forestry England

Title: Gibside 2024 - Hazards & Constraints
 Print Date: 30/04/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

PEFC
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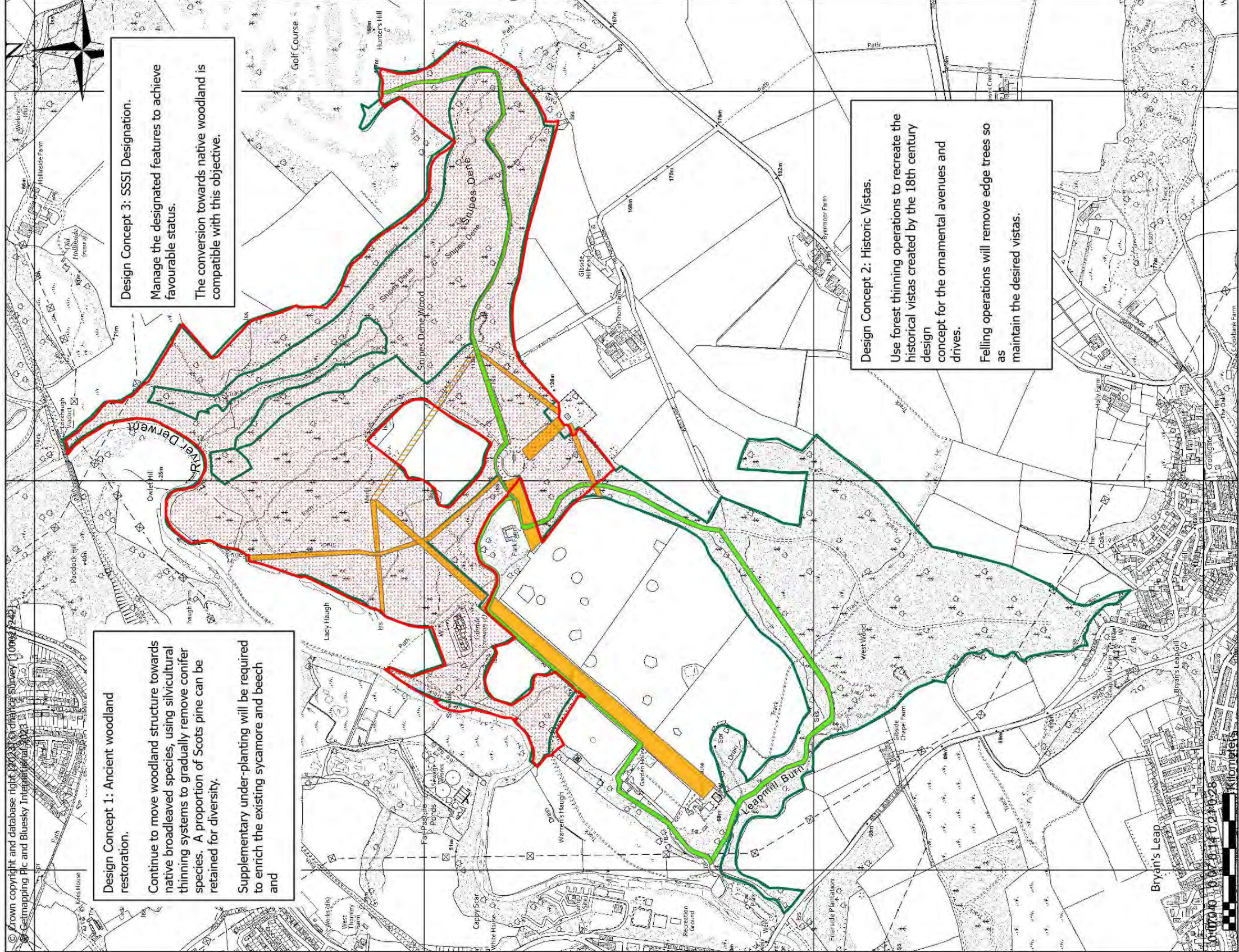
FSC
 FSC - Forest Stewardship Council
 The mark of responsible forestry


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 Getmapping Plc and Bluesky International Ltd

Design Concept 1: Ancient woodland restoration.
 Continue to move woodland structure towards native broadleaved species, using silvicultural thinning systems to gradually remove conifer species. A proportion of Scots pine can be retained for diversity.
 Supplementary under-planting will be required to enrich the existing sycamore and beech and









Design Concept 3: SSSI Designation.
 Manage the designated features to achieve favourable status.
 The conversion towards native woodland is compatible with this objective.


Design Concept 2: Historic Vistas.
 Use forest thinning operations to recreate the historical vistas created by the 18th century design concept for the ornamental avenues and drives.
 Felling operations will remove edge trees so as maintain the desired vistas.




