UKWAS

UK WOODLAND ASSURANCE STANDARD

UKWAS Revision 2020-23
Second Revision Draft (October 2021)

Consultation Report Annex – Consolidated Feedback

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Explanatory notes

This Annex brings together all of the stakeholder comments received during the consultation on the Second Revision Draft of UKWAS held in October and November 2021. A full list of respondents, organised into UKWAS constituencies, is in the main Consultation Report. Individual respondents are identified in this Annex by a unique code and either an organisational or personal name in square brackets, e.g. [C03 Scottish Forestry].

As far as reasonably possible without compromising readability, stakeholder feedback has been brigaded, so that where individuals have made identical comments, or comments differing in only the most minor details which do not change the substance, each comment is only shown once with a list of the relevant respondents, e.g. [A03 Confor; B04 Pryor & Rickett Silviculture Ltd]. Where more than one individual from the same organisation has submitted the same response, this is shown via multiple codes and a single organisational name, e.g. [B05, B06 Gresham House]. In some cases, this brigading has involved splitting the responses of individual respondents where only part of the response was reproduced by another respondent, but in no cases has any feedback been removed. Some respondents gave broadly similar feedback, but rather than brigading these and providing complicated editorial notes to highlight the differences, in most cases it has been considered appropriate to give the full comments separately to ensure the intent of each respondent is reflected faithfully.

Stakeholder feedback is reproduced verbatim, with only minor editing for consistency of presentation. Where clarification was needed, a small number of editorial comments have been made in square brackets. The formatting of responses has been removed, except where this was essential to understanding the comments.

The feedback is divided between general comments and comments on specific UKWAS sections or glossary definitions. Most respondents used the consultation template provided, but a small number provided comments in other formats; these latter comments have been presented as general or specific comments as seemed most appropriate, with some reproduced both as general comments and against specific UKWAS sections.

All UKWAS sections are shown in this Annex, with those sections receiving no stakeholder feedback highlighted using the colour coding below. Only those glossary definitions which received feedback are shown.

No attempt has been made to categorise general comments, all of which are shaded in grey. A basic categorisation of section-specific comments has been made as follows:

Blue	No comments received.	Green	Comment expresses support or otherwise does not require action.
Yellow	Comment requests changes or otherwise requires action.	Red	Comment requests that a requirement be removed.

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General comments

[A02 Seafield & Strathspey Estates] The use of timber will become more important as we move away from a fossil fuel based economy. UKWAS is well placed to guide the delivery of sustainably managed woodland which provides the material necessary for that transition balanced with the environmental and climate requirements of such an economy.

However, it is important that it is recognised that the basis for woodland certification is sustainable production of wood products. Anything which dilutes that premise risks the validity of the standard. Woodlands certified to UKWAS should have an obligation to deliver sustainable timber production to support the bio economy and the carbon and environmental benefits that follow from that. This does not diminish the value of woodlands managed for other priorities but it is questioned whether UKWAS is the correct standard for them to be audited against if they do not list timber production as part of their sustainable management.

There is a concerning tendency in the revision to be overly prescriptive and that inevitably brings conflict with site specific interpretation in a UK context – one size does not fit all. The wording of the document at times appears contradictory from “Requirement” to “Guidance” and that in itself can lead to misinterpretation and uncertainty. Language and consistency through the standard is vital to provide managers and auditors with clear guidance.

[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] Commercial timber is an important part of modern life, for example it delivered essential products throughout the Covid crisis and not just in the traditional building sector. There is a massive amount of research currently being undertaken to get more from the fantastic resource that is our woodlands. The UK imports over 80% of the wood products the country consumes, we are the second largest importer in the world. Ominously, global demand has been forecast to triple by 2050. The recent significant supply chain issues causing material shortages and significant price rises indicate the impact of a homegrown resource shortage to mitigate reduced availability of imports. Therefore, it is essential that we invest in sustainably managed productive woodlands now and in the future, by doing so, this will enable quicker sequestration of carbon, greater volumes of wood that will reduce reliance on imports, increase opportunity to store more carbon in long life products and substitute higher embodied energy materials. Here in the UK we can control the environmental impact of our forestry operations, we can ensure timeous restocking is carried out, workers are paid fairly – we must not further off shore our wood fibre supply where we have no control of management or supply.

We believe UKWAS aims to ensure a balance of the FSC core values: biological diversity, benefits to local people and woodland economic viability, it is extremely important for viable woodland management to maintain this balance. The Confor biodiversity report illustrated forests managed where timber is the main objective also contributes significant biological diversity and this should be accounted for in the achieving this balance. This revision more than any other seems to promote an imbalance towards biological diversity, greatly reducing the flexible approach professional foresters need to take to successfully establish and manage each woodland. Without economic viability, woodland operations are not carried out, this leads to a loss of benefits to local people such as less available work. We can have biological diversity and commercial timber working together as long as a sensible approach is taken. Throughout this revision minor tweaks have reduced the potential wood fibre productivity of many woodland areas, which consequently reduces the viability of many

sites, reduces the opportunity for associated jobs along the wood supply chain, and alarmingly reduced the potential for sequestering carbon quickly through high yield conifer growth and downstream storage in long life wood products, making it harder to achieve the standard and thus reducing the impact of UKWAS. Minor tweaks also have a administrative burden which again reduced the economical viability of certified timber. Consider this example: 1ha of commercial spaced Oak vs 1 ha of commercial spaced Sitka: In 30 years' time (i.e. 2050 Net Zero Target) the Oak will have a standing volume of 54m3 while the Sitka will be 540m3, so which best helps us sequester carbon? We need to use our land resource efficiently both nationally and globally.

Major changes such as seen in 4.1.1. & 4.3.1 have the real potential to destroy any economic return, in all likelihood these areas will drop out of UKWAS. When the additional revenue produced by certified timber is less than that spent on trying to achieve unrealistic goals, it becomes easier not to certify that area. This is a product assurance scheme not just an environmental action plan.

Before any amendment is made several points should be considered: what is the new evidence which shows the amendment is needed, what is the risk if the amendment is made or not made, what is the financial impact of the amendment. We should not be changing things for the sake of changing.

[A04 Buccleuch Estates] My interpretation of the standard is that it was to reassure the public that the timber-based products they were using had been sourced from sustainably managed woodlands. This revision seems to take it beyond what it needs to be, adding bells and whistles unnecessarily. The commercial conifer crops pay for the management of the high public-access and high conservation value areas of woodland (when times are good). I fear the emphasis in this revision is weighted too much in favour of conservation at the expense of commercial management. It is worth mentioning that on the Dumfries & Galloway part of the Borders Estate, 29% of the currently certified woodland compartments are classified as PAWS.

[A05 Buccleuch Estates] The purpose of the original certification standard was to provide assurance to the end use customer that the timber they were purchasing was from a sustainable source. The original UKWAS standard was a good example of how economic, biodiversity and social aspects were balanced to provide a standard that was above the minimum of UKFS. i.e. it became UKFS+ Many of the more enlightened forest owners signed up to this as a means of providing assurance standards to the management of the their woodlands even where the market was not requiring it for their types of output. Objectives and perceptions can change over time so the standard should be reviewed to ensure it remains fit for purpose. To this end all 3 sectors need to agree. Without balance between the three legs the standard ceases to be sustainable.

The current draft of UKWAS 5.1 is in our view an unsustainable standard. It has become in it's wording and requirements a conservation badge. There is nowhere in the standard that requires for timber to be produced so it seems to be failing to meet it's purpose.

We have been proud supporters of the UKWAS standard from version 1. However the standard in it's current form will require us to remove most of our blocks of woodland (over 6000 ha). Ironically, the blocks of pure monoculture will still be relatively simple to secure accreditation on. The older more developed, mixed species and age woodlands for which Buccleuch is famous will become unrealistic to put through. I do not believe any competent risk assessment of the impact of some of the proposed changes can have been undertaken. If it had, then it would have been clear that the changes were more likely to lead to wholesale removal of areas of woodland from certification or for no management to occur. Neither can surely be the intention?

The Boughton Estate, near Kettering at 1000ha is already pointless as the markets that it serves offer no incentive to bear the administrative burden of providing proof of compliance with the UKWAS standard. The increased work required for UKWAS 5 will take it beyond what we can justify. Significant areas of the other estates will likely follow suit. From conversations with many other managers it appears we are not alone.

Commercial timber is an important part of modern life, not just in the traditional building sector. There is a massive amount of research currently being undertaken to get more from the fantastic resource that is our woodlands. The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than aboard. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control. UKWAS is there to ensure a balance of the FSC core values: biological diversity, benefits to local people and woodland economic viability.

This revision more than any other has seen the balance tip towards biological diversity, squeezing the flexible approach professional foresters need to take to each woodland. Without economic viability, woodland operations are not carried out, this leads to a loss of benefits to local people such as less available work. We can have biological diversity and commercial timber working together as long as a sensible approach is taken. Throughout this revision minor tweaks have reduced the commercial aspect of many woodlands, making it harder to achieve the standard and thus reducing the impact of UKWAS. Aspects such as 4.1.1. & 4.3.1 have the real potential to destroy any economic return, in all likelihood these areas will drop out of UKWAS. When the additional revenue produced by certified timber is less than spent on trying to achieve unrealistic goals, it becomes easier not to certify that area. This is a product assurance scheme not just a environmental action plan.

[B02 Stuart Wilkie] The primary purpose of UKWAS is to assure purchasers that UK timber is produced to a high standard of sustainability, a claim that can follow the log through to its end use. Sustainability implies that timber will be produced from the WMU at a sustainable level and timber production is the driver and beating heart of the standard.

The task of a forest manger is to take the myriad of competing requirements using experience and best practice, to judge what are in effect hundreds of mini compromises and meld them into a balanced and implementable forest plan. The role of the auditor or CB is to robustly question these decisions and compromises, to determine if an appropriate balance has been struck and where necessary to raise corrective actions.

UKWAS is the framework onto which this process is pinned but must deal with a wide range of circumstances covering the whole of UK forestry. UKWAS is not able to prejudge every situation and it must be for the manager and the auditor (using the Verifiers and Guidance) to agree if an individual requirement has been met. The wording UKWAS 4 struck a fine balance and as a result was well received. It is notable how much of the UKWAS 4 language remains. Unfortunately, the revised text in UKWAS 5 has occasionally prescribed management decisions rather than guided them.

There is much to be welcomed in the new version of UKWAS. The greater emphasis on climate change and forest resilience is essential and these two themes have fingers that reach across the standard and touch many requirements.
[B03 Simon Jeffreys] These comments are probably too little too late as had paying work to do and had not realised how far UKWAS5 has been driven from a balanced well considered working tool to an overly prescriptive and unhelpful document that does not balance well on the 3 legs of the stool. Insufficient time to comment more fully. PAWS restoration 431g is not well considered and is overly prescriptive. Inappropriate to insert compulsion and will likely make many private estates review if certification is still for them. The Guidance sections are turning into long essays of how to do forestry and this makes the actual Standard unnecessarily long. The Standard is not the right vehicle for acres of text setting out what could or could not be done. Reacting early to carbon is commendable but I do wonder if the prescriptions set out are hostages to fortune as a fast evolving subject leaves UKWAS5 looking dated quite quickly, even recommending practices that are found to be undesirable or that have unforeseen implications. Less ground prep, slow establishment, more beat ups, more pesticides.
[B05, B06, B08, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Commercial timber is an important part of modern life, not just in the traditional building sector. There is a massive amount of research currently being undertaken to get more from the fantastic resource that is our woodlands. The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than abroad. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control.
[B07 Gresham House] Timber should play an essential role in transitioning to a low carbon economy and can provide us with a huge range of products- ranging from traditional building products to novel compounds produced through wood refineries. e.g. https://www.borregaard.com/ As a result, timber production should be considered an environmental good. Indeed, landowners who do not produce timber from their woodlands should be considered irresponsible in the same way as those who do not recycle, or waste scarce resources. There is a massive amount of research currently being undertaken to get more from the fantastic resource that is our woodlands. The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than abroad. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control.

[B09 Gresham House] Commercial timber is an important part of modern life, not just in the traditional building sector. There is a massive amount of research currently being undertaken to get more from the fantastic resource that is our woodlands. The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than abroad. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control. – The article by Dr Andrew Cameron in the latest Confor magazine sets out a good argument for the planting of productive conifers against broad leaves. There is a real concern we could be cutting off an emerging success story of a UK timber industry at its knees by not allowing the commercial planting that is so desperately need. The report alludes to a 269% increase in greenhouse gas mitigation from planting productive conifers against newly planted broadleaves.

[B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] UKWAS is there to ensure a balance of the FSC core values: biological diversity, benefits to local people and woodland economic viability. This revision more than any other has seen the balance tip towards biological diversity, squeezing the flexible approach professional foresters need to take to each woodland. Without economic viability, woodland operations are not carried out, this leads to a loss of benefits to local people such as less available work. We can have biological diversity and commercial timber working together as long as a sensible approach is taken. Throughout this revision minor tweaks have reduced the commercial aspect of many woodlands, making it harder to achieve the standard and thus reducing the impact of UKWAS. Minor tweaks also have a administrative burden which again reduced the economical viability of certified timber.

Major changes such as seen in 4.1.1. & 4.3.1 have the real potential to destroy any economic return, in all likelihood these areas will drop out of UKWAS. When the additional revenue produced by certified timber is less than that spent on trying to achieve unrealistic goals, it becomes easier not to certify that area. This is a product assurance scheme not just an environmental action plan.

[B05, B06, B07, B08, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Before any amendment is made several points should be considered: what is the new evidence which shows the amendment is needed, what is the risk if the amendment is made or not made, what is the financial impact of the amendment. We should not be changing things for the sake of changing.

[B19 Tilhill Forestry Ltd; E02 BSW Timber Ltd] Forests are seen as “critical to growing the UK’s low carbon economy*” and Commercial timber is an important part of modern life, not just in the traditional building sector.

The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than abroad. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control.

If the definition of sustainable forestry is the balance of economic, ecological and social aspects of forest management then in this revision we need to strike a better balance.

UKWAS is there to ensure a balance of the FSC core values: biological diversity, benefits to local people and woodland economic viability.

Without economic viability, woodland operations are not carried out, this leads to a loss of ecological and social benefits. We can have biological diversity and commercial timber working together as long as a pragmatic approach is taken.

Throughout this revision minor tweaks have the potential to reduce the commercial aspects of many woodlands, making it harder to achieve the standard and thus reducing the positive impacts of UKWAS. Minor tweaks also have an administrative burden which again reduces the economical viability of certified timber.

Changes such as seen in 4.1.1. & 4.3.1 have the real potential to destroy any economic return, in all likelihood these areas will drop out of UKWAS. When the additional revenue produced by certified timber is less than that spent on trying to achieve unrealistic goals, it becomes easier not to certify that area. This is a product assurance scheme not just an environmental action plan.

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*UK Forest Market Report 2021

[B20 ICF] As an independent certification standard for woodland management, the UK Woodland Assurance Standard (UKWAS) is a pillar of sustainable forestry practice. Trees will shoulder a significant proportion of mitigating the environmental crisis and helping us to adapt to a changed future climate. Certification is a crucial to UK forestry and UKWAS has contributed hugely to raising the standards of woodland management. As the UK body representing tree professionals, we actively support UKWAS and endorse the hard work of the Steering Group and drafting group.

As an Institute with a diverse membership, we leave it to individual members, other users of the standard and stakeholders to comment on points of detail and have made this response deliberately brief. That said, we are pleased to express our overall support for the revisions, for the structure of UKWAS and for the formats in which it is available. With this revision it is clearer and more relevant to current issues.

The greater emphasis on climate change and forest resilience is welcome. It is always a challenge to strike the right balance of environmental, social and economic objectives as these will vary for each woodland. With climate mitigation driving many government policies, it is important not to lose emphasis on productive forests as our use of wood and wood products grows to replace plastic and concrete in the long term.

We agree that planting stock should be UK-grown for biosecurity and economic reasons. However, there can be resilience reasons for choosing seed from more southerly sources, so wording about a preference for UK origin needs to take this into account. [Comment reproduced under UKWAS 1.1.7.]

We suggest the review group might consider more mention of different options of silvicultural systems. In many (though not all) circumstances, the adoption of continuous cover approach can be well suited to meeting a range of public and private objectives. However, with some of the additions there is a risk of reinventing terminology without adding much in the way of sense, for example using Low Intensity Forest Management Approaches instead of LISS. [Comment reproduced under UKWAS 2.10.1 and glossary definition of Low Intensity Forest Management Approaches.]

Finally, we want to emphasise the importance of following best practice guidance. The standard cannot and does not try to determine the best course of action in advance for individual woodlands. Crucially, there is a need for the work to be managed by professionals with the right skills and expertise.

[B21 Cawdor Forestry Ltd] Globally and within the UK timber has a wide spectrum of uses, and provides a low carbon alternative to other materials such as steel & concrete.

In the UK most timber is grown in commercial woodlands, which also provide a wide range of valuable ecological and social benefits. The commercial income funds the environmental work. If certification significantly erodes the commercial value it is likely that forest owners will chose to not have their woodlands certified. As a management company we have already seen a number of owners of very diverse woodlands abandon certification due to the unacceptable costs and burden imposed by certification, in aspects that are not a priority.

The UK imports over 80% of the timber the country requires, other countries also import large amounts. As the demand increases we should be looking to our own woodlands rather than abroad. Here in the UK we can control the environmental impact of our forestry operations, we can ensure restocking is carried out, workers are paid fairly – we must not off shore our timber supply where we have no control.

If the definition of sustainable forestry is the balance of economic, ecological and social aspects of forest management then in this revision we need to strike a better balance.

UKWAS is there to ensure a **balance** of the FSC core values: biological diversity, benefits to local people and woodland economic viability.

Without economic viability, woodland operations are not carried out, this leads to a loss of ecological and social benefits. We can have biological diversity and commercial timber working together as long as a pragmatic approach is taken.

Throughout this revision minor tweaks have the potential to reduce the commercial aspects of many woodlands, making it harder to achieve the standard and thus reducing the positive impacts of UKWAS. Minor tweaks also have an administrative burden which again reduces the economical viability of certified timber.

Changes such as seen in 4.1.1. & 4.3.1 have the real potential to destroy any economic return, in all likelihood these areas will drop out of UKWAS, which is likely to reduce the positive management compared to at present. When the additional revenue produced by certified timber is less than that spent on trying to achieve unrealistic goals, it becomes easier not to certify that area. This is a product assurance scheme not just an environmental action plan and trying to achieve ecological perfection is unrealistic.

[B22 Scottish Woodlands Ltd] There is much to be welcomed in the new version of UKWAS. The greater emphasis on climate change and forest resilience is essential to retain the standard's credibility. There is a heavy emphasis on environmental issues, which is not of itself a bad thing, but many issues have a social and economic angle too. The wording does not always strike just the correct balance. Conservation and bidiversoty does not equal sustainability.

[B23 Andrew Heald] Dear UKWAS

Please find detailed below my response to the UKWAS Consultation process.

These are my thoughts and opinions as a professional forestry management consultant with over 25 years' experience. I am not sure if it is relevant but in addition it is perhaps worth recording that I am/was:

- Ex Board member of UKWAS and a member of FSC International
- Ex manager of Tilhill's FSC Group Scheme (largest in the UK) and was a qualified Lead Auditor for Environmental Management Systems
- Convenor of the Economic Chamber at the 2017 FSC General Assembly in Vancouver
- Facilitator for FSC New Approaches program in 2020 to encourage more small woodland owners into certification
- Manager of Coed Llandegla when it was one of the first privately owned forests to be FSC certified in the UK

General consideration

It is important that UKWAS continues to try to find the right balance between social, environmental and economic considerations. The UK has a relatively high proportion of its productive woodlands in a certification scheme, it is probably a higher % than anywhere else in the world. Globally only circa 12& of the world's forest are in a certification scheme. In my opinion it is much better to set the standard at a level which can include the majority of woodlands and which ensures they are regularly audited, rather than a "gold standard" which is too exclusive.

UKWAS requirements must be easy to understand and equally important, straightforward to audit. The UKWAS audit is not simply a checklist, but a conversation between the auditor and the forest manager. If we want more smaller forest owners to be make use of UKWAS, then the standard and the audit process must be am inclusive one. It is essential that everyone with the responsibility of revising and editing the stand, has adequate experience of actual auditing. New requirements that seem perfectly reasonable in a meeting room, may not survive the scrutiny of a challenging forest site.

Carbon and timber – it should not be forgotten that the majority of woodland owners in the private sector are certified, because certified timber attracts a price premium. FSC and PEFC were always designed to be market driven mechanisms. Without timber production, and without a price differential private woodland owners will not pay the costs of being certified. Additional audit requirements cost money, taking more land out of timber production costs money. The working group must understand and must focus on value.

Our ambition should be to raise the standards of forest management across as large an area as possible – this will have the best outcomes for the most hectares.

[B24 CCFG] The CCFG is grateful for the chance to comment on the second revision draft.