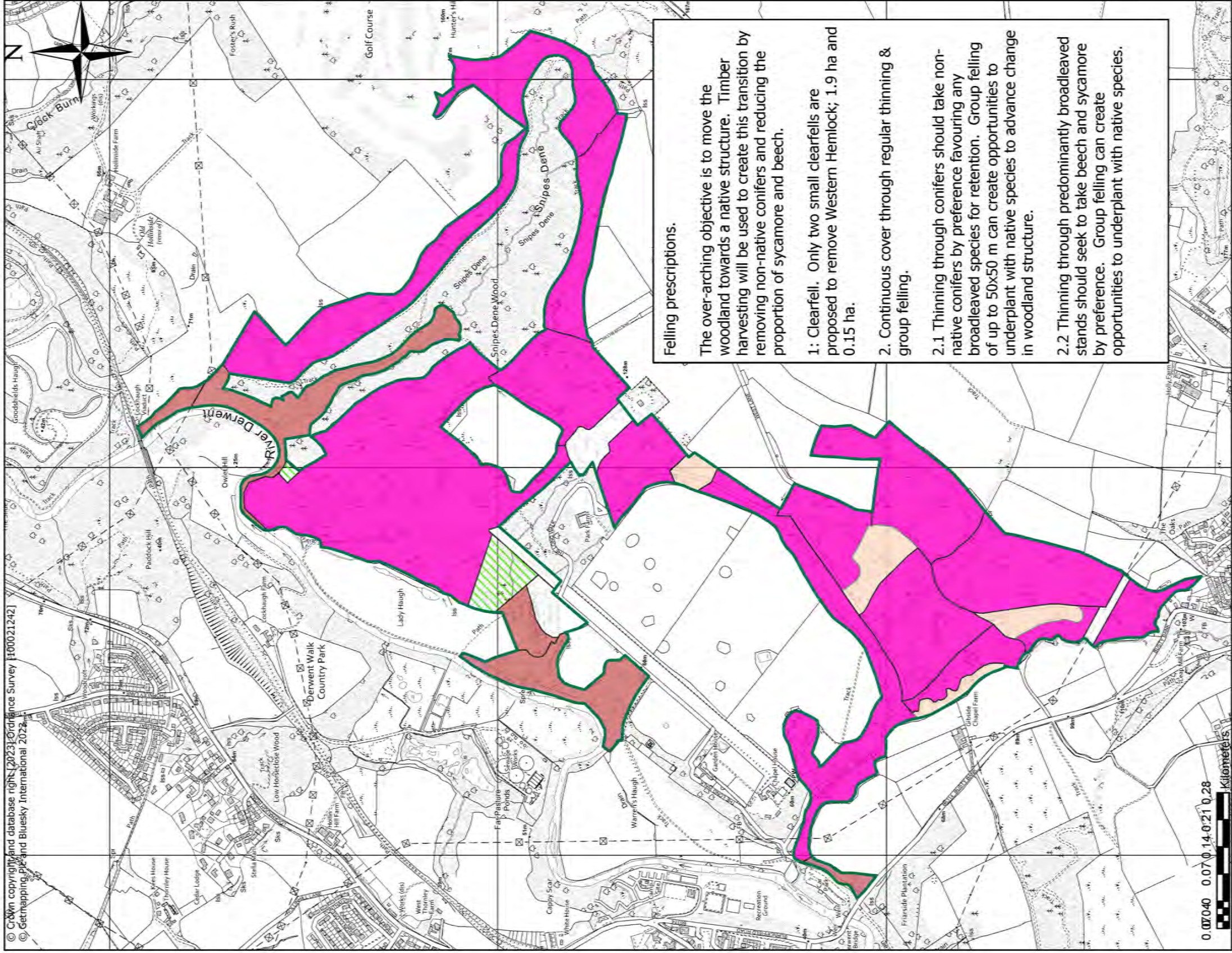
 Title: Gibside 2024 - Design Concept
 Print Date: 10/05/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

Legend

-  Sites of Special Scientific Interest
-  Historic Vistas
-  Vistas
-  Historic Drive
-  Vista Open
-  Vista to Open
-  <all other values>
-  Blocks

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 PEFC



Felling prescriptions.

The over-arching objective is to move the woodland towards a native structure. Timber harvesting will be used to create this transition by removing non-native conifers and reducing the proportion of sycamore and beech.

- 1: Clearfell. Only two small clearfells are proposed to remove Western Hemlock; 1.9 ha and 0.15 ha.
2. Continuous cover through regular thinning & group felling.
 - 2.1 Thinning through conifers should take non-native conifers by preference favouring any broadleaved species for retention. Group felling of up to 50x50 m can create opportunities to underplant with native species to advance change in woodland structure.
 - 2.2 Thinning through predominantly broadleaved stands should seek to take beech and sycamore by preference. Group felling can create opportunities to underplant with native species.