We are pleased to see that the UKWAS Working Group (WG) has been prepared to reconsider the use of the term LISS. We believe this term has been loosely interpreted within the sector and has allowed patch clear felling to continue to be used on a wide scale through the practice of dispersed clearcuts, even though this perpetuates the creation of single species forests of low resilience to climate and pests and diseases.

To that extent, we welcome the possibility of replacing LISS by a term such as Lower Intensity Management Approaches which gives greater emphasis to the objectives of management and the operations (including silvicultural systems) used to deliver the objectives. However, we think that the definition that has been proposed can be improved – see suggestions in the Glossary.

However, most importantly, we believe that the current draft is seriously deficient in that it fails to provide a clear (or indeed any) definition of continuous cover forestry (CCF) in the Glossary, and makes inadequate reference to CCF in various sections of the text. We provide below a definition of CCF and we suggest such a definition must be included in the next revision. We would particularly draw the WG's attention to the fact that CCF can be delivered through a range of silvicultural systems and therefore offers a flexible approach to the development of species rich and structurally diverse forests which are likely the key to ensuring the resilience of British forests in an era of climate emergency. We note that the value of CCF as a means of adapting forest to climate change is increasingly recognised in documents such as the Forestry Commission's publication on 'Managing England's Woodlands in a Climate Emergency' and is clearly recognised in the UK Forestry Standard. It is therefore very regrettable that CCF is not defined in the current document and we hope that the WG will include our definition (or a modification thereof) in the next iteration of UKWAS.

The definition of Continuous Cover Forestry we would propose is an adaptation of that contained within the UKFS. Thus 'Continuous Cover Forestry (CCF) is an approach to forest management implemented by silvicultural systems which ensure that the forest canopy is maintained at one or more levels without clearfelling. The CCF approach combines continuing production of timber with respect for key processes of the forest ecosystem including conservation of soil carbon. 'The silvicultural systems most closely associated with CCF are single stem and group selection systems, and irregular shelterwoods. However, a wider range of systems can be used during the transition from even-aged management.' With this in mind, we recommend that wherever the current text says 'lower-impact silvicultural systems', this should be replaced by 'continuous cover forestry or other lower intensity management approach'. The CCFG will be delighted to discuss these or any other points with the Working Group if that would be useful.
[C03 Scottish Forestry] I have had a look through the UKWAS latest revision and glad to see the references both to carbon balances in woodland and the decarbonisation of operations. I do wonder whether before the 2023 publication date there might need to be a bit of strengthening of the language around decarbonisation. As things stand Scotland is expected to have reduced carbon emissions by 70% by 2030 – I think the UK targets are catching up on this too. Might it be appropriate for woodland managers to have considered how they will manage operations to transition from fossil fuels in line with the national targets. One could argue for some leeway as we are producing carbon negative land management but there should be an expectation that we are at least working towards delivering to national targets. I can see that producing land management carbon balances in detail would be very demanding but a decarbonisation plan for machinery operations and infrastructure would be relatively straightforward.
[D01 Soil Association] We welcome the majority of the proposals for the UKWAS 5th edition and we appreciate that many of our initial comments via the stakeholder consultation and those we submitted as part of the 1st consultation have been responded to positively. Most notably we support the move to highlight the importance of in-forest carbon, use of non-toxic ammunition and avoidance of plastic/waste. We also recognise that the changes to Requirement 2.7.1 could be quite significant and we think it important that these changes are reflected in the final version of UKWAS V5.0. However, we have provided some feedback via comments and in the Consultation Response boxes on the following: 1. Use of 'taken into account' and 'awareness of' in some requirements and guidance – we believe that forest managers and auditors need more clarity on the intent for these requirements i.e. do they have to influence management? 2. Given the enhanced prominence to soil management in the proposed changes for V5.0, we propose that an understanding of soil type in the MU based on 'best available information' becomes a specific requirement of this standard. We suggest indicator 2.4.1 could be elaborated to include this requirement.

3. We remain disappointed that the standard does not show more vision in the requirements that influence silvicultural systems. In particular to highlight when clearfelling may not be appropriate and to set maximum thresholds for the scale of clearfelling in a certified unit and for individual clearfell size.

[D02 Ancient Tree Forum] ATF is supportive of the positive changes to the document, although there are some points we've made in earlier iterations that have not yet found their way into the text….yet! We hope that the detailed points made below will persuade the panel to make some adjustments: they may look small but are significant and reflect changes in knowledge & practice.

ATF commends the inclusion of new sections around carbon capture & storage but there is no tangible link in the Standard to the huge contribution that mycorrhizal fungi play in the process of locking up carbon. This underpins ATF's concerns that damage to tree roots and disturbance of the rhizosphere, which extends way beyond the drip zone, has greater consequences than merely to the tree itself. Similarly, the timely identification, mapping and appropriate management of Ancient & PAWS woodland, wood pasture, historic parkland and Ancient and Veteran trees (often within remnant historic landscapes) is vital to protect the undisturbed soils that lie beneath.

In addition to the suggested amendments/additions to the text in the sections below, ATF would like to see changes in the Glossary. A definition of Ancient trees (rather than the occasional use of the loose term 'old') and amendment to the description of Veteran, for consistency with other publications e.g. https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#use-of-buffer-zones

The above link also defines Tree buffer zones, which should replace Root zones. It also defines wood pasture/parkland, which we have amended in Glossary. There should also be a x-reference in the AW definition.

Finally, ATF hopes that there will be links either within the text or in the References section to relevant ATF publications and resources. Similarly associated material on e.g. tree safety.

[D03 RSPB] This response builds on the submissions previously made by RSPB, and reflects the discussions and drafting process leading to this consultation draft.

The RSPB has long supported UKWAS as an important means of ensuring best practise, driving continuous improvement, and giving confidence to those in the supply chain and customers that woodlands are managed sustainably, and strive to deliver public goods especially for nature and the climate. We are also conscious that public expectations on both climate and biodiversity matters are increasing and public support for the sector depends on leading and taking opportunities for progressive improvements in performance in these areas. The UKWAS must accordingly avoid accusations of 'greenwash' and be open and transparent in its approach.

With this in mind we recommend:

1. The standard should be clear and helpful to any interested party who might wish to raise issues around compliance of any woodland certified by the scheme giving guidance on how to raise issues and how to formally raise a complaint should discussion at a local level fail to satisfy the concerns expressed. This may best be done on the UKWAS website and in the full standard documentation.
2. The standard should seek to ensure that at least 30% of a WMU is managed for nature (to include open ground habitats as appropriate as well as native woodland) in accordance with targets agreed as part of the run up to COP 26 and signed off by the UK and Scottish Governments. We recognise that for plantation forests recently established this might prove challenging, so would like to see a tapered approach with this being adopted as a requirement from 2030 which corresponds with formal recovery targets, but clearly signposted now.
3. We wish to see further improvements on protecting soil carbon especially wetland and peatland habitats, within WMU's and in further afforestation of open ground areas. We consider a peat depth of 30cm should be the limit for any new afforestation as the release of soil carbon and loss of biodiversity at depths over this will not be in keeping with ambitions to be 'net zero' by 2050, or to meet interim targets for nature recovery. The adoption of the BTO sensitivity maps for areas of importance for breeding wading birds, together with soil carbon/peat depth data will be key tools to reduce such adverse impacts.
4. We are encouraged at the shift in emphasis on the use of pesticides and fertilisers signalled by the text. However we remain deeply concerned at any use of Neonicotinoid pesticides in forest management and would like these to be prohibited even in cases of insect pest outbreaks such as the large pine weevil.
5. We are also very supportive of moves to put greater emphasis on the restoration of PAWS back to a semi-natural woodland state. PAWS are one of the legacies of past policy that have contributed to the decline of the biodiversity associated with ASNW. This is the UN decade of eco-system restoration, which taken together with the 30x30 commitments should give much greater weight to the restoration of PAWS woodlands.

[D04 Scottish Raptor Study Group] The Scottish Raptor Study Group is made up of conservation volunteers who monitor raptor populations throughout Scotland on an annual basis. There are regional groups across the country from Shetland in the north to Dumfries & Galloway in the SW. Each group has a number of species co-ordinators who collate nest monitoring data for "their" allocated species submitted to them by group members; these data are then forwarded to the Scottish Raptor Monitoring Scheme, which is supported by Forestry & Land Scotland, Scottish Forestry and NatureScot. National reports are produced annually.

Many group members monitor woodland nesting raptors, and so experience at first hand the benefits and threats posed by woodland management to birds of prey. All active raptor nests (like all other birds) are legally protected in the breeding season under the Wildlife & Countryside Act. Some species are offered additional protection from Disturbance under Schedule 1 of the W&CA.

A high proportion of Scotland's rarest breeding birds of prey (White-tailed Eagle, Goshawk, Red Kite and Honey Buzzard) nest almost exclusively in woodland. A number of other birds of prey are wholly or partially dependent on woodland for nesting (Sparrowhawk, Common Buzzard, Tawny Owl and Long-eared Owl), whilst others may use woodland edge or veteran trees associated with forests (Golden Eagle, Osprey, Merlin, Kestrel).

Most of these managed woodlands do not fall within designated landscapes, but they are crucial to maintaining population levels of these high conservation value species. They provide nest-sites in mature trees for these large species, safety from persecution and disturbance, and provide foraging habitat in its own right for the woodland specialists (e.g., Goshawk, Sparrowhawk and Honey Buzzard).

SRSG members wish to raise concerns about whether UKWAS as currently set out is achieving the requirements of sections 4.4, "Protection of conservation values in other woodlands and semi-natural habitats" and section 4.6 Maintenance of biodiversity and ecological functions

In recent years, our members have become increasingly concerned that extensive felling is removing the very habitat that these rare raptors need for breeding. It is of course in the nature of the forestry industry that mature trees are those next in line for harvesting, but these are also the very trees used by breeding raptors, and for which there is increasingly no alternative mature woodland for them to move to, and which restocking cannot replace within the lifetime of these birds. The challenge is to maintain continuity of some mature woodland through successive rotations. We feel that evidence of maintenance/provision of nesting sites for such species (where present) should be referenced in the guidance for 2.5.1, 2.7.1, and in particular 2.11.1.

PAWS woodlands, ASN woodlands and areas of Natural Reserve are of limited extent, may often not be of sufficient stature for nesting, and may be in the areas of forests preferred by nesting raptors by virtue of their proximity to disturbance, unsuitable size or structure.

Careful management and planning can help to avoid conflict, but we are seeing the replacement of preferred nesting tree species (Larch, Scots Pine and Douglas Fir) with Sitka Spruce, and a loss of the age diversity that should support raptors through a succession of harvesting rotations. Losses include loss of nesting trees of suitable maturity (required by all large raptors), loss of woodland hunting habitat and loss of connectivity of mature woodland coupes. Species such as the Goshawk have traditional nesting ranges where nests are clustered into certain areas of forest. Because their nests are not protected from felling outwith the breeding season, these nesting ranges can be lost to felling almost overnight. Often there are no alternative areas for the birds to move to and few artificial nesting platforms are being provided by forest managers as per best practice advice (FC Bulletins 81 & 118). We believe that the UKWAS framework provides an opportunity for better protection of these High Conservation Value species, primarily through ensuring better liaison between forest managers and local raptor workers and Raptor Study Groups across the UK. We support the changes made in 1.1.1, 1.1.2 and 1.2.1.

[D05 Woodland Trust] UKWAS has requested specific feedback on a number of key areas. The Woodland Trust's general views on these areas is given below – with more detailed comments, where appropriate, under the relevant sub-sections:

1. Sub-sections 3.4 on Integrated pest management and 3.5 on Fertilisers

While noting that the changes shown will require significant adjustments for certificate holders the Woodland Trust supports the changes. The use of herbicide and fertilisers, while remaining relatively uncommon within forestry, should clearly be carefully considered. The emphasis on assessment of risk posed by the target species, the formal consideration of alternatives and the monitoring of success of any use coupled with enhanced risk assessments with

regard to non-target species/habitats and visitors/neighbours/workers are positive moves that once again place UKWAS at the fore front of sustainable and safe forest management when it comes to this aspect.

It is hoped also that these changes will act as a catalyst and move forward across the sector the search for and use of alternatives to pesticides and fertilisers.

The Woodland Trust also views the embedding of the concept of Environmental and Social Risk Assessment with this section of UKWAS as one that will rightly start to become more widely used across other areas of woodland operations. As such again it feels that UKWAS is leading the way in the approach and use of Environmental and Social Risk Assessments.

2. Sub-section 4.3.1 on Management of PAWS requiring that the primary management objective for PAWS is restoration to native woodland.

The threats of climate change, invasive species and tree diseases coupled with the continuing evidence of serious biodiversity declines across all our native woodland flora and fauna groups and the very wooded habitats they rely on, means there has never been a more important time to identify, protect and restore our PAWS sites across the UK. While there is increasing focus on the benefits of increasing new woodland cover, both of native and non-native species, for carbon, economic and environmental benefits this must be coupled with the adequate safeguarding of what is a continually dwindling and under threat native woodland and conservation heritage. Our ancient woodlands clearly can't be created but those planted with non-natives can be restored and therefore the Woodland Trust welcomes UKWAS taking a lead on ensuring these High Conservation Value woodland will remain, just that, of High Conservation Value.

The Woodland Trust hopes that the sector as a whole will embrace this challenge and view this new requirement as a truly long term sustainable environmental legacy resulting from the UKWAS standard.

3. Sub-section 4.8 Protection of cultural and historic environment sites – has the working group adopted right terminology to describe cultural and historic environment aspects? See also Glossary definitions of Cultural features, Heritage assets and Historic environment.

The Woodland Trust supports these changes as it feels this brings UKWAS in line with the terminology and understanding of this area. These changes simply brings UKWAS in line with the Cultural, Heritage and Historic environment sector and most importantly recognises the important role woodlands especially our ancient woodlands and veteran trees still play and have played in the life of local communities and people.

4. Glossary - Lower-impact silvicultural systems (LISS) and Lower intensity forest management approaches - the working group seeks views on replacing the term 'LISS' with 'Lower intensity forest management approaches' as defined in the glossary.

The Woodland Trust supports these changes as it feels this brings UKWAS in line with the present understanding, wider adoption and direction of travel across the sector with regard to the adoption of such systems and approaches.
[E01 James Jones & Sons Ltd] UK Commercial timber is a critical part of the requirement to de-carbonise our economy. The UK imports over 80% of the timber the country requires, and other countries also import large amounts. As the global demand for timber increases, we should be benefiting from the robust standards and laws already in place within the UK as detailed (for example) within the UK Forestry Standard and be looking to supply increased timber volumes for UK construction via our advanced and integrated wood processing sector. We require to limit our reliance on imported timber where our control in terms of supply volume and environmental safeguards is far more limited. UKWAS to date has traditionally ensured that the core PEFC and FSC values (biological diversity, benefits to local people and woodland economic viability) were delivered via the variety of legal measures already in place within the UK. However, this planned revision largely fails to enable professional foresters to develop modern forests delivering multi-use benefits with commercial forestry as a central pillar to (largely) pay for such design improvements. The UKWAS 5 proposals would clearly further reduce the commercial viability of many woodlands, making it harder to achieve the standard and thus reducing the impact and scale of UKWAS. Such changes, including the increased administrative burden, will likely further reduce the economic viability of certified timber. At present UK wood processors are only just able to maintain their required 70% minimum of UKWAS volume to enable PEFC and FSC certification. Changes such as that proposed 4.1.1. & 4.3.1 have the real potential to greatly lessen any economic return, and UKWAS volumes to a point where volume credit systems will have to be adopted, leaving a significant volume of UK timber “uncertified” and so disadvantaged in the marketplace. James Jones therefore strongly recommend, that this process to UKWAS 5 be suspended until such time as the UK Forestry Sector can agree a reasonable and logical progression based on UK risk, costs and benefits. Critically the status of the provided guidance requires further clarification to prevent examples which are beyond the scope of UKWAS being regarded as part of this forest management certification standard.
[F01 SEPA] SEPA applauds and congratulates the working group on incorporating consultee responses to the first draft consultation and delicately weaving those into this second draft, many of our suggestions have been included. The most noticeable difference is document language and the simplification of terminology throughout the document which will reduce sector confusion and improve compliance. SEPA has inserted further comments, some of which were provided in the first revision and we would encourage you to consider incorporating those in the sections highlighted. The following comments are more introductory/holistic for consideration: UKWAS needs to harmonise with the vision and priorities contained within Scotland’s Forestry Strategy 2019-2029, Implementation Plan 2020-2022 and most importantly UKFS which is under review. Reference can be made in general terms to devolved forestry Policy of member countries rather than a list of

individual devolved nations agendas or a diagram showing how pivotal UKWAS is to the documentary world around it. Current text is more standalone despite odd references to UKFS. Perhaps the Infographic can cover this ? The issue of consequence management needs to be included to outline how important it is for consumer confidence, environmental protection and company reputation to comply fully with the standards. A brief outline of what can potentially occur for not complying would assist in clarifying the message.
[F02 Historic Environment Scotland] Thank you for your invitation inviting comments on the UKWAS 5 Second Revision Draft. With regard to item 3. in the 'Questions for stakeholders', we are content with the terminology used in the draft standard to describe cultural and historic environment aspects With four separate national statutory historic environment government agencies and multiple local authority archaeological services and special interest groups slight variations in terminology across the UK are inevitable. However, we do not consider that the terms used in the draft standard are likely to lead to any significant misunderstanding of the requirements or thrust of the guidance. We hope our previous comments and those below on the Second Revision Draft are helpful. If you would like any further input from us at this stage or have any questions please contact Richard.Heawood@hes.scot
[F03 NatureScot] Thank you for this opportunity to comment on the latest draft of the UKWAS standard. NatureScot made three key points in our submission to UKWAS earlier in the year. We note that the conversion of forest land to restored peatland has been included in the draft but the other points have not been adequately covered. a) Ensuring Areas and features of high conservation value are in good condition [Comment reproduced under UKWAS 4.1.1, 4.2.1 and 4.4.1.] In our previous comments we recommended that, to address the nature crisis, UKWAS should include a requirement for areas of high conservation value to be brought into good condition. Our concern with the previous version of the Standard was that it did not require improvement on conservation objectives. In several paragraphs it used the phrase 'Areas and features of high conservation value' to be 'maintained and, where possible, enhanced' (4.1.1). This phrasing allowed compliance whilst areas of high conservation value are maintained in poor condition. The new draft Standard (V5) does not address this concern, as there is no requirement to restore damaged areas and features of high conservation value. The most significant change in para 4.1.1 b for protected woodlands suggests that these areas and features 'are maintained and brought into good condition over time'. The final words 'over time' do not provide sufficient clarity on the expected timescales for woodland managers to do any restoration now, and could be conceived as consigning that obligation to an unspecified point in the future. For ancient semi-natural woodlands (4.2.1d) and semi-natural habitats (4.4.1b) the wording is unchanged at 'conservation values are maintained and where possible enhanced' a phrasing which we consider to similarly remove any requirement for woodland managers to do any restoration.

Hence, our recommendation is that UKWAS includes wording in sections 4.1, 4.2, 4.4 that requires areas of high conservation value to be brought into good condition within a fixed timescale – perhaps 5 years. The definition of good condition needs to be agreed with the statutory conservation agencies, but for protected (designated) woodlands would be the standard definition of 'favourable condition'.

As a further clarification, in this context good condition means that key stressors – like high grazing levels or rhododendron – are removed, and the area can develop in a natural way. It doesn't seek impossible outcomes like instant old trees or deadwood.

b) % Area assigned to prioritise nature and conservation [Comment reproduced under UKWAS 2.11.1.]

Our second concern with the previous version of the Standard was that it retained the 15% allocation of Woodland Management Unit area to conservation objectives. This has not changed in the latest version. Scottish and Westminster governments, as well as the EU have accepted the need for a 30% allocation of land towards conservation, and it seems to us that UKWAS needs to reflect this – and also to do more to tackle nature loss across the countries of the UK. We accept that this change could be phased in over a period to accommodate the harvesting of existing stands, and thus an implementation period of 10 years (or more in exceptional cases) would be a reasonable target.

Hence, our recommendation is that UKWAS requires that woodland management makes changes providing an allocation of 30% of land to conservation objectives, to be implemented over 10 years (or more in exceptional cases)

c) Conversion to non-forested land [Comment reproduced under UKWAS 2.13.2.]

We are content with the changes that allow an 'exceptional circumstances' exemption from the new 5% limit, with the key issue in our view being the restoration of peatland from inappropriate or unproductive planting.

[G01 FSC UK] We would again ask the UKWAS Working Group to consider making an explicit reference to the FSC National High Conservation Value Framework as a tool for the identification, management and monitoring of HCVs. We are concerned that the dispersed way in which HCVs are addressed in the standard (in sections 2.3.1, 2.11.2, 2.15, 3.1.4, 4.1, 4.2, 4.3, 4.5, 4.8, and 5.1.2) can lead to inconsistent treatment of the different categories. We have made a number of specific comments highlighting areas where UKWAS does not appear to thoroughly or consistently address FSC requirements under Principle 9.