Forestry England

Title: Gibbside 2024 - Felling Proposals
 Current Time: 14/03/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

Legend

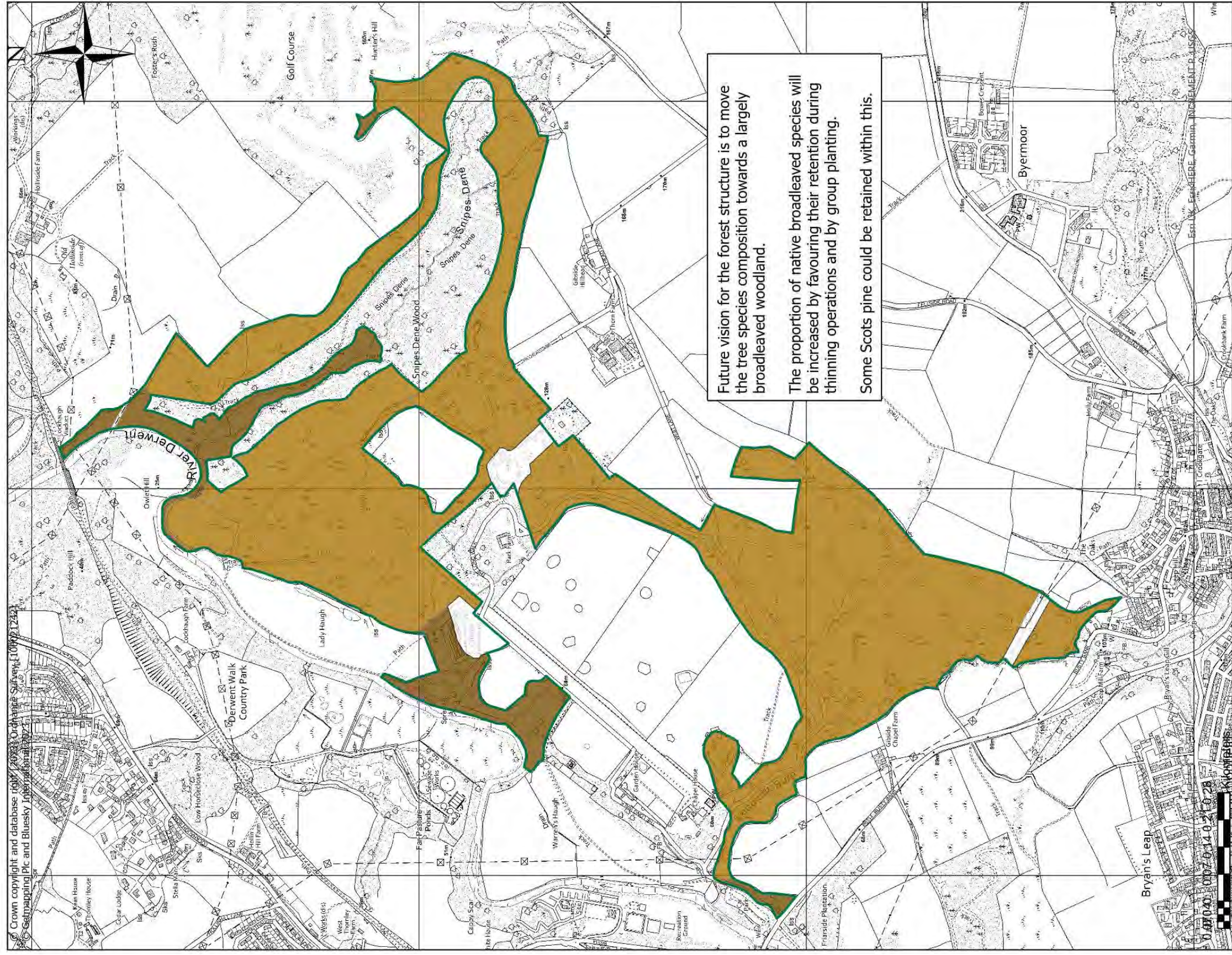
- FE Blocks
- LMP_MANAGEMENT
- Felling Period

- CCF
- Felled
- Min Intervention
- Open

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FSC

PEFC



Title: Gibside 2024 - Future Forest Structure
 Current Time: 14/03/2024
 User: Giles Brockman
 Scale: 1:9,000
 Scale at A3

Legend

-  Blocks
-  Future Restock
-  Future_Species
-  Habitat Blvd
-  Mixed Blvds
-  Open



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