We note that a number of issues have proved difficult for the UKWAS Working Group to resolve, e.g. historic environment terminology, and terminology around LISS/CCF. We remind the Group that a number of individuals and organisations have offered their services as technical experts, and suggest that

experts be invited to meetings to address specific issues. In addition to the experts listed during the review process, this could include Duncan Pollard, who in the first consultation offered to provide further input on living wages/income.

Guidance should be checked for consistency in the use of words such as 'could' or 'may'. In particular, as a defined term, 'may' should be used as defined or replaced with wording such as 'might'. For reference, 'should' indicates that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, 'may' indicates a course of action permissible within the limits of the standard, and 'can' is used for statements of possibility and capability, whether material, physical or causal.

[G02 PEFC UK] There is no space for comments on the references, so have put this here.

It would be useful for PEFC if the Reference appendix on the web site included the following
ILO Code of Good Practice: Safety & Health in Forestry Work 1998
ILO 182 Worst Forms of Child Labour Convention 1999
UN Universal Declaration of Human Rights 1948
Stockholm Convention on Persistent Organic Pollutants 1998

[H01 BASC] The British Association for Shooting and Conservation (BASC) is the largest shooting organisation in the UK with approximately 150,000 members, many of whom are involved in the management of forests and woodlands, as these form one of the major habitats for gamebirds and other quarry species. Around 24% (35,000) of our membership are also active deer stalkers and therefore have a major part to play in the management of our national deer herd. The majority of our members are involved in game shoots where grey squirrels are controlled and BASC has supported a number of grey squirrel management projects across the UK. We are a member of the Deer Initiative Partnership and the UK Squirrel Accord.

[M03 Scottish Land Commission] I have been asked to review this draft for alignment with the Scottish Government's Land Rights and Responsibilities Statement. All my comments are in reference to the Statement and its accompanying Protocols.

Land Rights and Responsibilities Statement and Protocols

LRRS Principle	Relevant Protocol / Guidance	Link
All	Scottish Land Rights and Responsibilities Statement (LRRS)	Scottish Government LRRS
Transparency	Protocol: Transparency of Ownership and Land Use Decision Making	SLC Website
	Practice Guide: Land Use and Management Template	SLC Website
	Protocol: Engaging Communities in Decisions Relating to Land	SLC Website

Community engagement	Practice Guide: Developing an Engagement Plan + Route Map, FAQs, case studies, templates & resource guides	SLC Website
	Watch: Webinar	SLC YouTube
Diversification of ownership and community ownership	Protocol: Diversification of Ownership and Tenure	SLC Website
	Protocol: Negotiating Transfer of Land to Communities	SLC Website
	Practice Guide: FAQs & Route-map and case studies on Diversification and Negotiated Transfers	SLC Website
	Watch: Webinar 'Diversification of Ownership & Tenure & Negotiating Transfer of Land to Communities'	SLC YouTube
Good stewardship	Protocol: Good Stewardship of Land	SLC Website
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Contents
[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] The change from rural to local is a good move taking into account those woodlands on the urban fringe, a resource that is under used. However the term 'local' does rise the issue of what is local and is there are quantifiable distance to this. Given we are a small country in comparison to other timber producers such as Russia, USA, Canada would local mean a region or the whole country. It is only of concern if there is a requirement to evidence supporting local businesses and would a WMU be in breach if it sent timber to a mill further away for a better price, or used a contractor from a considerable distance, would this negatively impact the use of foreign labour for restocking? Could the UKWAS definition be altered to include local as meaning UK?
[A05 Buccleuch Estates] No issues, comments made against specific points later in document.
[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] The structure remains robust.
[D03 RSPB] The standard is well organised and comprehensive. It would help if some cross referencing in the text was used to ensure that readers attention was drawn to linked requirements or guidance as appropriate, but we appreciate such editing can also add to length.
[E01 James Jones & Sons Ltd] The term 'local' requires to be further clarified i.e. what is local and is there are quantifiable distance to this. For example, could the UKWAS definition be altered to include local as meaning UK?
[F01 SEPA] Contents Section 2.9 in addition to Introduction of Non native species, there needs to be inclusion of "Management of non-native species" in woodlands eg Himalayan Balsam, Japanese Knotweed, Giant Hogweed and North American Signal Crayfish.

Introduction

1. Background and purpose

[A02 Seafield & Strathspey Estates] The adaption to include the elements in the last paragraph is valid but the manner in which this is implemented and audited must take into account the predominantly plantation nature of UK forestry and the need to produce marketable produce from woodlands to enable the delivery of the non timber aspects of woodland management and to mitigate against the default offshoring of our own timber requirements. At present, however valuable ecosystem services are, it is seldom possible for these to be monetised by the forest owner. Most of the ecosystem services work is paid for out of the revenue generated by forest products, in the main timber, unless the woodland owner has access to charitable, social or state funding, all of which are less reliable than sustainable timber revenues.

[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] It is agreed that UKWAS needs to adapt to reflect current issues, but it must ensure that it does not go so far that it prevents economical management of woodlands. In the majority of sites it is the timber produced and sold that pays for the other operations to be carried out. If the timber is poorly managed and of little value there is less cash to put back into the site. There must be a balance for all aspects and tipping the scales to one side means the others lose out.

[A05 Buccleuch Estates] It is agreed that UKWAS needs to adapt to reflect current issues, but it must ensure that it does not go so far that it prevents economical management of woodlands. In the majority of sites it is the timber produced and sold that pays for the other operations to be carried out. If the timber is poorly managed and of little value there is less cash to put back into the site. There must be a balance for all aspects and tipping the scales to one side means the others lose out. The principle of cross subsidisation is still very relevant. The commercial timber element pays for the management and increasing levels of administration of the biodiversity and social elements. If the commercial element is squeezed too far then there is less available for the others.

[A06 Moray Estates] Whilst it is important for recent revisions of the UKWAS standard to reflect non timber products there should be a requirement for the standard to focus on sustainable production of timber and wood fibre. It is recognised that woodland management and operations need to assist in the goal towards Net Zero and that in situ, ex situ Carbon storage and GHG heavy substitution plays a primary role in that Net Zero aim. Producing timber and wood fibre whilst at the same time achieving other non timber benefits (biodiversity, soil health, water conservation/management and social benefits should be the primary purpose of UKWAS.

[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] Welcome the additional text.

[B23 Andrew Heald] If we are to tackle climate change then we will need to decarbonise our economy. That will require a great er use of timber and fibre, and less use of high energy material like concrete and steel. “Greater focus on practices that enhance carbon storage in trees and soils and reduce greenhouse gas emissions from woodland operations.” Is simply not enough. There must be greater focus on the role of forest products in a wider circular bioeconomy https://www.fao.org/documents/card/en/c/cb7274en

[B24 CCFG] We would stress that greater use of CCF will reduce soil disturbance (as recognised in UKFS) and therefore limit disruption to carbon storage in soils. Thus the last sentence could be revised to read: '[…] greater focus on lower intensity management approaches such as CCF that enhance […]'.
[E01 James Jones & Sons Ltd] It is clear that UKWAS needs to evolve to reflect current issues, but it must ensure that commercial forestry remains central to the rationale for both new wood creation and re-stocking. Generally, timber revenues enable the variety of environmental and social benefits to be realised.
[F01 SEPA] The relationship between UKFS and UKWAS at a UK level needs to be promoted in the Introduction to show how the two vitally important documents are interwoven and synergistic. Current text doesn't go far enough to reflect how important environmental compliance [UKFS] is to achieving good certification [UKWAS]. Additional text or a diagram outlining the importance of achieving good environmental compliance and UKWAS certification would be beneficial for clarity and direction.
2. Procedures for use of the certification standard
[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] [Re. research sub-section] By removing "long-term" removes the opportunity to recognise support of important research such as tree breeding and genomics for improved planting stock. Should this not include and the development of markets for wood fibre.
[B22 Scottish Woodlands Ltd] Third-party rights - leases, burdens in title, ownership rights and legal restrictions on management We are seeing a lot of powerline infrastructure created through certified woodlands which is causing problems for compliance. Could the standard say something helpful here? These clearances may frequently be in excess of 0.5% in one year or 5% in total.
[D03 RSPB] This may be the appropriate place to mention how any complaints can be dealt with and how interested parties can constructively raise issues of potential noncompliance with managers of certified forests, and then should it be necessary, how to involve UKWAS or the relevant certifying body in any follow up. An open and transparent way of resolving issues raised around potential noncompliance is the hallmark of trusted schemes that win and maintain public confidence.
[F01 SEPA] UKWAS needs to include 'consequence management' of not complying with certification standards and what potential impact this will have on economic value of timber and product quality. This would strengthen the link between environmental performance, certification compliance and consumer confidence in wood products and kite marks on those products. This could be covered in diagrammatical fashion and linked to previous comments on UKFS/UKWAS links.
[K01 Grown in Britain] How would an owner be able to demonstrate this text? The owner/manager should consider contributing to and/or supporting relevant research activities which benefit the ~~long-term~~ future management of woodlands.

[M03 Scottish Land Commission] In terms of **Third Party Rights** where woodland activities are likely to impact the exercising of these rights, it is relevant to cite the principles and expectations of good practice as set out in The Protocol on Community Engagement in Decisions Relating to Land and the Route Map for community engagement. Citing the above Route Map would also be helpful in the section titled **Application of the certification standard to different scales of woodland management unit and intensities of operation,** as it helps guide people to assess where their activities have a significant impact.
3. Interpretation of the certification standard

Using the certification standard

[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Add felling license/felling permission (In Scotland felling permission)

[F01 SEPA] The change in wording and move away from confusing terminology is welcomed and offers clarity of message and avoids ambiguity.

However, under Requirements section, the term “relevant requirements” is confusing as text then states that requirements are mandatory and must be met. The term relevant suggests priority ranking and/or assessment [by whom and how] and needs to be deleted or amended.

[K01 Grown in Britain] International standards (and BSi) use the following verbal forms to identify what is a requirement, recommendation, permission or possibility.

ISO recommends
Verbal forms
In all clauses, be clear about what is a requirement and what is
a recommendation or other type of statement. In order to make
clear what the user must do, the following verbal forms are used
in ISO documents:

- Requirements – shall, shall not
- Recommendations – should, should not
- Permission – may, need not
- Possibility and capability – can, cannot

https://www.iso.org/files/live/sites/isoorg/files/developing_standards/docs/en/how-to-write-standards.pdf

BSi recommends

Table 3 – Verbal forms

Verbal form	Implication	Typical context
shall	requirement (see **7.2**)	normative element of a specification or test method
should	recommendation (see **7.3**)	normative element of a code of practice or guide informative element of a specification or test method
may	permission (see **7.4**) (within the stated limits of a standard, to adopt a particular course of action)	informative element of any standard
can	possibility and capability (see **7.5**)	informative element of any standard
might	possibility (see **7.5**)	informative element of any standard
is	description (see **7.7**)	normative element of a test method informative element of any standard
will	ambiguous (see **7.8**)	informative element of any standard (avoid where possible)
must	ambiguous (see **7.6** and **7.8**)	do not use in any standard

https://www.bsigroup.com/Documents/standards/guide-to-standards/Rules-for-structure-and-drafting-of-UK-standards-2017.pdf

Eliminating shall from the text is an unusual approach to standard writing and could make it difficult to understand what is a requirement and what is a recommendation i.e. what is normative and what is informative. Auditors are trained to interpret standards and the terminology is key to allowing them to understand the provisions. I would suggest that this deviation from the norm may lead to some auditors and someone writing a management plan misinterpreting requirements as recommendations.

1. Legal compliance and UKWAS conformance

1.1 Compliance and conformance

1.1.1 [K01 Grown in Britain] Is this normative or informative

1.1.2 [D03 RSPB] Where WMU sites are wholly or partly notified as SSSI/ASSI the statutory conservation agency will from time to time assess the condition of the notified features. This may require adjustments or corrective action by the owner/manager. Will such requests be captured as part of the audit given the owner/manager will not necessarily have undertaken anything proactively that needs the SNCO consent? Can it be made clearer in the verifier or guidance?

[F01 SEPA] The use of the phrase in column 1 "Conformance to the spirit" is too weak and should be replaced with the term "compliance with any relevant codes" as from SEPA's perspective these are legal obligations and must be met. Ties in the previous introductory sections which states that requirements are mandatory. Likewise, under Guidance column "aiming to achieve" is too weak and open to [mis]interpretation. Owners/managers must meet the principles set out within codes of good practice and guidelines.

[K01 Grown in Britain] Is this normative or informative?

[M03 Scottish Land Commission] Could the Appendix of References include links to the Scottish Government's Land Rights and Responsibilities Statement and Accompanying Protocols? Ideally also the Route Maps I have referred to in relation to my responses to various sections – as they are very useful and directly practically applicable.

LRRS Principle	Relevant Protocol / Guidance	Link
All	Scottish Land Rights and Responsibilities Statement (LRRS)	Scottish Government LRRS
Transparency	Protocol: Transparency of Ownership and Land Use Decision Making	SLC Website
	Practice Guide: Land Use and Management Template	SLC Website
Community engagement	Protocol: Engaging Communities in Decisions Relating to Land	SLC Website
	Practice Guide: Developing an Engagement Plan + Route Map, FAQs, case studies, templates & resource guides	SLC Website
	Watch: Webinar	SLC YouTube
Diversification of ownership and	Protocol: Diversification of Ownership and Tenure	SLC Website
	Protocol: Negotiating Transfer of Land to Communities	SLC Website

	community ownership	Practice Guide: FAQs & Route-map and case studies on Diversification and Negotiated Transfers	SLC Website	
		Watch: Webinar 'Diversification of Ownership & Tenure & Negotiating Transfer of Land to Communities'	SLC YouTube	
	Good stewardship	Protocol: Good Stewardship of Land	SLC Website	
		Practice Guide: Supporting Information for Good Stewardship of Land	SLC Website	
		Watch: Webinar 'Good Stewardship of Land'	SLC YouTube	
1.1.3	[M03 Scottish Land Commission] The Protocol on Transparency of Ownership and Land Use Decision Making can provide guidance here, as can The Protocol on Community Engagement in Decisions Relating to Land and the Route Map for community engagement.			
1.1.4	[B01 Rebecca Haskell] If crofting rights have been added as an example, should turbary / peat-cutting rights also be added as an example ie to cover areas such as Northern Ireland and/or if there are peat- cutting rights in Scotland that are not related to crofting tenancies…			
	[F01 SEPA] Change Water supplies to water supply sources and transfer pipework.			
	[K01 Grown in Britain] Is this normative or informative?			
	[M03 Scottish Land Commission] The Protocol on Community Engagement in Decisions Relating to Land and the Route Map for community engagement are relevant guidance here.			
1.1.5	[F01 SEPA] 1.1.5 [a] Its not just protection of woodland ecology integrity in the long term but the short term also.			
	[K01 Grown in Britain] Is this normative or informative			
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here.			
1.1.6				
1.1.7	[B20 ICF] We agree that planting stock should be UK-grown for biosecurity and economic reasons. However, there can be resilience reasons for choosing seed from more southerly sources, so wording about a preference for UK origin needs to take this into account.			
	[D05 Woodland Trust] Increasing importance is being placed around the sourcing of trees for planting and restocking requirements with regard to biosecurity and phytosanitary considerations as the number and incidents of new introduced tree pest and diseases continues to increase. There is an increasing emphasis on UK-grown planting stock, accredited biosecure nurseries and quarantine periods for imported stock. While some aspects are covered by legal compliance and so relevant to section 1.1.7 of UKWAS such as plant passporting much of this area remains outside of legal requirements for the present time and falls largely under "best practice" and "voluntary approaches & schemes". It is likely many of these aspects will remain outside of legislation when UKWAS 5 is released. It is felt, therefore, that for UKWAS to be seen to be leading the way in			

	protecting UK commercial and native woodlands from imported tree diseases and pests that UKWAS should consider creating a specific requirement around seed and tree sourcing –within section 2 of UKWAS. This would allow UKWAS to consider more fully the potential and value of creating UKWAS requirements and guidance with regarding to the non-legal aspects relating to sourcing of tree seed and trees.
	[G01 FSC UK] Based on guidance from FSC International on indicators for foodstuffs, we recommend replacing the new guidance on UKWAS 1.1.7 with a separate requirement along the following lines: Proposed new requirement: Where foodstuffs are produced as non-wood forest products, there is compliance with legislation relating to their handling, transportation and trade.
	[K01 Grown in Britain] UK-grown planting stock, preferably from seed of UK origin, should be sourced where it is available, commercially viable and aligned with management objectives. * See also 4.7 on local native seed sources. * We would add the following text here 'Where it is not available, a pest risk analysis should be carried out to ensure that the seed or planting stock risk of introducing/spreading pests and diseases is kept to a minimum.' If not, the above text implies that no precautions are needed if they can't find UK stock/seed.
	[M01 Graham Gill] I don't have a detailed response to the consultation, but I have been looking out for possible interpretation issues. In section 1.1.7 guidance, is the "seed preferably of UK origin" intended to apply to non-native species? By definition, these can't be of UK origin. UK provenance perhaps, but not UK origin. I think that needs clarified to avoid an interpretation issue. Personally, for climate resilience reasons, I would delete "preferably of UK origin" in this part of the guidance, but that is a Standard issue, not an interpretation one.
1.2 Protection from illegal activities	
1.2.1	
1.3 Genetically modified organisms	
1.3.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] In the fight against Grey Squirrels, the use of gene editing is currently being researched and the results so far are promising. DEFRA are also undertaking a review of the wording and potential use of GM organisms. The wording here should be altered to allow for research to be carried out use GM organisms in certified WMU. Or that UKWAS will follow national regulations or evidence which may allow organisms with altered genes to be made and released.

	Gene editing for GS is looking to put a block in the transmission of a chromosome which will in affect render all off spring to be male. The impact of this does not affect the health of the animal but rather it reduces the population of females, which over time changes the population from increasing to decreasing.

2. Management planning	
2.1 Policy and objectives	
2.1.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] In guidance it states 'Economic viability need not be based on, or solely on, the sale of products from woodland. Income from other sources, such as membership subscriptions, government funding or private investment, may be sufficient to achieve the policy and objectives of management.' This should be changed to show that the WMU produces a minimum amount of sustainable timber and or NWFP to account for example. 30% of the economic sustainability of the site. This change would require sites currently managed with little or no intervention to actively bring timber or products to the market. These type of sites then would benefit the local economy via jobs and products as most would be suitable for the local market rather than a national market. However as the technology to use different species in construction develops it will also help to ease the raw material crisis that the UK is facing as the timber can be used in more ways.
	[A05 Buccleuch Estates] It must be accepted and possibly included in the glossary that not all owners have the luxury of public subscription and government support is variable over time. Therefore the majority of subscribers to the scheme will be paying for the management of the woodlands through the revenue generated by timber sales. The economic sustainability of the woodland management must not be overridden or other management objectives will suffer.
	[A06 Moray Estates] Whilst economic viability need not be based solely on the sale of wood products from woodland and certainly income from other sources, such as membership subscriptions, government funding or private investment, may be sufficient to achieve the policy and objectives of management there should be a requirement for the sale of wood products to be a long-term, sustained, and significant proportion of the economic viability of the woodland. My suggestion is that at least 70% area of a WMU is used primarily for sustainable timber production. Without the clear connection to timber production used by wider society in a low carbon society there risks a further disconnect away from the founding rationale for woodland certification. Without a clear connection to sustainable timber production there is a risk that the timber resource used by UK population is simply off-shored and sustainable timber production in the UK is marginalised in subsequent policy drift led by groups with no requirement to operate as primary producers. Without a clear connection to timber production there is a risk that resilience in timber production and the wider environmental benefits of transitioning away from Green House Gas (GHG) heavy products is impeded. In summary there should be a sense check in the Policy and Objective setting and auditing/testing of these objectives.

	The sense check should be to think like a primary producer such as a 'Nature Friendly Farmer' or an 'Agroecologist' (as defined by the Soil Association). In either of these producer groups, **not** producing a primary product (and instead relying on subscription) is not seen as a success – that is a 'Toy Farm' or 'Hobby Farm'. Whereas producing a product for consumption is very much seen as a success and core to sustainable production. It should be noted that RSPB's network of Demonstration Farms have a key objective to "To develop a network of demonstration farms which show how to combine profitable, productive farming with wildlife" (https://www.rspb.org.uk/our-work/conservation/projects/rspb-advice-and-support-for-farmers-across-the-uk/). That laudable objective clearly makes sense from a farming perspective and the logic of the objective must transfer through to UKWAS as we recognise that sustainably produces ex-situ wood products are an essential element of Net Zero. There are of course roles for woodlands that do not produce sustainable timber for society, and they could be classes as natural reserves or 'wilded' areas. They could and should be part of a WMU within UKWAS, but if solely managed for this objective, then a different management scheme should be used… perhaps a statutory designation such as a SSSI should be the aim? Perhaps a Natural Capital Certification Scheme is more apt for solely non sustainable timber producing woodlands (WMU's) Just as a woodland managed to UKWAS should have to produce sustainable yields of timber and wood products, then woodland should demonstrate their steps towards greater resilience. This objective should challenge the least resilient plantations and woodlands to restructure to achieve better resilience within the WMU level. There should include a default to utilise thinning in order to maintain the window of opportunity to convert from clearfell silviculture to CCF with a view to future option and species diversity within WMU's and where appropriate at a stand level. The use of regular thinning interventions counters the charge that plantations are not providers of regular employment for the rural workforce.
	[B02 Stuart Wilkie] One of the best adaptions to climate change is for woodlands to be productive. By removing timber and using it wisely the woodland will continue to absorb CO2 more rapidly and not reach a plateau. If woodlands are not being managed primarily for timber production or for NTWP then management planning should at least identify what Ecosystem Services they are providing and how these are to be permanently sustained and monitored.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Poor wording in requirement 2.1.1 a) …viable, and takes account of the need for forest resilience. (i.e remove the words full and embed)
	[B24 CCFG] We suggest a new requirement is inserted between the existing Requirements a) and b) with the wording: 'The owner/manager has considered the adoption of a lower intensity management approach such as CCF across all or part of the WMU as a means both of achieving an appropriate balance of objectives and of developing forest resilience.' The appropriate Guidance would say something like: 'In many

	circumstances, although not all, the adoption of a continuous cover forestry approach can be best suited to meeting a range of public and private objectives'.
	[D01 Soil Association] Not surprised that 'consideration of the carbon balance' has been removed [from guidance]. We highlighted the challenges of doing this in practice, at 1st consultation.
	[D03 RSPB] The term 'environmentally sound' is very open in its meaning. And can mean different things to different people. It also lacks any sense of continuous improvement or ambition. It would be preferable if it was Environmentally sound and contains ambition to improve the WMU over time for its contribution to nature recovery and the needs of the climate.
	[F01 SEPA] Unsure what "environmentally sound" looks or feels like in this context. Change to "environmentally beneficial" as extant legislation refers to protecting and improving Scotland's natural environment which is incumbent on all forestry practitioners.
	[K01 Grown in Britain] Forest resilience includes the provision for the effects of climate change. We would expect there to be some long term vision that the woodland will be able to adapt to a changing climate. We would suggest adding the following text in blue. This should include consideration of the effects of various woodland management practices on carbon sequestration and storage in trees and soils across the WMU. It should also include consideration of our changing climate and how those trees will be able to survive as our climate warms.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here, as are the Protocols on Transparency of Ownership and Land Use Decision Making and The Protocol on Community Engagement in Decisions Relating to Land. The Route Map for community engagement can help guide people towards identifying when and what type of engagement is good practice.
2.1.2	[A05 Buccleuch Estates] The carbon reduction by the use of renewable timber instead of steel or concrete should be allowed to be factored into the planning here.
	[B23 Andrew Heald] There MUST be specific reference to the carbon benefits of substituting high energy materials such as concrete, steel and plastics, for timber and fibre. And the urgent need for all certified woodlands to contribute to the wider bioeconomy https://revolve.media/the-bioeconomy-bringing-life-to-the-center-of-our-economy/
	[D01 Soil Association] Consider clarifying what is meant by 'takes fully into account'. Is the manager required to do anything beyond 'taking into account' these impacts? Does 'take into account' imply specific action regarding negative impacts or just awareness of? Equally, does a forest manager need to demonstrate 'awareness of' something by taking any management action? If intent is the intention, then maybe use mitigate or similar to be more specific in the requirement?

	[D03 RSPB] We agree these comments in red. But we remain concerned at the impact of invasive commercial conifer species on such areas within the WMU, and increasingly on to neighbouring ground. It would help if this issue was mentioned in this section and later as required.
	[G01 FSC UK] Rather than deleting 'long-term', it might be clearer to refer explicitly to 'short- and long-term' impacts.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here, as are the Protocols on Transparency of Ownership and Land Use Decision Making and The Protocol on Community Engagement in Decisions Relating to Land. The Route Map for community engagement can help guide people towards identifying when and what type of engagement is good practice. Another issue which is relevant to this point is that of integrated land use decision making. The WMU is in its context and good stewardship of it requires an integrated land use perspective. This point is likely to form part of our upcoming Natural Capital Protocol.
2.1.3	[A02 Seafield & Strathspey Estates; A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Point b – the extra wording 'all the requirements of' is not required. Either you meet the standard or you don't and if you don't meet the standard then the proscribed actions by the scheme and auditors will be undertaken.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Point a – many of the changes in this document are at odds with point a.
	[B02 Stuart Wilkie] The first paragraph of guidance seems at odds with the requirement and perhaps belongs with 2.1.2.
	[B22 Scottish Woodlands Ltd] Without long-tern economic viability no woodland is sustainable. This must be taken into account throughout the standard when writing other requirements.
	[D03 RSPB] Maximising income can lead to conflicts with the climate and nature requirements or opportunities. Should this not be a more balanced requirement? Or is this covered by the section in yellow above?
	[E01 James Jones & Sons Ltd] Point a – many of the changes proposed run contrary to 2.1.3 a)
	[F01 SEPA] 2.1.3 [a] and [b] refers only to economics and economic viability. Sustainable forest management as set out within Scotland's Forestry Strategy 2019-2029 is'nt just about the money, it includes environmental and social viability therefore these 2 factors must be included under the viability heading to ensure parity. Disappointing that a good opportunity has been missed here to include the value of Natural Capital in the planning section to widen the long term planning objectives, crucial to delivering Scottish Government's climate change and biodiversity crisis agenda's. The basic principles of natural capital would add value to this section and the findings from the nat-cap UK study at Larriston would support this.

	[K01 Grown in Britain] Economic viability also depends upon those trees being able to adapt to our changing climate and ability to withstand potential new pests and diseases. We suggest adding the text in blue below …and tree densities and other woodland management are designed to achieve long-term economic viability. This would include consideration of our changing climate and species that are selected for forest resilience to this and future pests and diseases.
2.2 Documentation	
2.2.1	[A02 Seafield & Strathspey Estates] Point C – asking for positive impacts as well as negative is a good thing, however it does double the work required to evidence this point.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Point C – asking for positive impacts as well as negative is a good thing, however it does double the work required to evidence this point, especially on land which may be out of the control of the WMU owner / adviser.
	[A05 Buccleuch Estates] Point C – asking for positive impacts as well as negative is a good thing, however it does double the work required to evidence this point. This can become a formidable task for complex woodlands and is one case of the incremental costs of compliance with more diverse woodlands. It will not encourage owners to progress down this path.
	[B02 Stuart Wilkie] Where a woodland is being managed purely for ecosystem services there should be an assessment of what those are, and how the level of service is to be permanently sustained?
	[B23 Andrew Heald] c) Assessment of environmental values, including those outside the WMU potentially affected by management, sufficient to determine appropriate conservation measures and to provide a baseline for detecting possible positive and negative impacts. If owner/manager proposes to convert a PAWS or HCV woodland to wholly native species then to comply with this requirement they would need to fully assess the carbon impact, including increased timber importation and/or the increased production of cement and steel, to replace the lost timber production.
	[C01 DAERA Forest Service] A Veteran tree management strategy and a Historic environment site management plan may be appropriate as Guidance in some cases. In other areas better example verifiers would be detailed in forest management plans.
	[D01 Soil Association] 'Taken into account' again [in guidance]?
	[D03 RSPB] Add to management planning documentation a requirement to identify and plan for the needs of any specially protected or priority species that is found to occupy the WMU, a combined species plan would be sufficient in most cases.

	[D05 Woodland Trust] The Woodland Trust welcomes and supports the inclusion of the Veteran tree management strategy and Deadwood conservation plan within the guidance on elements to be included or referred to within a Management Plan. It would however request consideration be given to a slight wording change to better reflect UKWAS guidance and requirements on these areas: • Veteran tree management **and recruitment** strategy • Deadwood conservation **and recruitment** plan
	[E01 James Jones & Sons Ltd] Point C – asking for positive impacts as well as negative is potentially beneficial, however it does double the work required to evidence this point, especially on land which may be out of the control of the WMU owner / adviser. Why are impacts beyond the WMU required to be considered?
	[F01 SEPA] Guidance refers to Deadwood, deer, fire and vet tree health Plans but no mention of Environmental Management Plans to include peat depth, ecology, private water supply sources, historical land drainage, etc. This needs to be included for completeness.
	[F02 Historic Environment Scotland] We welcome the addition of an historic environment site management plan to the list of documents cited in the last paragraph of the guidance.
	[G01 FSC UK] Guidance from FSC International on hunting includes an indicator on management planning requirements, including the following elements: 1. Policies and procedures for game managers 2. Hygiene and food safety regulations in cases that the game is used for food. 3. Maps of all hunting areas. 4. Procedures for monitoring of the impacts of hunting. 5. A general evaluation of the ecological impact of hunting. 6. Procedures for processing, packing and sales (if applicable). We propose that some or all of these could be incorporated under UKWAS 2.2.1 or 2.12.1.
	[M03 Scottish Land Commission] Guidance on good practice can be found in Protocol on Transparency of Ownership and Land Use Decision Making.
2.2.2	[B23 Andrew Heald] About sites which are of special cultural and historical importance to local people, where they have requested confidentiality. Change to About sites which are of special cultural and historical importance, where they have requested confidentiality.

	Whether people are local is largely irrelevant and also difficult to audit.
	[G01 FSC UK] Only making documentation available on request is arguably not very proactive or transparent in an era when so much information is freely available online. Some have argued that summaries of management plans are hardly ever requested, but this may be because stakeholders are not aware that this is an option for them. Consideration should be given to requiring the owners/managers of all but the smallest woods to make management plan summaries publicly available proactively, most obviously via a website. The requirement in Criterion 7.5 to make other relevant components of the management plan available to affected stakeholders on request and at cost is currently only addressed in the definition of 'publicly available'. Consideration should be given to explicitly addressing this in the current requirement or in a new requirement.
	[M03 Scottish Land Commission] Guidance on good practice can be found in Protocol on Transparency of Ownership and Land Use Decision Making.
2.2.3	[D05 Woodland Trust] The Woodland Trust welcomes and supports the clarification provided in the revised requirement a) and the new requirement b).
	[F02 Historic Environment Scotland] We welcome the increased emphasis on keeping management planning documentation current.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here, as is The Protocol on Community Engagement in Decisions Relating to Land.
2.3 Consultation and co-operation	
2.3.1	[A02 Seafield & Strathspey Estates] Point e – Ongoing dialogue, where constructive, is accepted but experience has been that consultees request extensions to agreed response times due to their own workloads and this is not reasonable in enabling timely completion of the management process. A defined consultation period is required after which decisions have to be made with best available information gathered. There is also the issue of vexatious responses which must be taken into account when auditing the response to engagement.
	[A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Point e – same concerns as the March consultation, without a closing date the consultation is always open. Point taken that silence should not be taken as agreement, however if a stake holder wishes to respond to a consultation then the onus is on them to reply in a reasonable time frame. Suggest that once a WMU is certificated the consultation is deem closed until the next management plan review etc
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Evidence that consultation feedback has been assessed and considered – forestry professionals will no doubt read and consider consultation feedback but

	to provide evidence which is likely to be written so it is tangible adds extra administrative work load to a already considerable volume of paper work.
	[A05 Buccleuch Estates] Point f – We would prefer the word “reasonable” between to and issues in the second line. Some are far from any sane person’s understanding of reasonable.
	[B02 Stuart Wilkie] Engaging with the forest workforce and those in the timber industry has been a low priority, especially where consultation has been driven by forest authority requirements. Therefore, we welcome the guidance on engagement with this constituency. However, might I suggest that this could be done at a higher level than the WMU level? Could be done at a main certificate level perhaps once every 5 years?
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] For **timber transport issues** should read “consult with the regional groups from the timber transport forum” i.e not local timber transport group. For **biodiversity issues**…remove the word local experts (as local not required) For **historic environment issues** should read relevant nature groups (correct expertise more important than local) Verifier “Evidence that consultation feedback has been assessed and considered” – forestry professionals will no doubt read and consider consultation feedback but to provide evidence which is likely to be written so it is tangible adds extra administrative work load to an already considerable volume of paper work.
	[B22 Scottish Woodlands Ltd] Engaging with the forest workforce and those in the timber industry has been a low priority, especially where consultation has been driven by forest authority requirements. Therefore, we welcome the guidance on engagement with this constituency. However might we suggest that this could be done at a higher level than the WMU level? We would suggest that this could be done at a main certificate level perhaps once every 5 years?
	[D03 RSPB] This section is important. We are aware of a regular but growing ‘rumble’ of complaints about poor consultation that then leads to management that adversely affects the biodiversity interest of woodlands. Whilst this will obviously include woodlands not held within UKWAS, some certainly do. The last section in guidance in yellow is therefore very important to engender trust and cooperation. Again developing a plan for specially protected and or priority species as suggested for 2.2.1 would start the process of building relevant contacts with data holders eg raptor groups, Wildlife Trusts and others.
	[E01 James Jones & Sons Ltd] Point e – as per comments received within the March 2021 consultation, without a closing date the consultation is always open. Suggest that once a WMU is certificated the consultation is deem closed until the next management plan review etc.

	[F01 SEPA] For private water supplies, owner/managers should also contact the Local Authorities who hold a record of private water supplies and also a risk register of source waters.
	[F02 Historic Environment Scotland] We welcome the additional paragraph in the guidance relating to consultation on historic environment issues.
	[G01 FSC UK] UKWAS 2.3.1(c) does not explicitly address engagement of stakeholders in HCV monitoring, and does not address engagement with experts, as per Criterion 9.4. UKWAS 2.3.1(f) could more explicitly address the identification and avoidance of the full range of significant negative social, environmental and economic impacts, as per Criterion 4.5. It could also explicitly address proportionality of actions to identify and avoid risk, as per the Criterion: 4.5 The Organization, through engagement with local communities, shall take action to identify, avoid and mitigate significant negative social, environmental and economic impacts of its management activities on affected communities. The action taken shall be proportionate to the scale, intensity and risk of those activities and negative impacts.
	[M03 Scottish Land Commission] Most of what is set out here is well aligned with the expectations in the Protocol on Community Engagement in Decisions Relating to Land. However, there are some differences in the expected timeframes relating to consultation, engagement and response. See points e) to g) below for the timeframes set out in the above protocol. For info, the key principles and expectations within that protocol are: **Protocol on Community Engagement in Decisions Relating to Land** General Principles The Scottish Government's Guidance sets out the following broad principles, which also provide the basis for the Specific Expectations below. It is expected that all interested parties will adhere to these general principles: i. Communities can reasonably expect to be engaged in decisions about the use and management of land where the outcome is likely to have an impact on the community ii. Engagement should be a genuine exercise in collaboration, and community views should be considered to aim to achieve mutually beneficial outcomes iii. Engagement and communication should be open-ended to encourage positive working relationships and communication between communities, land owners and managers iv. Engagement should be proportionate to the resources available to all parties and the impact that the decision may have on the community. Specific Expectations

	The specific expectations that apply to all parties are: a. Up to date contact information for people with local decision-making authority over the land and for the office bearers of community organisations should always be publicly available. b. Where a community aspiration or concern about current or proposed land management emerges, this should be communicated promptly to the owner or manager of the land. Reasonable opportunity should be given for them to respond to issues raised and enter into constructive dialogue about it. c. Where a relevant party makes a request for information, or for a meeting to discuss matters relevant to that organisation; and where the information requested is appropriate and proportionate, this should be accommodated. It is recommended that this is within six weeks of a request. d. Those who take decisions about land which can significantly impact on a local community should create an engagement plan that sets out what, how and when they will engage with the community on the decisions that affect them, particularly where a community organisation or elected representative proposes it, or where it becomes clear that such a plan would be useful. It is recommended that this is developed jointly within twelve months. e. Where plans to significantly alter an aspect of land management or use can be reasonably anticipated in advance, information about the proposed change should be publicly available at a stage when there is opportunity for the decision to be influenced. It is recommended that this be at least three months in advance of the planned change. f. Arrangements for recording actions and decisions taken at consultation/engagement meetings should be agreed in advance of the meeting with the record made available to relevant parties. It is recommended that this is within six weeks of the end of the consultation period or of feedback having been received unless otherwise agreed. g. Where decisions about land use or management may have a significant impact, the people making them should explain how views from the community have been considered in their decision-making process. It is recommended that this is within six weeks of the end of the consultation period, or of feedback from a community consultation exercise being received.
2.3.2	[B23 Andrew Heald] The owner/manager seeks to engage with neighbouring woodland owners and seeks to ensure that the management of each complements and does not unreasonably compromise, the management of adjoining woodlands. This cannot be audited – if a forest neighbour refuses to co-operate, then the owner/manager can not “ensure that the management of each complements. Rewrite The owner/manager seeks to engage with neighbouring woodland owners and does not unreasonably compromise, the management of adjoining woodlands.

	[D03 RSPB] Impacts should mention the establishment of invasive commercial conifer species that may self-seed into neighbouring native woodland or priority habitats, and agreement on suitable control measures.
	[F01 SEPA] "Changes in Hydrology…." - If owners/managers wish to undertake drainage or hydrologically related works then they need to contact the local SEPA Office to ascertain whether any engineering permissions are required otherwise its an unauthorised activity and enforceable. Likewise for water related emergency works. We have come across unauthorised diversions of watercourses on forestry sites for example.
	[G01 FSC UK] Wording could be improved, e.g. 'The owner/manager seeks to engage with neighbouring woodland owners and to ensure that the management of each woodland complements and does not unreasonably compromise the management of the others'.
	[K01 Grown in Britain] The owner/manager seeks to engage ~~engages~~ with neighbouring woodland owners and ~~seeks~~ to ensure that the management of each complements and does not unreasonably compromise, the management of adjoining woodlands. Text highlighted in green needs editing to 'and ensures' or ', to ensure'.
	[M03 Scottish Land Commission] Again this seems well aligned to the Protocol detailed in the previous question. This question is also relevant to the issue of integrated land use decision making which is likely to be part of our upcoming Natural Capital Protocol.
2.3.3	[B23 Andrew Heald] The owner/manager seeks to engage engages with neighbouring landowners and considers, where possible, opportunities for co-operating in wider conservation initiatives, wild mammal control and control of invasive non-native species. Rewrite The owner/manager seeks to engage ~~engages~~ with neighbouring landowners and considers, where possible, opportunities for co-operating in wider forest management initiatives, timber harvesting, integrated pest management, wild mammal control and control of invasive non-native species.
	[D03 RSPB] This section should mention the importance of preventing and tackling invasive commercial conifer crops self-seeding into areas where they damage and cause potential costs to neighbouring owners. So add this alongside Himalayan balsam etc. This is a growing and extremely costly issue being faced in many areas of ASNW, and priority open ground habitats.
	[D05 Woodland Trust] The Woodland Trust welcomes and supports this new requirement as an important recognition of the growing need for landscape scale action and co-operation across the sector to aid delivery of economic, social and environmental change.
	[K01 Grown in Britain] What does 'seeks to engage' mean? This should be clarified in the guidance. As it is written, it could be difficult to audit.

	[M03 Scottish Land Commission] Response as per previous question. One aside I might add here (with a different hat on!) is that perhaps Giant Hogweed is worth mentioning as an invasive species that may require neighbour co-operation. It is certainly a problem that requires co-operation of neighbours in woodlands where I live in the vicinity of the River Findhorn.
2.4 Productive potential of the woodland management unit (WMU)	
2.4.1	[B23 Andrew Heald] How can this be audited ? Are owner/managers required to measure/monitor soil carbon and hydrological function ?
	[D01 Soil Association] It may be helpful to forest managers and to the auditability of the standard if understanding of soil types becomes a requirement of UKWAS? This may be the best indicator to develop to include such a requirement.
	[D03 RSPB] We support this section.
	[F01 SEPA] Need to add protection of soil/carbon and hydrological function in the short term.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here.
2.4.2	[B02 Stuart Wilkie] There should be a requirement that the production of timber from a woodland is maintained at a level that can be permanently sustained. As noted in guidance under cutting and undermanagement is just as problematic as overcutting. Conversion of productive woodland to unproductive woodlands is not sustainable forest management so should the timber be certified? UKWAS should not allow management to fritter away the productive potential of a woodland especially at a time that the planet needs more wood. The exception would be HVC woodlands. Suggestion Remove the words “or below” from a) Additional requirement: Management planning shows how the annual allowable cut will be permanently maintained or enhanced. Guidance: The annual allowable cut should be calculated after any restructuring to meet other requirements of this standard.
	[B22 Scottish Woodlands Ltd] Maintaining long-term timber production is key to tackling the climate crisis. This requirement should be stronger, other than in exceptional circumstances highly productive certified woods should not be replaced by unproductive or low productivity woodlands as this would run counter to climate goals.
	[D01 Soil Association] Consider ‘best available information’ of soil type as a specific requirement [Re. guidance ‘However, the owner/manager should be aware that significant under-cutting might be detrimental…’] Not sure this is helpful? Will it mean managers who are not intervening to allow woodland to achieve biological potential may be challenged for not harvesting?
	[D03 RSPB] This section strikes a sensible balance in our view between the various woodland types and aims of managers and the environment.

	[D05 Woodland Trust] The Woodland Trust welcomes and support the changes made to this requirement in particular the continued recognition under UKWAS that timber harvesting in excess of increment can be justified for the reason outlined in the guidance section.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here.
2.4.3	[B02 Stuart Wilkie] Should this requirement, or at least guidance, state that venison and boar can only sold as certified if shot with non-toxic ammunition.
	[D03 RSPB] We support this section.
	[G01 FSC UK] Guidance and definition of non-wood forest products must include Christmas trees. Reference could be added to UKWAS 2.13.3. Regarding the advice to owners/managers, the standard has not previously included any advice or requirement to contact a certification scheme directly. Existing advice to owners/managers (see UKWAS 4 sections 1.1.5, 2.13.2, 3.2.2 and 3.4.4) is to seek guidance from a certification body or group scheme manager; this reflects the normal lines of communication with certificate holders. Consideration should be given to directing owners/managers to seek approval for certification of additional products via their certification body; this would have to be discussed with certification body representatives, but informal discussion suggests they would be supportive. The wording of this advice should also be far more tentative, e.g. 'It might be possible to certify other NWFPs not included in the list above if best practice on harvesting levels can be demonstrated. Owners/managers are advised to seek guidance from their certification body or group scheme manager'. See comment on UKWAS 2.13.2(c). Guidance from FSC International on animal products such as venison includes an indicator on demonstrating that animals have spent a certain proportion of their life in the certified management unit before certification claims can be made. We propose to argue that this is not relevant to claims in relation to venison, and that it is more important to demonstrate management that takes account of deer populations and impacts, animal welfare, public safety and food hygiene. However, we propose a different response to a similar indicator on honey, as follows. Guidance from FSC International on honey as a non-wood forest product includes an indicator on demonstrating that a certain proportion of pollen collected by bees originates within the certified management unit before certification claims can be made. This is presumably intended to ensure that meaningful claims can be made about certified woodland honey, including the avoidance of pollen from pesticide treated or GMO crops. We propose that the most practicable way of achieving this is to specify a minimum distance between hives and the boundary of the management unit, based on average bee foraging distances. We appreciate that this will rule out certified honey production for many smaller woods. The following proposal is based on the 'supplied as certified' language used in UKWAS 3.2.2: Proposed new requirement: Where honey is to be supplied as a certified non-wood forest product, hives are located at least one mile from the nearest boundary of the WMU.

	Proposed new guidance: This requirement is intended to ensure that certified honey is made using pollen gathered predominantly from within the management unit, and therefore subject to the requirements of this standard regarding pesticide usage etc. If the honey will not be supplied as certified, hives may be placed nearer to the boundary of the management unit. Guidance from FSC International on honey as a non-wood forest product includes an indicator on treating sickness in bees. This is presumably intended to ensure that meaningful claims can be made about certified woodland honey and to ensure management consistent with the FSC Pesticides Policy. The following proposal is adapted from the indicator provided in FSC International guidance: Proposed new requirement: Where it is necessary to disinfect beehives, physical means are used rather than chemical means. Where it is necessary to treat varroa mites, the following substances may be used: formic acid, lactic acid, acetic acid oxalic acid, menthol, eucalyptol or camphor. Proposed new guidance: Physical means of disinfecting beehives include steam and fire. Guidance from FSC International on honey as a non-wood forest product includes an indicator on feeding of bees. This is presumably intended to ensure that meaningful claims can be made about the contents of certified woodland honey. We propose to argue that this is adequately covered by best practice.
	[M03 Scottish Land Commission] The Protocol on Good Stewardship of Land is relevant here.
2.4.4	[D03 RSPB] We support this section which is much improved.
2.5 Assessment of environmental impacts in existing woodland	
2.5.1	[D03 RSPB] This section is much improved and we support it as drafted.
	[D04 Scottish Raptor Study Group] Breeding raptors are a key group of priority species found in managed woodlands. Many forestry operations can impact negatively on these species. Environmental planning should identify key species at risk e.g., nesting raptors in the breeding season, how these risks can be avoided (sensitive areas to be identified by appropriate surveys by e.g., raptor specialists, trained staff) and how to avoid issues (avoid all felling of sensitive woodlands in the breeding season unless thorough pre-felling surveys have been carried out by suitable experienced/trained personnel). Our members have become increasingly concerned that pre-felling surveys are sometimes carried out in a token manner by ill-trained personnel with limited experience. Forest managers should seek advice from specialist raptor workers at all stages of the planning.

	[G01 FSC UK] UKWAS 2.5.1(b) could more clearly emphasise the prevention of impacts in the first instance, as per Criterion 6.3, e.g. 'The results of the environmental assessments are incorporated into planning and implementation in order to avoid adverse environmental impacts of management activities, and to minimise or repair impacts that do occur'.
2.5.2	[D03 RSPB] This should make clear that commonly planted trees eg Sitka spruce are invasive. Amend the bullet point on Invasive species above to make this absolutely clear please.
	[M03 Scottish Land Commission] Neighbour interactions in connection to woodland management planning and adjoining land may benefit from guidance in the Protocol on Community Engagement in Decisions Relating to Land.
2.5.3	[F02 Historic Environment Scotland] We welcome the additional mention of windthrow, which is a significant risk to historic environment sites in woodland.
2.6 Woodland creation	
2.6.1	[A02 Seafield & Strathspey Estates] UKWAS should defer to UK and devolved legislation which sets the country requirement for approval of land use change. It is not UKWAS's role to state whether afforestation is appropriate.
	[A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] This is a woodland based scheme so don't understand the need to highlight that afforestation may not be appropriate land use. It would be expected that a site would only be entering into UKWAS if afforestation was the right direction to take. Adding extra guidance that trees may not be the right course has no place here. UKFS would cover if land is appropriate for afforestation, UKWAS is there to ensure a higher level of management once the decision has been taken to plant trees.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] Woodland management planning should also fully recognise the need for areas to be a) large enough to be economically viable and b) composed of species compliant with both UKFS and EIA requirements but reflecting site suitability and the existing local markets for the timber. Land out with the WMU may not be in the control of the WMU owner, therefore the new guidance wording should be removed and reverted back to V4. The owner is already duty bound to consult with adjoining owners on proposals for the WMU but to [sic]
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Remove this line "In some cases afforestation may not be appropriate on either the whole or part of the land. " Can we use "woodland creation" rather than "afforestation" - the latter having a somewhat negative connotation. Not sure why anyone would want certification of new woodland?? For all our RM audits this is never an issue i.e. there is no woodland creation.

	[B23 Andrew Heald] Delete “In some cases afforestation may not be appropriate on either the whole or part of the land.” It is not relevant in a forest management standard.
	[D03 RSPB] It would be useful if in the references that a link is included to the BTO Woodlands and waders sensitivity mapping, which is now being used in England and we understand may be developed for use Britain wide. A full reference can be provided-this will assist access to bird survey data of help in afforestation cases. This section has been improved and we welcome the progress made. However Assessments by forestry companies and others planning new afforestation are often rudimentary when compared to those undertaken by other sectors, and it would be helpful if this section made clear that investment and taking appropriate advice and the time to do such screening was essential for a good outcome.2.6.1 a) could usefully give a stronger steer to meet this point.
	[E01 James Jones & Sons Ltd] This is a woodland based scheme therefore there is no need to highlight that afforestation may not be an appropriate land use. It would be expected that a site would only be entering into UKWAS if afforestation was the right direction to take. Adding extra guidance that trees may not be the right course has no place here. UKFS would cover if land is appropriate for afforestation, UKWAS is there to ensure a higher level of management once the decision has been taken to plant trees. The need to assess economic goods in the widest sense is also questioned in terms of rationale. It would appear timber requires to be considered against a variety of other equivalent environmental indices.
	[F02 Historic Environment Scotland] In the Guidance, we welcome the inclusion of historic environment features in the list of field surveys and data sources to be used to inform the location and design of woodland.
	[G02 PEFC UK] It would assist PEFC with the endorsement process if social benefits were added to woodland creation. E.G. Deliver economic goods, **social benefits** and/or ecosystem services
	[K01 Grown in Britain] Maybe where you use resilient woodland, include it in the definition of forest resilience – ie should be highlighted in green and also written next to forest resilience in the glossary… this would provide clarity for the reader on what is meant.
	[M03 Scottish Land Commission] The issue of woodland creation raises the consideration of soil and agricultural land class in relation to integrated land use decision making. Expectation d) of the Protocol on Good Stewardship states: d. Where land is highly suitable for a primary use (for example, food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making. The impact of relative options on the environment and on communities should be taken into account.

	This is of particular relevance in Scotland as only 8% (and 7% in Wales) of the land area is suitable for arable use (compared to 30% in England). In this context it is also relevant to integrated land use decision making. In 2.6.1 – there is no reference to this aspect of decision making in relation to new woodland creation. Suggested modifications: • In the Requirements box a), after the phrase, "environmental values", it may help to add "*and integrated land use, including for food production".* In Requirement b), it might benefit from the addition of another bullet stating "*contribute to integrated land use where the impact of relative options on the environment and on communities are taken into account."* • In the Evidence column, another bullet might be added - "*Agricultural Land Class Map*" to demonstrate consideration of productive agricultural land in relation to land use decision making. • In the Guidance box, after the first sentence (highlighted in yellow), the following text may help clarify what is required: *Integrated land use decision making is a key part of a just transition to net zero greenhouse gas emissions. A balanced approach will include food production, social benefits, climate change mitigation and enhancement of biodiversity. Where land is highly suitable for a primary use (for example, food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making. The impact of relative options on the environment and on communities should be taken into account.* • Under the Field Surveys points in the Guidance section, a bullet stating "*the use and suitability of land for food production*" could be added.
2.6.2	[A02 Seafield & Strathspey Estates] The use of the word avoids in requirement should be deleted. 'Avoid' suggests no activity when minimisation is appropriate given the historical silvicultural evidence for the need to cultivate in UK forestry situations.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] The use of the word avoids in requirement is not needed as minimises covers it. 'Avoid' gives the impression that no works will be carried out when often works are needed but at a minimum. Some traditional planting methods that are deemed negative to soil carbon release in the short term are actually the best at establishing trees which then capture well over and above the carbon lost during the early phase. The choice of ground preparation should be reflected in the amount of carbon the new woodland is likely to capture. If the woodland fails due to poor ground prep then little carbon is captured. It is better to give a little and gain a lot than gain little. Therefore advise that: minimise soil disturbance is removed or balanced with 'unless no other methods are appropriate, as defined by a professional forester'.

	[A05 Buccleuch Estates] The use of the word avoids in requirement is not needed as minimises covers it. 'Avoid' gives the impression that no works will be carried out when often works are needed but at a minimum. This is an area where guidance is being developed so the use of Avoid may be problematic within a very short timescale.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] What is? Silvicultural effectiveness. Is this silvicultural management? Or just Silviculture? How could you not consider silviculture
	[B23 Andrew Heald] This is a very narrow understanding of ground preparation. The purpose of ground prep is to ensure good tree establishment, this can include soil cultivation, drainage and weed control, and optimising micro-site conditions. This requirement needs to be rewritten so that the focus is on the forest manager to demonstrate that they understand the positive and negative impacts of their choice of ground prep technique, and have reached a credible decision. Simply avoiding negative impacts is not good forest management.
	[D03 RSPB] Add soil compaction to the potential list of negative impacts And under guidance should roading and extraction choices also be added for completeness?
	[E01 James Jones & Sons Ltd] The use of the word avoids is not practicable and minimises is sufficient in this context. The soil carbon and peatland examples if taken in isolation could potentially limit new plant and re-stock areas and no reference to overall carbon/soil balances is given.
	[F01 SEPA] Choice of appropriate ground preparation methods to minimise soil disturbance and [add in] reduce carbon emissions to air/water.
2.7 Woodland restructuring	
2.7.1	[A06 Moray Estates] The Requirement states the need for increasing species diversity as part of the restructuring process. However, the Guidance concentrates upon Structural Diversity only. The guidance should state something like: 'Species diversity can be increased by planting a mixture of species and/or by accepting an element of natural regeneration into the stand. The enhancement of structural and species diversity will both improve forest resilience and will facilitate future management using lower impact management approaches such as continuous cover forestry.'
	[B01 Rebecca Haskell] Is 'so we ask this is taken as part of continuous improvement' supposed to be there? If so what does it refer to? Although not in red type or highlighted in green, it does not appear in UKWAS 4….
	[B02 Stuart Wilkie] "so we ask this is taken as part of continuous improvement". This seems an odd comment here!

	The guidance on open space must also refer to 2.13 and woodland removal. Throughout the standard we are suggesting that some areas are not replanted but when does this become woodland removal? When does the 5% threshold under 2.13 apply? FSC THE EXCISION OF AREAS FROM THE SCOPE OF CERTIFICATION FSC-POL-20-003 (2004) EN says not exceeding 0.5% per year and not exceeding 5% in total.
	[B23 Andrew Heald] The UK has some of the lowest levels of woodland cover in Europe – UKWAS should be focussed on forest management, not on the creation of additional open space for the sake of it – rewrite Where appropriate, woodland restructuring ~~can~~ provides opportunities for the creation of temporary and permanent open space and open ground habitats (See 4.4.3). These may include:
	[B24 CCFG] The Requirement explicitly mentions the need for increasing species diversity as part of the restructuring process, but the Guidance concentrates upon Structural Diversity. We suggest that there should be additional guidance saying something like: 'Species diversity can be increased by planting a mixture of species and/or by accepting an element of natural regeneration into the stand. The enhancement of structural and species diversity will both improve forest resilience and will facilitate future management using lower impact management approaches such as continuous cover forestry.'
	[D01 Soil Association] We welcome the new requirement for all even-aged woodlands to be restructured, to achieve in-stand structure of species, sizes, ages, spatial scales, regeneration cycles and open space. To achieve this will require a wholescale transformation away from clearfell and restocking with single species stands We would hope that UKWAS V5.0 could set some specific requirements for both the scale of clearfelling permitted in any certified woodland and also a maximum area threshold for any individual clearfell. [Re. the requirement] This is a significant change and is welcomed. As we read it, ALL stands shall have in-stand structure. [Re. guidance 'Smaller coupe sizes…'] I think the only reference in the standard with any implications for scale of clearfelling or individual clearfell size? Guidance only, requirements needed. [Re. guidance 'All WMU's have the potential to be improved…'] Positive guidance.
	[D03 RSPB] Many plantation forests have poor ground flora and structure. Shrub species and the provision of standing as well as fallen dead wood adds cover and diversity that benefits a wide range of woodland dependent species. Please add this to the guidance- The provision of a natural shrub layer, and standing and fallen dead wood.

	[D04 Scottish Raptor Study Group] Our members have become increasingly concerned that extensive felling is removing the very habitat that rare raptors need for breeding. It is of course in the nature of the forestry industry that mature trees are those next in line for harvesting, but these are the very trees used by breeding raptors, and for which there is increasingly no alternative mature woodland for them to move to, and which restocking cannot replace within the lifetime of these birds. The challenge is to maintain continuity of some mature woodland coupes across successive rotations. We feel that evidence of provision of suitable age and type of trees to provide nesting sites/habitats for rare woodland raptors (where present) should be specifically referenced here.
	[D05 Woodland Trust] The Woodland Trust welcome and supports the changes made within this requirement, in particular it welcomes: • the specific reference to restructuring applying at both woodland and stand level. This should see significant gains both in terms of resilience, biodiversity value and the promotion and adoption of LISS approaches to management. • the inclusion in guidance of reference to planning for future veteran trees and deadwood will hopefully deliver and safeguard significant biodiversity value and resilience to a number of priority and specialised species reliant on these elements.
	[G01 FSC UK] Consider reframing along the lines of IGIs to address all woodlands: 6.8.1 A varying mosaic of species, sizes, ages, spatial scales, and regeneration cycles is maintained appropriate to the landscape. 6.8.2 The mosaic of species, sizes, ages, spatial scales, and regeneration cycles is restored where it has not been maintained appropriate to the landscape. Also consider explicitly addressing environmental and economic resilience, as per Criterion 6.8, at the requirement level.
2.8 Tree species selection	
2.8.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] See comments on 4.3.1. the restocking of sites should be in accordance with suitable species for the site not just native species. In reply to the new wording in guidance – high conservation woodlands restocked with natives only. These areas account for a considerable amount productive woodland area using non-native species. This guidance would see many sites dropping out of UKWAS. The standard should allow non-natives used in a appropriate way.
	[A04 Buccleuch Estates] The requirement to use only native species in woodlands of high conservation value is too arbitrary. Who decides what is native to a particular region/area/catchment? This requirement will simply remove woodlands of high conservation value from certified areas.
	[A05 Buccleuch Estates] The clause requiring only native species to be used in woodlands of high conservation value is potentially a major sticking point. This is too restrictive as the definition of HCV woodland is too broad in the glossary (see comments there). We manage one of the largest scheduled designed landscapes in the UK that has significant areas of woodland, much of which is PAWS. This is managed under CCF principles and

	contains very mixed woodland (everything from true remnant oak,hazel woodland to mixed age and species conifer/broadleaf woodland). We also manage significant areas of oak/ash woodland in Northamptonshire that has been devastated by Chalara and is now suffering increased amounts of Acute Oak Decline. The only option is to use sycamore (is this classed as native yet?) and other non locally native species such as beech and hornbeam to keep the squirrels away from the cherry. Management of these woodlands is far more important than whether the species is native. We could not afford to plant only native species as there is little or no market for them, only firewood so would have to come out of certification.
	[B01 Rebecca Haskell] Maybe need to fully clarify regeneration requirements for PAWS. Guidance in 4.3.1 states 'Restoration to native woodland of a type appropriate to the site should be the primary objective where there is potential' which implies that using native species for regeneration is not an absolute requirement (unless the phrase 'where there is potential' is relating to timing eg at some point but not within the scope of the current management plan if crop is no-thin and not due for felling within plan period?) but in d above it appears to be stating that it is an absolute requirement.
	[B03 Simon Jeffreys] Exclude PAWS 4.3.
	[B23 Andrew Heald] d) In woodlands identified in sections 4.1-4.3: • Native species are used for regeneration "In these woodlands, regeneration with native species is consistent with a precautionary approach to maintaining conservation values." This requirement ignores the international forest science and recommendations on assisted migration and could lead to reduced long term resilience - https://www.fs.usda.gov/ccrc/topics/assisted-migration
	[C02 Forestry England] Change wording in point d to 'Native species are *primarily* used for regeneration' referring to PAWS woodlands (4.3). The current wording is overly restrictive in precluding options that will accelerate PAWS restoration (such as the established practice of using nurse crops to establish the target canopy species composition). Advancing and honorary native species are also appropriate in some sites for long-term resilience objectives (related to point a.1 'Improvement of long-term forest resilience including the potential impacts of climate change). See 'Managing ancient and native woodland in England' Forestry Commission Practice Guide (2010, https://www.gov.uk/government/publications/managing-ancient-and-native-woodland-in-england). The guidance notes here or in section 4.3.1 should acknowledge this.
	[D03 RSPB] This is an important section. We see merit in moving section c) above to section b), so that the use of Native species message comes first, followed by the regeneration points.
	[D05 Woodland Trust] The Woodland Trust welcomes and fully supports the important clarification the additional requirement d) provides in terms of ensuring native species are selected for use in High Conservation Value (HCV) woodlands, identified in sections 4.1-4.3, when it comes

	to planning and works aimed at improving the long term resilience and development of species diverse stands within these HCV woodlands. This is an important measure to safeguard and protect our native tree species and woodlands through on-going climate change.
	[E01 James Jones & Sons Ltd] See comments on 4.3.1. the restocking of sites should be in accordance with suitable species for the site not just native species. In reply to the new wording in guidance – high conservation woodlands restocked with natives only. These areas account for a considerable amount productive woodland area using non-native species. This guidance would see many sites dropping out of UKWAS. The standard should allow non-natives used in an appropriate way. See previous comments regarding UKWAS volumes and the 70% processors input minimum which is already under threat.
	[F01 SEPA] Under Guidance column, worth adding in the word 'tree' to describe the use of non-native 'tree' species, want to avoid confusion with non-tree species.
	[G01 FSC UK] Criterion 10.2 requires the use of 'ecologically well adapted' species, and requires that native species and local genotypes be used for regeneration, unless there is clear and convincing justification for using others. We have previously asked the UKWAS Working Group to consider how successfully the standard addresses these requirements, and in particular whether there is too much scope for species choice to be determined by management objectives, rather than by what is ecologically appropriate. The Working Group chose to defer to the UKWAS Steering Group on this issue, but as it has not been discussed by the Steering Group we feel we must raise it again.
2.9 Introduction of non-native species	
2.9.1	[B02 Stuart Wilkie] "and all regulatory requirements are met". seems superfluous in the context of trees. I am not aware of any available species that would require regulatory approval.
	[B03 Simon Jeffreys] Exclude PAWS.
	[B23 Andrew Heald] Non-native tree species are not introduced to woodland identified in sections 4.1-4.3. This requirement ignores the international forest science and recommendations on assisted migration and could lead to reduced long term resilience - https://www.fs.usda.gov/ccrc/topics/assisted-migration
	[C02 Forestry England] Considering climate change resilience "Native" species should include neo native species appropriate to the woodland type and future climatic conditions especially when looking at PAWs woodland. For PAWs woodland 4.3 more appropriate wording would be The majority of the species should be species that are historically native to that site (i.e. species that would have naturally been found on that site for most of the last 5000

	years). However, a small proportion of the 'native component' can be broadleaves that are: l Either: 'advancing native species' which in the past were not naturally present on this site, but are native elsewhere in Britain, and given climate change can be expected to be suited to this woodland in the near future (e.g. beech in the North West) l Or: 'honorary natives' which are broadleaves native to North West Europe and expected to be adapted to conditions on this site in the near future (e.g. chestnut). This wording and principle comes from the Forestry Commission's 'Managing ancient and native woodland in England' 2010: https://www.gov.uk/government/publications/managing-ancient-and-native-woodland-in-england The current wording prevents the ability to use the accepted silvicultural practice for using a nurse species. As this practice can accelerate PAWS restoration and reduce costs, restricting this practice will delay and reduce PAWS restoration projects. Restrictions on species should be focused on canopy at maturity.
	[D03 RSPB] It should be made clear that if any non-native species are introduced, including tree species, that subsequently have an invasive impact to the detriment of priority habitats within or adjacent to the WMU that the responsibility rests with the owner to mitigate and control this.
	[D05 Woodland Trust] The Woodland Trust welcomes and supports the changes made to this requirement especially the clarification that the requirement operates at the woodland level and the important protection of HCV woodlands from the potential impacts of introductions of non-native trees offered by requirement b).
	[F01 SEPA] Under Guidance please add the word 'tree' to Non native 'tree ' species……
	[G01 FSC UK] Wording of UKWAS 2.9.1(c) could be improved, e.g. 'Other non-native plant and animal species are only introduced if they are non-invasive and bring environmental benefits, and all regulatory requirements are met'.
2.10 Silvicultural systems	
2.10.1	[B20 ICF] We suggest the review group might consider more mention of different options of silvicultural systems. In many (though not all) circumstances, the adoption of continuous cover approach can be well suited to meeting a range of public and private objectives. However, with some of the additions there is a risk of reinventing terminology without adding much in the way of sense, for example using Low Intensity Forest Management Approaches instead of LISS.
	[B23 Andrew Heald] In addition, choice of silviculture system must include the consideration of growing timber & fibre which can help decarbonise our economies and move away from a reliance on high energy materials.

	Woodlands which are not producing timber or fibre must demonstrate how they are contributing to a circular bioeconomy - https://cti-timber.org/publications/
	[B24 CCFG] In Requirement b), we suggest a better phrasing would be: 'Where sites, windthrow risk, tree health risk and objectives allow, a range of lower intensity management approaches such as the silvicultural systems associated with continuous cover forestry are adopted with the aim of diversifying ages, species and stand structures'. We have removed species from the first part of the requirement because we cannot see why species should be a constraint upon the use of CCF or similar lower intensity approaches.
	[D01 Soil Association] New requirements for in-stand structure under 2.7 will achieve more than the requirements in 2.10, which will still facilitate the justification of any silviculture system based on management objectives. We still believe that UKWAS needs to set more requirements to govern the use of clearfelling and the scale of any individual clearfells. [Re. UKWAS 2.10.1(a)] Still very disappointing that nothing in this requirement or guidance around the scale of clearfelling; intensity at forest level or individual coupe size. Silence elsewhere in the standard as well apart from limited guidance on coupe size under 2.7.1. [Re. guidance 'Use of lower-impact silvicultural systems may not be appropriate…'] Although supportive of this guidance, seems odd that the few instances when CCF may not be appropriate are highlighted when the many instances when clearfelling will not be appropriate are not listed?
	[F02 Historic Environment Scotland] In the Guidance, we welcome the addition of historic environment sites to the list of factors to be taken into account.
	[G01 FSC UK] Criterion 10.5 requires the use of 'ecologically appropriate' silvicultural practices. We have previously asked the UKWAS Working Group to consider how successfully the standard addresses this requirement, and in particular whether there is too much scope for silviculture to be determined by management objectives, rather than by what is ecologically appropriate. The Working Group chose to defer to the UKWAS Steering Group on this issue, but as it has not been discussed by the Steering Group we feel we must raise it again.
	[M03 Scottish Land Commission] In relation to the mention in the Guidance section on the Views of Local People, it may be appropriate to add a link to the Protocol on Community Engagement in Decisions Relating to Land.
2.10.2	[B24 CCFG] In Requirement a), replace 'lower-impact silvicultural systems' by 'continuous cover forestry or similar lower intensity management approach'. In the second paragraph of the Guidance, we are unclear where the statement about 'generally advises using small coupe fellings …up to around 2 ha in size' is derived from. For instance, the 2010 FC England Practice Guide on Managing Ancient and Native Woodland states (on p 26) 'As a general principle, systems that either mimic natural processes or continue historical practices are likely to be most appropriate. These are

	commonly described as low impact, close to nature, continuous cover or uneven-aged systems.' We suggest that the concluding part of the sentence should be phrased as: '[…] high forest generally advises using a lower intensity management approach such as continuous cover forestry or coppice management.'
	[D03 RSPB] A reference should be made to adopting low impact felling methods that avoid soil compaction, the construction of roads or drainage operations. Is that clear from section a)? We are not convinced it is.
2.11 Conservation	
2.11.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] The national target for the balance of native and commercial woodland is 40:60 and while in Scotland they are nominally hitting this level already (based on grant models) as most commercial schemes often have very close to the 10% native woodland, in actual fact, as an industry we are already delivering near enough 50:50 native: commercial schemes for new planting. Furthermore, it is incumbent on all of us as land managers to make the best use of the limited land resource available and by ensuring commercial woodlands are well designed but truly commercial this optimised the use of the land, requiring less land take from other land uses and is therefore both the economically and environmentally responsible approach. The Confor report on bio-diversity in commercial plantations also shows that to be bio-diverse does not mean it must be native broadleaves, a point that has been lost throughout version 5. We need both commercial crop and bio-diversity but they are not mutually exclusive.
	[A06 Moray Estates] Use CCF rather than LISS as a term. The list in section B is incorrect and timber can and should be sustainably produced by using CCF.
	[B02 Stuart Wilkie] The list in b contains areas which may be legitimately managed with other priorities so some of these should not be in the requirement but may be appropriate as guidance. PAWS may be managed for timber production. LTR will be clear felled at some stage. Elsewhere we are trying to encourage LISS for timber production and I can think of an area managed for erosion control where the main objective is to protect the public road from landslide. Perhaps all of b should be guidance?
	[B03 Simon Jeffreys] A long essay of notes too long.
	[B22 Scottish Woodlands Ltd] The list in b should be guidance. Some of the list is clearly wrong e.g. LISS and LTR may be managed for timber. Areas managed for erosion control may be for other reasons than biodiversity e.g. to prevent landslides.
	[B23 Andrew Heald] UKWAS is about finding a balance - 2.11.1 c is un-auditable and demonstrates a fundamental sift away from sustainable forest management

	c) Throughout the WMU, management planning identifies opportunities where conservation and the enhancement of biodiversity may be achieved alongside other objectives. Either delete this requirement or replace it with c) Throughout the WMU, management planning identifies opportunities where timber production, recreation, conservation and the enhancement of biodiversity may be achieved alongside other objectives.
	[B24 CCFG] In both the Requirement and the Guidance, we recommend replacing 'lower impact silvicultural systems' by 'continuous cover forestry or other lower intensity management approach'.
	[D03 RSPB] We consider the 15% is not progressive and shows no evidence of improvement since the early days of UKWAS. With binding nature recovery targets now placing responsibilities on agencies and all bodies to achieve improvements to biodiversity by 2030, and woodland biodiversity in increasing decline the 15% minimum is not sufficient. The resistance to change and improvement is a serious issue that will inevitably draw criticism to the sector for not rising to the challenge of halting and then restoring nature across the UK. We consider that 30% should be the target but accept in some circumstances this will be hard to achieve quickly. We would suggest the 30% target is adopted, with a requirement to achieve this as a minimum in all WMU plans by 2030, and in place on the ground in all WMU's by 2035 at the latest. This will allow forests to be managed steadily to achieve the right outcome, and ensure forestry and woodland management contributes to biodiversity recovery and enhancement. As a more detailed comment can it be woodland grouse lekking areas so as to include capercaillie (whose lek sites are legally protected) please. Please also add the following amended bullet points: Management and expansion of ride edges and open ground alongside forest roads Enhancement and expansion of wetland, riparian areas and water courses to improve their biodiversity value
	[D04 Scottish Raptor Study Group] Managed woodlands are unique in providing nesting habitat, feeding habitat and secure nesting sites for a wide range of raptors, with some almost completely dependent on them (e.g., Goshawk, Honey-Buzzard). Where woodland nesting raptors are present, management planning should seek to ensure that HCV forest is provided specifically with the requirements of breeding raptors in mind. Specialist raptor workers could provide advice on this at an early stage in the process. The challenge is to maintain the presence of some coupes of mature woodland through successive rotations. We feel that evidence of planning for maintenance/provision of nesting sites/habitats for woodland raptors (where present) should be specifically referenced here.

	[D05 Woodland Trust] In order to provide further clarity on this requirement the Woodland Trust would like the following wording change to requirement b) and addition to the guidance section to be considered: 1. Change to wording to Requirement b) This ~~shall~~ includes all conservation areas and features identified in the following sections: 2. Additional sentence to be added to the guidance section. Where areas and features identified in (b) comprise more than 15% of the WMU all of these areas shall be managed for conservation and enhancement of biodiversity as the primary objective.
	[F03 NatureScot] Our second concern with the previous version of the Standard was that it retained the 15% allocation of Woodland Management Unit area to conservation objectives. This has not changed in the latest version. Scottish and Westminster governments, as well as the EU have accepted the need for a 30% allocation of land towards conservation, and it seems to us that UKWAS needs to reflect this – and also to do more to tackle nature loss across the countries of the UK. We accept that this change could be phased in over a period to accommodate the harvesting of existing stands, and thus an implementation period of 10 years (or more in exceptional cases) would be a reasonable target. Hence, our recommendation is that UKWAS requires that woodland management makes changes providing an allocation of 30% of land to conservation objectives, to be implemented over 10 years (or more in exceptional cases).
2.11.2	[B02 Stuart Wilkie] As above the final bullet in a might not always have a conservation objective.
	[B22 Scottish Woodlands Ltd] As above the final bullet in a might not always have a conservation or biodiversity objective.
	[B23 Andrew Heald] The owner/manager should therefore consider the need for specialist surveys appropriately timed to confirm the presence of areas and features of high conservation value in order to apply the precautionary approach when developing management strategies and actions. And b) Management strategies and actions ~~shall be~~ are developed in consultation with statutory bodies, interested parties and experts. This places a huge burden on the owner/manager of any semi-natural woodland, it will significantly increase cost and complexity of management planning. If the owner/manager is an experienced forest manager and managing their woodlands well, why do they have to consult external experts ?

	Rewrite b) Management strategies and actions ~~shall be~~ are developed in consultation with relevant statutory bodies.
	[D03 RSPB] Add as a verifier discussions with local experts and conservation bodies.
	[D04 Scottish Raptor Study Group] Nesting raptors should be specifically mentioned here as High Conservation Value features of managed forests, along with the potential role of specialist raptor workers in providing the specialist surveys required to meet the criteria listed here. Such workers should be contracted to carry out such work and/or may be able to provide specialist training for staff.
	[G01 FSC UK] See comment on UKWAS 2.15.2.
2.12 Protection	
2.12.1	[A01 Richard White] I am very concerned about the proposed ban on lead based ammunition in UKWAS certified woods. Sections 2.12.1 and 4.9.3 of the draft refer. I do not believe this proposal is based on good science. I suspect that it is part of an underhand attempt by the increasingly noisy 'animal rights' movement to limit consumptive utilisation of wildlife which is essentially sustainable if not mismanaged. My understanding is that metallic lead is relatively inert and un-reactive under normal climatic and soil conditions. That is the reason why it was the roofing material of choice for churches and other large mediaeval buildings. The biggest problem with lead in this use is downward creep due to its ductility. Once it has formed a protective oxide coating it hardly reacts at all. It is noteworthy that lead musket balls are regularly picked up at Culloden and on English Civil War battlefields which have lost almost none of their original weight. This concern was first raised in North America where ingestion of lead shot by ducks lead to enhanced levels of lead in their tissues. There are several factors responsible for this:- • hunting pressure along migratory waterfowl flyways in North America is higher and more concentrated spatially than elsewhere so much more shot ends up in the water, • lead shot ingested by ducks ends up in their gizzards where is ground down finely before passing into the acidic environment of their guts where the expose metallic lead reacts to form lead compounds which are toxic, These conditions do not apply in woodland and forest ecosystems. Enhanced levels of lead in the tissues of waterfowl in the UK and Europe lead to a ban on the use of lead ammunition for shooting waterfowl over wetlands and on the foreshore. In the UK, at least, this ban has proved to be ineffectual and is largely ignored.

	Apart from its harmful impacts on waterfowl which are well documented and whose mechanisms are well understood, the harmful impacts of the use of lead based ammunition in dry-land habitats are much less clear. What is clear from the material supplied by proponents of this ban is that the most significant source of lead in shot game comes from the lead shot itself. What is not at all clear from this material is how much lead in birds (and other wildlife) is due to ingestion from the environment of lead originating as lead shot. A major source of lead in other birds is from wounding with lead shot. Overall, the material contains too much extrapolation and too many estimates and assumptions to be a reliable source of evidence justifying a major change to what is supposed to be a science and fact based protocol. Moreover, the practical alternatives to lead in ammunition, steel shot and monolithic brass or copper rifle bullets have quite serious drawbacks of their own. They are more expensive than lead-based ammunition and are less dense which means that projectiles lose momentum faster due to air resistance and thus are less lethal at longer ranges. This is significant in shotgun ammunition, less so with rifle ammunition. Copper rifle bullets are significantly more expensive than lead based bullets as their manufacture is more complicated. Less dense copper or brass rifle bullets are longer and thus potentially more stable in flight, but they need to rotate faster calling for tighter rifling and thus higher pressures which require heavier and stronger rifles. Forests need to be protected against deer in particular but also rabbits, hares and squirrels. Shooting is the only legal, economically affordable and practicable method of deer control in most cases and has its place in the control of other species. Moreover, sport shorting is a major source of income for many woodland owners and income from it justifies the retention of large areas of semi-natural broadleaved woodland in lowland Britain which would be more profitable under conifers without the 'sporting' income. Despite being relatively inert in elemental form, lead compounds, particularly organic lead compounds, are well known to be dangerously toxic substances. The Centres for Disease Control in the USA and the WHO state that a blood lead level in people of 10 µg/dL or above is cause for concern, while paediatricians deem such a level in children to constitute lead poisoning. This is due to the greater sensitivity and vulnerability of children to the impact of lead compounds on the development and functioning of the brain and the nervous system as a whole. In adult humans, symptoms of lead poisoning become apparent when the lead level in blood reaches around 40 µg/dL and become severe at a level of around 70 µg/dL. A study in the Dakotas in the USA of a sample of almost 800 people who regularly ate birds killed using lead shot found that 1.1% had a blood lead level in excess of 5 µg/dL i.e around half the level of concern. The proposal to ban the use of lead-based ammunition is controversial because there is insufficient evidence now as to whether the use of lead shot in woodland is leading to a measurable - or even detectable - increase in the amount of lead in the soil and how much lead originating from lead-based ammunition is being ingested by woodland wildlife and what impact this is having. This is a gap which can and should be addressed before action is taken. The carcasses of road-killed pheasant poults, which are notoriously stupid and get themselves killed in numbers on the roads, would make an excellent source of data to elucidate these issues.

	I submit that before action is taken, research should focus on the following issues: • is there a detectable increase in lead in the soil in woodlands resulting from the use of lead-based ammunition? • if so, by how much? • is there a detectable increase in lead in the tissues of woodland wildlife resulting from the use of lead-based ammunition? • what impact, if any, is this resulting increase in lead in the tissues of woodland wildlife having on wildlife health? There is some evidence that scavenging birds have elevated levels of lead in their tissues but most populations of these birds are either stable or increasing, so is this actually causing measurable and real harm? Are the proponents of this ban within UKWAS responding to proper scientific concerns or to what they perceive to be the trend or an alternative agenda? If UKWAS moves prematurely on this issue it runs the risk of bringing itself into disrepute for responding to woke rather than scientific concerns and for failure to be sufficiently scientifically rigorous. A partial ban, applying to woodland but not farmland or moorland is highly likely to be ineffectual and ignored and to also weaken the repute of UKWAS. If UKWAS is to retain credibility it must be seen to following advances in knowledge and science and not merely "following the curve" of fashionable opinion. In the final analysis, this is a public and environmental health issue which requires to be resolved by the state. I do not believe that it is the proper role or place of UKWAS to move unilaterally or lead the pack over this issue. If the evidence indicates that the continuing use of lead based ammunition for hunting (and target shooting) poses a significant threat to public or environmental health, then the state should act to ban the manufacture, sale and use of lead-based ammunition for all civilian purposes. That would deal with the problem if one exists. We have to accept that the military is unlikely to comply or follow suit! I do not believe that this proposed ban is in the best interests of the forest industry or wider conservation and I urge UKWAS to remove it until and unless reliable scientific evidence of harm due to the use of lead-based ammunition in woodland becomes available.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] This should be held back until a suitable calibre for all deer in Scotland is approved. Currently there are issues around calibre and bullet weights not matching so shooting of some species will stop. If UKWAS waited until BASC had completed their change in 2025, the shooting industry would then be ready rather than implementing it in 2023.
	[B02 Stuart Wilkie] Fully support.
	[B22 Scottish Woodlands Ltd] Use of non-toxic ammunition is in line with market requirements for venison.
	[D01 Soil Association] [Re. UKWAS 2.12.1(b)] Positive.

	[D03 RSPB] We support these proposals.
	[D05 Woodland Trust] With regard to the new requirement b) the Woodland Trust supports this and would like it noted that a number of organisations, including the Woodland Trust and statutory bodies already have or are looking to specify this requirement within the timescale for the introduction of UKWAS 5. The Woodland Trust therefore supports this requirement and its own experience suggests it is practicable and achievable within the timeframe of the UKWAS 5 implementation.
	[G01 FSC UK] Guidance from FSC International on hunting includes an indicator on management planning requirements, including the following elements: 1. Policies and procedures for game managers 2. Hygiene and food safety regulations in cases that the game is used for food. 3. Maps of all hunting areas. 4. Procedures for monitoring of the impacts of hunting. 5. A general evaluation of the ecological impact of hunting. 6. Procedures for processing, packing and sales (if applicable). We propose that some or all of these could be incorporated under UKWAS 2.2.1 or 2.12.1.
	[H01 BASC] BASC and eight other shooting organisations are continuing to encourage a voluntary transition away from lead and single-use plastics in shotgun ammunition for live quarry shooting by 2025. This timeframe was established as there are still significant issues with regard to the suitability and supply of alternatives. This is also the case with some of the smaller calibres of rifle that are legal for deer control. The .243 calibre has known issues with copper ammunition and many available copper rounds in this calibre do not meet the legal requirements as set out in the Deer Acts. However, the .243 calibre is the most popular calibre in use today with 45% (BASC deer stalking survey 2020) of our deer stalker members using it for deer management. Further research & development is required to ensure that non-lead ammunition for these calibres is accurate and lethal, both of which have major implications for deer welfare. We are disappointed that deer welfare was not given higher priority in the review of the first consultation, and we still recommend that the requirement for the use of 'non-toxic' ammunition in deer management is removed.
	[K01 Grown in Britain] Lead free bullets is the term that has been agreed with Forestry England, Deer Initiative and BASC for wild venison production
2.12.2	[D03 RSPB] We support this section.

2.12.3	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] Agree with the requirement, however parts of the guidance are misleading. Currently the available recycling schemes are limited and that section of industry is still trying to catch up with the existing volume of material currently in the environment. The research into recycled, readily recyclable, bio-degradable and other natural products is still ongoing and no positive peer reviewed results have yet been made available. The sentiment is right but the guidance should be left open for professional foresters to make a judgement on the available information at the time. Recent evidence has shown that some bio-degradable plastic after industry composting still produce harmful substances. A plastic by its very nature no matter what is base material is still a plastic and will behave like one. Remove guidance on types of materials. Why should biodegradable materials be preferred, what is the rationale for this currently? Research in 2021 carried out by UCL completed a comprehensive Life Cycle Assessment (LCA) study which compared the environmental performance of current and prospective scenarios for shelter-aided seedling planting compared with a base case where shelters are not employed. The study focused on the UK and demonstrated that (i) planting seedlings without shelters is the most preferable option across most environmental impact categories (including Climate Change), and in terms of weighted results, (ii) polypropylene shelters are preferable to bio-based alternatives, including polylactic acid-starch blends and bio-polypropylene, (iii) recycling is the most environmentally advantageous EoL treatment. Biodegradable products are starting to pollute traditional plastic recycling schemes which is resulting in plastic not being recycled. Biodegradable products are resulting in increased littering due to misconceptions that we can just leave it in the environment to biodegrade. These are just some of the issues being highlighted by environmental professionals currently. Biodegradability of tree protection products in the environment is not yet tested and proven for many of the alternatives being put on the market. Neither do we yet fully understand the impacts of leaving some of these alternatives (including many made of 'sustainable' natural products) materials in our environment and the effect they may have on our ecosystems. It is not appropriate currently to say that there should be a preference for biodegradable materials which may have a far larger negative environmental impact than those it replaces. The highlighted guidance text also suggests that non-biodegradable tree shelters only are classed as waste. Biodegradable tree shelters are also classed as waste when they are no longer required and cannot be left to litter the environment. They must be dealt with similarly under waste duty of care requirements, whether compostable / biodegradable or not.
	[B02 Stuart Wilkie] Good addition.
	[B03 Simon Jeffreys] Not just herbivore also establishment.
	[B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Agree with the requirement, however parts of the guidance are way off mark. Currently the available recycling schemes are limited and that section of industry is still trying to catch up with the existing volume of material currently in the environment. The research into recycled, readily recyclable, bio-degradable and other natural

	products is still ongoing and no positive peer reviewed results have yet been made available. The sentiment is right but the guidance should be left open for professional foresters to make a judgement on the available information at the time. Recent evidence has shown that some bio-degradable plastic after industry composting still produce harmful substances. A plastic by its very nature no matter what is base material is still a plastic and will behave like one. Remove guidance on types of materials.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] The sentiment to consider the appropriate tree protection method is right but the additional guidance here is incorrect and misleading. Why should biodegradable materials be preferred, what is the rationale for this currently? Research in 2021 carried out by UCL completed a comprehensive Life Cycle Assessment (LCA) study which compared the environmental performance of current and prospective scenarios for shelter-aided seedling planting compared with a base case where shelters are not employed. The study focused on the UK and demonstrated that (i) planting seedlings without shelters is the most preferable option across most environmental impact categories (including Climate Change), and in terms of weighted results, (ii) polypropylene shelters are preferable to bio-based alternatives, including polylactic acid-starch blends and bio-polypropylene, (iii) recycling is the most environmentally advantageous EoL treatment. Biodegradable products are starting to pollute traditional plastic recycling schemes which is resulting in plastic not being recycled. Biodegradable products are resulting in increased littering due to misconceptions that we can just leave it in the environment to biodegrade. These are just some of the issues being highlighted by environmental professionals currently. Biodegradability of tree protection products in the environment is not yet tested and proven for many of the alternatives being put on the market. Neither do we yet fully understand the impacts of leaving some of these alternatives (including many made of 'sustainable' natural products) materials in our environment and the effect they may have on our ecosystems. Recent evidence has also shown that some biodegradable plastic after industry composting still produce harmful substances. It is not appropriate currently to say that there should be a preference for biodegradable materials which may have a far larger negative environmental impact than those it replaces. In relation to recycling: schemes are limited and that section of industry is still trying to catch up with the existing volume of material currently in the environment. The research into recycled, readily recyclable, biodegradable and other natural products is still ongoing and no positive peer reviewed results have yet been made available.

	The guidance should be removed until we are clear of the options and should be left open for professional foresters to make a judgement on the available information at the time. Remove guidance on types of materials. The highlighted guidance text also suggests that non-biodegradable tree shelters only are classed as waste. Biodegradable tree shelters are also classed as waste when they are no longer required and cannot be left to litter the environment. They must be dealt with similarly under waste duty of care requirements, whether compostable / biodegradable or not.
	[B22 Scottish Woodlands Ltd] Good addition and in line with best practice.
	[D01 Soil Association] Positive.
	[D03 RSPB] This is a useful and welcome step.
	[E01 James Jones & Sons Ltd] Once again, the proposals appear increasingly prescriptive with a reduced ability for the professional forester to apply common sense site specific measures.
	[F01 SEPA] There should be a plan to remove them before they become waste. I suggest changing to "There should be a Plan to uplift from the landscape for reuse, recycling or disposal as waste.
	[K01 Grown in Britain] The following two paragraphs seem to be saying the same thing. One should be deleted. Owners/managers should be aware that non-biodegradable tree shelters will degrade over time and be classed as waste which is subject to legal requirements. There should be a plan to remove them before they become waste. Managers should be aware that not all biodegradable plastics will degrade in the woodland environment and may require industrial composting to break down which will require their collection before they begin to break up.
2.12.4	[A02 Seafield & Strathspey Estates] The requirement is a biosecurity policy but the verifier is a biosecurity plan – lack of consistency in terminology.
	[B02 Stuart Wilkie] A step forward.
	[B22 Scottish Woodlands Ltd] Good addition and in line with best practice.
	[B23 Andrew Heald] Requirement states a policy but the means of verification says a plan – which is it ?
	[D03 RSPB] An important requirement. Support.
	[D05 Woodland Trust] As per comments made under 1.1.7.

	Increasing importance is being placed around the sourcing of trees for planting and restocking requirements with regard to biosecurity and phytosanitary considerations as the number and incidents of new tree pest and diseases continues to increase. There is an increasing emphasis on UK-grown planting stock, accredited biosecure nurseries and quarantine periods for imported stock. While some aspects are covered by legal compliance and so relevant to section 1.1.7 of UKWAS such as plant passporting much of this area remains outside of legal requirements for the present time and falls largely under "best practice" and "voluntary approaches & schemes". It is likely many of these aspects will remain outside of legislation when UKWAS 5 is released. It is felt, therefore, that for UKWAS to be seen to be leading the way in protecting UK commercial and native woodlands from imported tree diseases and pests should consider creating a specific requirement around seed and tree sourcing –within section 2 of UKWAS. This would allow UKWAS to consider more fully the potential and value of creating UKWAS requirements with regarding to the non-legal aspects relating to sourcing of tree seed and trees. The alternative could be to cover this within an expanding text within the guidance within this section.
	[F01 SEPA] **North** American Signal Crayfish. Owners/managers to follow good forestry practices to reduce the risk of INNS spread which is a legal requirement such as off track vehicle jet hosing prior to leaving site.
2.13 Conversion	
2.13.1	[B02 Stuart Wilkie] 4.3 is already plantation so is it correct to include it?
	[B22 Scottish Woodlands Ltd] 4.3 is PAWS and already converted to plantation. Only conversion to non-forested land would be possible.
	[D03 RSPB] We support this section. PAWS and ASNW should not normally be converted to other land uses.
2.13.2	[B02 Stuart Wilkie] I still struggle with the concept that the timber from such large-scale clearances can be sold as certified timber from a sustainably managed forest when the forest itself ceases to exist. Are we simply greenwashing this timber as sustainable when it is patently not, just to suit a conservation objective? I appreciate the biodiversity and conservation case for the clearance, but is this timber any more sustainable than timber from a new powerline wayleave taking renewable energy to the national grid which is considered ineligible for certification? Deeply conflicted on this one!
	[B03 Simon Jeffreys] C repeated in notes.
	[C02 Forestry England] Item c) do the certification scheme(s) have a process to approve this conversion. The guidance could more appropriately give this route rather than just contact the schemes. Also what is the process if the schemes disagree with each other. Would the wording not be better approval from their certification bodies rather than certification schemes.

	[D03 RSPB] The conversion of plantations established often during the post war period on what are now recognised as highly prized and much reduced priority habitats will be an essential tool in meeting our international conservation commitments, and legal targets for nature recovery. There is no doubt the PEFC requirement adopted here has raised an impediment to this important work, and we must work to ensure it does not inadvertently slow this restoration work. It does seem odd that restoring areas planted primarily as a 'crop' is not treated in the same manner as the farmed environment. The workaround proposed is helpful providing UKWAS is able to respond quickly to any requests, and thus data must be collected to track the schemes that cross the 5% threshold. Furthermore in the case of the RSPB there are some 50 WMU's the majority small to medium in scale. In most cases conversion will not arise, but in a few cases 5% will be easily surpassed eg in the Flows, or some lowland heathland sites in England where heaths are being restored, but the area will not be 500ha in most cases. How is it proposed we proceed in such cases? The total certified woodland managed as WMU's held by RSPB is some 12000 ha. and increasing. In any 5 year period it is unlikely more than 1000ha in total would be restored/converted. But on some WMU's the 5% allowed will be exceeded, and in a few cases this will exceed 500ha. So some clarity in the words and back office systems to operate and support it will be required for all concerned please. We note that owners such as FLS only have 3 WMU's covering huge areas and many discrete holdings, so the 5% is most unlikely to be exceeded (but 500ha may).
	[F03 NatureScot] We are content with the changes that allow an 'exceptional circumstances' exemption from the new 5% limit, with the key issue in our view being the restoration of peatland from inappropriate or unproductive planting
	[G01 FSC UK] The standard has not previously included any advice or requirement to contact a certification scheme directly. Existing advice to owners/managers (see UKWAS 4 sections 1.1.5, 2.13.2, 3.2.2 and 3.4.4) is to seek guidance from a certification body or group scheme manager; this reflects the normal lines of communication with certificate holders. Consideration should be given to directing owners/managers to seek approval via their certification body; this would have to be discussed with certification body representatives, but informal discussion suggests they would be supportive. See comment on UKWAS 2.4.3.
2.13.3	[B02 Stuart Wilkie] Guidance should also include fertiliser regimes to be consistent.
	[K01 Grown in Britain] The guidance section is mostly about Christmas trees. Suggest adding extra with examples of SRC which may be covered by a certificate might be beneficial for clarity.

2.14 Implementation, amendment and revision of the plan	
2.14.1	
2.15 Monitoring	
2.15.1	[B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Compliance with Forest and Water guidelines – how is this a form of monitoring? Should anway read Compliance with the UKFS water guidelines (UKFS section 6.7).
	[D03 RSPB] Could owners be encouraged to consent to access by those undertaking surveys to add to the understanding and distribution of species, and or archaeological surveys, and of course ask/request findings are shared with them? In many cases WMU's will be part of various monitoring surveys for butterflies, birds and other groups which provides baseline data to help determine policies and programmes to advance nature restoration.
	[D04 Scottish Raptor Study Group] Nesting woodland raptors should be specifically mentioned here as an example of a priority species group, comprising species which are almost wholly dependent on managed forests for nesting and foraging.
	[F02 Historic Environment Scotland] In the Guidance, we welcome the highlighting of the historic environment amongst the special features to be monitored for environmental impacts and condition. In the final paragraph Scheduled Monument Condition Monitoring undertaken by national statutory historic environment agencies could be cited as an example.
	[G01 FSC UK] Arguably UKWAS 2.15.1(d) does not adequately address periodic monitoring to assess changes in the status of HCVs, as per Criterion 9.4.
	[M02 Spotta Ltd] The current template does not put the monitoring into a useful and relevant context – What is the purpose of the monitoring? For example, monitoring for pests is a key element of any IPM strategy (section 3.4.1). Without a clear link to the IPM strategy it is not possible to define relevant objectives or results from this aspect of monitoring. There should be a clear and well-defined relationship between the design of the monitoring programme and the action it informs, such as the IPM strategy. Suggested revisions to requirements: c) The owner/manager where applicable monitors and records: (additional points) • Insect pest activity at an appropriate and well-justified time and spatial resolution, suitable to meet the objectives set out in the IPM strategy. • Clear justification of the use of pesticides, biological control agents and fertilisers and any adverse impacts based on the monitoring data.

	• Impact of control measures on populations of the insects targeted. This must quantify the reduction in the insect population before and after the application of control measures. Suggested revisions to example verifiers: Time-series charts describing insect pest activity. Suggested revisions to guidance: Monitoring should be linked to potential and actual positive and negative impacts of management on the condition of features and sensitivities of the WMU identified in section 2.2.1, and to the delivery of management objectives. Monitoring should also be linked to IPM strategy specified in section 3.4.1 Monitoring may include: • (additional point) Real-time automated insect monitoring technologies General comments: [sic]
	[M03 Scottish Land Commission] Possibly useful to include a link to guidance in the Protocol on Community Engagement in Decisions Relating to Land and Protocol on Transparency of Ownership and Land Use Decision Making.
2.15.2	[D03 RSPB] See comments for 2.15.1.
	[G01 FSC UK] UKWAS 2.15.2 does not explicitly address the adaptation of management strategies to ensure effective protection of HCVs, as per Criterion 9.4. This could potentially be addressed here or at UKWAS 2.11.2.
2.15.3	[D03 RSPB] We support these requirements.
	[D04 Scottish Raptor Study Group] Nesting locations of rare breeding birds of prey should not be made publicly available, but details can be held by a third party such as the statutory forestry regulatory bodies, who are also then alert to the presence of sensitive species when, for example, issuing felling licenses.
	[G01 FSC UK] Stakeholder expectations for proactively making monitoring findings publicly available might not be as great as for management planning documentation, but consideration should be given to requiring the owners/managers of all but the smallest woods to make stakeholders aware that they can request access to monitoring findings, most obviously via a website.
	[M03 Scottish Land Commission] Relevant guidance - Protocol on Transparency of Ownership and Land Use Decision Making.

3. Woodland operations	
3.1 General	
3.1.1	[K01 Grown in Britain] Add a link to where best forestry practice can be found.
3.1.2	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] Aspects relating to the reduction of use of fertilisers, pesticides and plastics need to be considered across the industry, however this should not be at the expense of good silviculture and establishment techniques. For example, if by apply fertilizer at point of planting on a restock site the speed of establishment is increased by 50%, this could result in a net saving of other chemical inputs such as weevil control and herbicide for weeding. This could also provide other benefits such as earlier canopy closer/establishment and faster growth/sequestration of carbon. The technology for low carbon haulage vehicles is still developing and unlikely to be ready for mass roll out by 2023. This guidance is unrealistic by 2023 and should be kept for UKWAS 6. Low greenhouse gas emission vehicles would include a new diesel engine when compared to a diesel of 30 years ago, not just modern electric engines.
	[A06 Moray Estates] For the long-term sustainability of timber production especially longer stored construction timber planning should include site assessments as to whether stump treatment would be effective to reduce negative impact on Heterobasidion. High Risk areas should be treated using appropriate biocide (Urea or Pg or emerging products) to reduce long-term declines in timber productivity.
	[B02 Stuart Wilkie] Could we reference “Guidance on Responsibiities for Environmental Protection in Forestry” somewhere? I know we don’t mention specific guidance, but a pointer would do. “Planning of woodland operations should consider published guidance on roles and responsibilities for environmental protection.”
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Guidance: Tree protection products rather than just plastics and remove reference to plastics, this is misleading. Suggest: particular attention should be given to the use of high embedded-carbon products used for: Fertiliser, Pesticides and Tree protection. Consideration should be given to the adoption of low greenhouse gas emission vehicles (delete: used in forest planning, management, harvesting operations and timber haulage.)
	[B22 Scottish Woodlands Ltd] Guidance should reference “Guidance on Responsibiities for Environmental Protection in Forestry”.

	[B23 Andrew Heald] In addition consideration should also be given to forest management decisions which lead to increased use of high embedded carbon products (concrete, steel, plastic etc) due to reduced timber production this could include but not limited to the creation of open ground, conversion to native species, use of fallow period, etc
	[D03 RSPB] We would welcome a verifier that demonstrates that managers have considered the timing and location of operations to avoid sensitive priority species present on the site which might be adversely impacted. The current wording is a bit too general and vague.
	[F01 SEPA] Its not just the protection of water supplies from pollution but the mapping out of water supply source areas to implement effective pollution prevention plans. This is currently the subject of a Scottish Government led working group as there is sensitivity that planting water hungry trees too close to source areas reduces the water yield for the homeowner as well as increased risks of pollution from harvesting or chem spraying. Source mapping whereby the source area sits within the fabric of existing woodland is a priority issue and this can range from simple site walkovers/drone surveys to professional assessments.
	[G01 FSC UK] Bullets should be worded consistently, with the fourth and fifth bullets beginning with 'Taking measures'.
3.1.3	[D03 RSPB] Please add species as well as features of high conservation value to the requirement in 3.1.3.
	[F01 SEPA] Operational Plans should be communicated to site supervisors too, not just workers. Roles and Responsibilities should be clearly outlined on site as per new FIEG Guidance.
	[F02 Historic Environment Scotland] We welcome the additional flagging of historic environment sites here.
3.1.4	[D03 RSPB] Species also need to be referenced given many are specifically protected at sensitive times of the year.
	[D04 Scottish Raptor Study Group] We strongly support this section. Raptor nests should be specifically mentioned as an example of a feature of High Conservation Value.
	[F02 Historic Environment Scotland] We suggest that the requirements at 3.1.4 are altered to read as follows: Operations shall cease or relocate immediately where: • They damage sites or features of conservation value or of special cultural and historical significance identified in sections 4.1-4.5 and 4.8. • They reveal previously unknown sites or features which may be of conservation value or of special cultural and historical significance.

	Operations in the vicinity shall recommence only when the sites or features have been investigated and appropriate management and/or remedial action agreed in discussion with the relevant statutory bodies and/or local authority historic environment or archaeology services. Repair of damage, prevention of any further damage, and establishment of buffer areas may be required where appropriate
3.1.5	[B02 Stuart Wilkie] A good addition.
	[B22 Scottish Woodlands Ltd] Good addition and in line with best practice.
	[D03 RSPB] We support this requirement.
3.2 Harvesting and restocking	
3.2.1	[B01 Rebecca Haskell] Is some specific guidance / example verifier needed re b 'loss of soil carbon to air or water' ie to make clear what extra this includes which is not already covered in the first bullet point ie 'damage to soil and watercourses…….burning' which would release carbon to air or water.
	[D02 Ancient Tree Forum] ATF is pleased to see the inclusion of 'root zones' above but the definition in the Glossary is not in accordance with current practice & planning legislation . The revised definition shown should be adopted as shown here: https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences
	[D03 RSPB] We consider reference be made to avoiding soil compaction-which is often less obvious. We also consider that roading even if temporary should be kept to a minimum and planned to avoid damage to the areas (15%-30%) which form the core of the WMU managed for nature. Indeed should that not be a requirement for all management operations? How can an area be put forward as being managed for nature if it is subject to regular high impact forestry operations?
	[D04 Scottish Raptor Study Group] Damage to High Nature Conservation value species such as nesting woodland raptors. Appropriate training of staff or contracting of specialist raptor workers to carry out pre-felling surveys and/or training.
	[G01 FSC UK] In UKWAS 3.2.1(a), explicit references should be added to extraction (consistent with Criterion 10.11) and to High Conservation Values (consistent with revised IGI 10.11.1), and for consistency with the term NWFP it might be better to refer to 'wood' rather than to 'timber', e.g. 'Wood and non-wood forest products (NWFPs) are harvested and extracted efficiently and in a manner which conserves environmental values and High Conservation Values.'
3.2.2	[D03 RSPB] We support this section.
3.2.3	[A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] Stump removal is not widely

	practised and is known to be costly, fibre is easily contaminated and causes it significant damage to soil carbon. Therefore it would be covered by section referring to soil carbon 2.4.1 However as different approaches to stump fibre recovery change such as using new technologies to cut lower or core out stumps the term 'harvesting' could prevent this happening. While further research into additional fibre recovery is explored the term 'no stump harvesting' should be removed. OR the wording changed to mirror section a 'Stump harvesting is practised only where there is demonstrable management benefit, and where a full consideration of impacts shows that there are not likely to be any significant negative effects.' As well as the list already given.
	[A05 Buccleuch Estates] Some stumps are removed to enable harvesting access routes and during ground preparation. They are not removed from site only removed from the ground to enable transit of machinery. These are generally small scale but possibly include in the list at b to prevent time being wasted at audit.
	[B23 Andrew Heald] Delete b – and include stump harvesting in a. – it is much simpler to have a single requirement for harvesting. "Whole tree harvesting" can be taken to include including harvesting of the stump. New single requirement Whole tree harvesting or stump removal shall be is practised only where there is demonstrable management benefit, and where a full consideration of impacts shows that there are not likely to be any significant negative effects.
	[D03 RSPB] Add damage or loss to habitat features of conservation value in guidance after bullet point re Nutrient loss.
3.2.4	[D03 RSPB] We support this section.
3.2.5	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] The previous wording 'reduces the potential for' is better than 'reserves'. Ground preparation is required for establishment. Soil, water and carbon should be protected from the potential adverse effects of cultivation operations. The current wording is overly negative of all ground preparation, when it is known to help establish trees quicker and reduce losses.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] In the 1990s/early 2000 Forest Enterprise (as was) trialled flat planting (i.e. no ground prep) on restock sites which lead to large cohorts of very variable and poorly established crops. Around the same time the Forestry Commission lead by SNH also banned fertiliser application from afforestation schemes for native woodlands, along with limiting drainage and ground prep. This led to extensive scheme failures. No matter how well intentioned, it is important that we do not abandon sound silvicultural practice; poor initial establishment leads to more input intensive establishment or to crop failure which reduces the sites profitability and therefore the amount to be spent on additional woodland works.

	[A06 Moray Estates] Section 3.2 assumes that WMU are to be extensively managed under clear felling and restocking regime. The does not appear to be space in this part of the standard to require CCF to be properly addressed as an alternative to Clearfell and Plant
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Remove all the text in guidance, cultivation follow industry guidance.
	[B22 Scottish Woodlands Ltd] It is important that following best practice guidance would meet this requirement and no more onerous analysis is required. How does the guidance on when not to restock relate to 2.13.2 Woodland removal or potential legal requirements?
	[B23 Andrew Heald] Please be consistent it should be Owners/managers not Owners AND managers . This is a very narrow understanding of ground preparation. The purpose of ground prep is to ensure good tree establishment, this can include soil cultivation, drainage and weed control, and optimising micro-site conditions. This requirement needs to be rewritten so that the focus is on the forest manager to demonstrate that they understand the positive and negative impacts of their choice of ground prep technique, and have reached a credible decision. Simply avoiding negative impacts is not good forest management.
	[B24 CCFG] The whole of Section 3.2 implicitly assumes that forests will be managed using a clear felling and restocking regime. We suggest that in 3.2.1 there is an additional requirement along the lines of 'Management shall consider the feasibility of using a lower intensity management approach such as continuous cover forestry as a means of minimising site disturbance and damage to carbon stocks.'
	[D01 Soil Association] See comments on guidance. The likely long term post-harvest use of timber from carbon storage should not be used to justify avoidable emissions at restocking phase. [Re. the requirement] Positive. [Re. guidance 'The likely long-term post-harvest use…'] This final sentence is unhelpful. Forest managers should be minimising emissions from ground preparation in all instances and growing timber with potential long-term carbon storage potential should not be a reason to deviate from this requirement. [Re. guidance 'Cultivation and new drainage should be kept to a minimum…'] Positive.
	[D03 RSPB] For some of these operations/actions (which are welcomed) a useful verifier should be advice from expert agencies or advisors. For example we would wish peatland restoration to benefit from sound advice to ensure it is planned and implemented successfully. Such work is still novel in many areas and thus good planning and advice is needed.

	[E01 James Jones & Sons Ltd] The previous wording 'reduces the potential for' is better than 'reverse'. Ground preparation is required for establishment. Soil, water and carbon should be protected from the potential adverse effects of cultivation operations. The current wording is overly negative of all ground preparation, when it is known to help establish trees quicker and reduce losses, thereby maximising long term carbon sequestration within the growing forest.
	[F01 SEPA] New Cultivation Guidance issued stipulates the preferred ground prep methods so agent/owner doesn't need to evaluate much in terms of best [compliant] options. In line with grammatical simplification, remove the word 'should' in new text "Cultivation and new drainage…."
	[M02 Spotta Ltd] General comments: While the guidance mentions the use of a fallow period for pest control purposes, this currently isn't captured in the requirements for restocking. The use of a fallow period for restocking e.g. Sitka Spruce has been shown to be an effective method of pesticide reduction against the insect pest Hylobius abietis. In previous consultations there were no economically viable methods for assessing the risk of insect pest activity on clear-fell sites prior to restocking. Now, new remote monitoring technologies make this feasible. The ability to quantitatively assess the activity of insect pests prior to restocking can allow forest managers optimise restock timing to minimise the risk of insect pest damage, while minimising the amount of time that a site remains fallow. This represents best-practice for minimising pesticide use, as is required by the FSC and PEFC. Note: This comment is relates to comments made on section 3.4.1 – Integrated Pest Management. Suggested revisions to requirements: Restocking is carried out in a manner that is likely to minimise the use of pesticides while keeping the fallow period as short as possible. The timing and location of restocking activities are informed by quantitative data describing the prevalence of pests, in order to minimise the likely use of pesticides. Suggested revisions to example verifiers: Quantitative pest prevalence data on clear-fell sites.
3.3 Forest infrastructure	
3.3.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Requirement [or Clause]: Add and notifications to read: 'All necessary consents and notifications are obtained or made for …. Etc' (This is with reference to the need to notify HSE using an F10 if roading infrastructure meets these requirements under CDM Regs, also prior notification under planning regulations) Suggest change quarry to borrow pit.

	Example Verifiers: add notifications and registration of exemption to Records of consent to read 'Records of consents and/or registrations of exemption. 'Notifications.' Guidance: First sentences should read: Consents, exemptions and notifications may relate to planning, environmental or construction regulations. (This is because consents and registrations of exemptions fall under the Environmental Permitting regulations)
	[B02 Stuart Wilkie] I think we avoided the word quarries last time around as these are covered by the quarries act and has a specific meaning under that act.
	[B22 Scottish Woodlands Ltd] The word quarries should be avoided as these are covered by the quarries act and has a specific meaning under that act.
	[D03 RSPB] See comments in 3.2.1 above. We would recommend that any roads or mineral extraction avoids as far as possible any area that forms part of the 15%-30% earmarked for nature conservation and any priority habitats.
3.3.2	[B01 Rebecca Haskell] Is 'access for sporting purposes' quite the right phrase? If this is referring to, for example, provision of quad tracks on restock sites for stalkers undertaking deer control, the purpose is to enable deer management at a sufficient level in the area to ensure crop establishment, not 'sporting purposes', though of course there is an overlap…
	[B23 Andrew Heald] "there should be a documented evaluation for its need and rationale such as for stabilising eroded ground, meeting all-ability access " – so before a small woodland owner opens up a footpath, they are required to undertake a documented evaluation ? Please rewrite to reflect the reality of woodland management, these proposals will simply discourage owner/managers from allowing public access.
	[D02 Ancient Tree Forum] ATF feels that use of the word 'unnecessary' is an unhelpful qualification to 'damage to root zones'. Should also read 'root buffer zone' We also maintain that our earlier submission accurately reflects best practice, namely: Brash mats are not sufficient to protect tree root zones. A root protection area (RPA) of 15x tree diameter or 5m beyond canopy drip zone is a bare minimum. See https://www.gov.uk/guidance/ancient-woodlandand-veteran-trees-protection-surveys-licences

	[D03 RSPB] This picks up the sentiment of our comments made earlier about roads and road construction. We would observe that a clear bit of guidance making the use of areas included in the identified nature 15%+ should be avoided wherever possible will send a message where features of high priority are currently absent from a WMU.
	[M03 Scottish Land Commission] Good practice guidance in terms of community engagement regarding infrastructure planning can be found in the Protocol on Community Engagement in Decisions Relating to Land.
3.4 Integrated pest management	
3.4.1	[A02 Seafield & Strathspey Estates] The statement "Note that a reduction in the use of pesticides reduces the embedded-carbon budget of forestry operations." Is questionable. Such a statement cannot be made without qualification and therefore should not be included.
	[B23 Andrew Heald] • An IPM policy or strategy document • Clear records of the decision-making process This is overly burdensome for small woodland owners UKWAS should avoid making statements like this – So, it would be extremely difficult to justify pesticide use where practicable alternative methods of control are available: for example, in place of strimming around picnic benches. An auditable standard should not make statements like this, without providing clear evidence that they are factually accurate - Note that a reduction in the use of pesticides reduces the embedded-carbon budget of forestry operations.
	[D01 Soil Association] Positive including subsequent related requirements: Now much more in line with FSC framing and requirements.
	[D03 RSPB] We are very concerned that even this directional guidance leaves open the possibility of the use of a group of Neonicotinoid pesticides. The evidence that this class of chemicals has significant impacts on non-target species is growing steadily. Accordingly we would ask that the guidance also differentiates between pesticide type, making Neonicotinoids the last option, or better still not used at all. Wording such as it "would be extremely hard if pesticides were ever favoured to justify the use of Neonicotinoid compounds where approved alternatives exist".Which builds on the text in guidance above.
	[J01 Forest Research] I'm not convinced it's a particularly strong argument to make that reducing pesticides use reduces the embedded carbon budget of forestry operations. In fact, in terms of carbon lost, alternatives such as repeated mechanised control or more intensive cultivation or the use of plastic mulches might well be far worse. Herbicide use is, for example, around a tenth of the carbon loss through planting and beating up. Overall, the carbon budget of pesticides is very small compared to the benefits in terms of increased sequestration over the rotation (0.01 t C ha lost compared to 4.6 T C sequested over the first 5 years after planting). There are much better reasons to try to avoid pesticide use, and I would delete this sentence on the carbon impacts of pesticide use from the standard entirely.

[M02 Spotta Ltd] General comments:

From DEFRA: “IPM requires effective monitoring, including inspection and identification of pest issues. Not all insects, weeds, fungal pathogens and other living organisms have a sufficient impact to require control measures, and accurate identification allows appropriate control decisions to be made. Monitoring minimises the potential for interventions to be used when they are not needed, and is used to ensure the correct timing of the control method (chemical or non-chemical) to optimise effectiveness. Thresholds are set, above which pest, weed and disease populations levels are expected to cause damage that becomes economically or environmentally unsustainable. Once a threshold has been crossed, an intervention is made to control the pest, weed or disease.”

Under the current guidance there is no obligation (or even recommendation) to conduct monitoring activities to assess the need for control agents, or the appropriateness of different control options. Without this it cannot be considered a complete IPM approach. Explicit requirements to **demonstrate** pest activity are needed in section 3.4.1 to protect against pre-emptive or prophylactic pesticide use, and to ensure that chemical methods are only being used as a last resort. Also, references to ‘potential’ pest presence should be removed because these are incompatible with an IPM approach, as defined by DEFRA.

From FSC: “For FSC, having a clear pesticides policy, and keeping it up to date with changing global circumstances and **new technologies**, is essential.”

The requirements and guidance in section 3.4.1 provides an opportunity to uphold this sentiment around the use of the new technologies to minimise pesticide usage. Technologies are now available that allow cost-effective large-scale monitoring of pests to inform forest management decisions. For example, it is now possible to make objective assessments of H. abietis activity across multiple sites in real-time. The use of such technologies allows for objective measures of the severity of a pest infestation in a given WMU. This in turn enables more explicit regulation around justifying the use of pesticides through e.g. setting insect pest activity thresholds above which control measures can be used. Additionally, the use of such technologies provides warning of insect pest presence, allowing to optimised timing of control activities. This increases the efficacy and can lead to a reduction in total pesticide usage.

Suggested revisions to requirements:

New b) As a part of the IPM strategy, the use of chemical pesticides must be justified on the basis of demonstrated pest prevalence. As such, IPM includes:

- Monitoring for pests of concern
- Well-defined thresholds above which the use of chemical pesticides may be justified

	New c) The impact of control measures is assessed through continued monitoring activities.
	
	d) Integrated pest management demonstrates knowledge of the latest published advice, available technologies and its appropriate application.
	
	Suggested revisions to example verifiers:
	Real-time insect pest monitoring data and thresholds for triggering control measures
	
	Suggested revisions to guidance:
	Integrated pest management should conform to best practice. A stepwise approach should be followed as summarised below:
	
	• Set measurable thresholds above which pest populations are expected to cause damage
	• Monitor to assess if and when this threshold is reached. If a threshold is reached:
	• Consider the control options:
	  ○ Take no action
	  ○ Avoid the problem: for example by a change in silvicultural practice or tree species
	  ○ Take remedial action: only if the problem cannot be tolerated or avoided
	• Consider which remedial action is most suitable:
	  ○ Non-chemical method: potentially including biological control agents (see section 3.4.6)
	  ○ Chemical method: using the least hazardous option

3.4.2	[B01 Rebecca Haskell] If guidance re evidencing of consultation is suggesting that this may be carried out at the time of management plan review or renewal it would be really helpful if this was clearly cross – referenced in 2.3.1 and/or 2.2.1a. ie could there be a stronger link in 2.3.1 / 2.2.1 a – n requirements as 2.3.1 'new or revised management planning documentation as specified under section 2.2.1' doesn't make it clear that this risk assessment process should also be subject to consultation, nor do 2.2.1 a-n expressly mention environmental and social risk assessments – only reference is in the Guidance 'this may include IPMS'.
	[B02 Stuart Wilkie] I would prefer the use of the word impact to damage under the first bullet point in b. The aim would be to avoid damage by minimising impact. This is slightly at odds with the wording at 3.3.4.d.
	[B22 Scottish Woodlands Ltd] The least social and environmental damage" The aim should be to avoid damage. This wording seems to accept damage will happen which is at odds with best practice.. This is also not what the wording in 3.3.4.d implies. Otherwise the clarification of these requirements is helpful.
	[D03 RSPB] See comments under 3.4.1.

	[G01 FSC UK] See comment on UKWAS 3.4.6(a); it might be best to refer to both pesticides and biological control agents in UKWAS 3.4.2(a), rather than having separate environmental and social risk assessment requirements.
	[J01 Forest Research] I am not convinced it should be specified here that the environmental and social risk assessment should be carried out at the WMU level. Particularly for larger certified estates, I would have thought a environmental and social risk assessment would often need to be done on a site by site basis, as part of the site by site IPM decision process, but informed by a 'higher level' WMU plan (the latter being the stage at which stakeholders are consulted on when the management plan is revised). In other words, a WMU level IPM strategy incorporating an environmental and social risk assessment of potential chemical control options. Then a site specific IPM decision process, with a stie specific environmental and social risk assessment, both informed by the WMU level plan. I think there is a lot of confusion out there around this point, not helped by some of the FSC guidance produced, and perhaps the simplest thing to do would be to leave out the words 'prepared at a WMU level', which would allow a range of different approaches to be taken to fulfil the requirement. Presumably the 'book' symbols refer to references in the appendix. I would be keen to see the revised list of references when it is produced please.
3.4.3	[B22 Scottish Woodlands Ltd] We welcome the requirement for all certificate holders to contribute to research into alternative methods of control. As one of very few organisations that has carried the load on this, we hope it will help to fund future research. Could this be strengthened?
	[D03 RSPB] Again we would wish it to be made clear that even if approved Neonicotinoid based pesticides should not be used, or only used if no alternative has been approved.
	[J01 Forest Research] Why is there no mention of a requirement for the management unit to undertake research into alternatives? It is a requirement under FSC policy for example.
3.4.4	[D03 RSPB] See comments under 3.4.1 and 3.4.3.
3.4.5	
3.4.6	[D03 RSPB] We support this section noting that this is an area which continues to develop and is not without risks to the natural environment should the control agent perform unexpectedly when released in a real-world situation. Caution is required. Indeed a precautionary approach is advised.

	[G01 FSC UK] Just as UKWAS 3.4.1(a) refers to both pesticides and biological control agents in the context of IPM, it might be better for UKWAS 3.4.2(a) to refer to environmental and social risk assessment for both pesticides and biological control agents, rather than having a separate requirement for biological control agent ESRA in UKWAS 3.4.6(a).
	[J01 Forest Research] Biocontrol agents include biological pesticides and other forms of biological control. Biological pesticides can be insecticides, fungicides or herbicides (also known as mycoherbicides), and are formulated using living organisms. They are regulated in exactly the same way as other pesticides by the UK HSE. Biological control agents which use multicellular organisms such as nematodes or insects are not classed as pesticides, and not regulated by the Chemicals Regulation Directorate, but are subject to Defra, SNH and NRW licensing requirements. Pesticides derived from natural sources, so called natural product pesticides, are not biocontrol agents. Given the above, do you mean to include Biological control agents in section 3.4.6? Alternatively it might be better to use the term 'Biological pesticides'? (For example, FSC pesticide policy does not apply to biological control).
3.5 Fertilisers	
3.5.1	[D03 RSPB] Unnecessary use of fertilisers may be avoided through the appropriate choice of species or species-mixtures. We suggest adding to this line taken from guidance above – or leaving poor soils where nutrient deficiency may arise unplanted as part of the area devoted to nature.
3.5.2	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B19 Tilhill Forestry Ltd; E02 BSW Timber Ltd] Point c should be removed from requirement, although this is not a widely used method it is still required at times eg with a yield class 4 or 6 crop could be improved to yield class 10, better growth equals better benefits such as carbon sequestration. It would be more appropriate to add a comment in guidance that aerial technology for application should only be used after a risk assessment has been completed the and task is justified. Currently this work is done via manned means but as drone technology advances, becomes cheaper to use and access there are potentials for this method to be highly accurate and deployed quickly when conditions are right. Do not prevent the innovation of future technology by banning it now. Point b gives the forester the flexibility to work to the site and conditions while maintaining a high standard of environmental protection.
	[B21 Cawdor Forestry Ltd] Requirement c) should be removed and moved to guidance and wording amended to aerial fertiliser should only be carried out when justified.

	[B22 Scottish Woodlands Ltd] The use of aerial fertilisation may be justified in certain situations, but we understand that there are environmental risks associated with this. Perhaps UKWS could borrow text from 3.2.4 here. “Aerial fertiliser is only applied where there is demonstrable management benefit, and where a full consideration of impacts shows that there are not likely to be any significant negative effects”.
	[C01 DAERA Forest Service] Future re-establishment will very likely require additional fertilisers. A ban on aerial fertilising should be reconsidered where the risks of poor targeting of application can be controlled. A definition of aerial fertilising would be helpful. Does this include broadcast or blown fertiliser from ground based vehicles?
	[D03 RSPB] We support this section.
	[F01 SEPA] Owners/managers should be aware of legal requirements relating to buffers along water courses, bodies and supplies. Need to emphasise its water supplies. I didn’t see this sentence in the pesticide section, if its not there it needs to be added.
	[J01 Forest Research] Is there recent clear scientific evidence to justify the statement ‘Aerial applications of fertiliser carry unacceptable risks in terms of lack of targeting and drift.’? If not, given the other requirements (a – f) in section 3.5.2, I’m not sure it is necessary to specifically ban aerial applications.
3.5.3	[D03 RSPB] Support.
3.6 Fencing	
3.6.1	[M03 Scottish Land Commission] This issue does arise in relation to community engagement – guidance can be found in the Protocol on Community Engagement.
3.6.2	[D03 RSPB] Ensure the guidance on fence marking produced by FLS/GWCT/RSPB is referenced.
	[F02 Historic Environment Scotland] In the Guidance, we suggest adding that statutory consent may be required for fencing work on Scheduled Monuments. Also, suggest adding to the list: The need to maintain access for the monitoring and management of designated sites.
	[G01 FSC UK] Wording could be improved, e.g. ‘Where fences are used, they are correctly specified and maintained, and their alignment is designed…’.

	[M03 Scottish Land Commission] Guidance can be found in the Protocol on Community Engagement in Decisions Relating to Land.
3.7 Waste	
3.7.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Requirement: Change wording to reflect law. Waste is produced, stored, transported and disposed of without harming the environment in accordance with current regulations. Example Verifiers: Change wording: 'No evidence of significant impacts from waste management.' (ie not just disposal). Amend second bullet to read: 'Documented policy or guidelines on arrangements for waste management including minimisation, segregation, storage, recycling and return to manufacturer.' Guidance: Remove statement: Removal of wastes is a legal obligation. This doesn't make sense. Unless the guidance is meant to read: Any waste materials in the woodland must be stored, transported and disposed of in accordance with duty of care regulations, not left in the woodland. Amend bullets under 'Waste includes:' to as below: Bullet 1 - Redundant tree shelters and tree bags Bullet 4 – Empty fuel and lubricant containers
	[B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; E01 James Jones & Sons Ltd] Change disposal to management. Waste should be handled and stored correctly as well as disposed of correctly.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Remove General refuse? Unless we mean general litter arising from work operations. (Note: Any redundant tree shelters should be removed from woodlands not just plastic, redundant tree shelters should not be left to litter the environment beyond their useful life)
	[D03 RSPB] Add redundant fencing to bullet points.
3.7.2	[B02 Stuart Wilkie] a) is a good addition.

	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Clause a): change the requirement to the below, the current text is not concise: The owner/manager considers resource efficiency when selecting materials. Delete: "The owner/manager selects materials which are best suited for waste minimisation and materials reduction where they are available, economically viable and aligned with management objectives."
	[B22 Scottish Woodlands Ltd] a) Is a welcome addition.
	[D01 Soil Association] [Re. UKWAS 3.7.2(a)] Positive.
	[F01 SEPA] 3.7.2 [b] All wastes are a priority regardless of what it is so there's no need to rank it, all of it must be removed, delete word progressively and prioritisation as it has no place in waste regs.Its all a legal requirement. The owner selects materials for reuse surely, keeps costs down and promotes circular economy.
3.8 Pollution	
3.8.1	[B01 Rebecca Haskell] A drain that connects to a water course is defined as a watercourse. If a distinction between water courses and drains is considered necessary (and I agree this might be a good idea) would it not be better wording to say 'siltation of watercourses, **including** drains that connect to watercourses?
	[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] Emphasis more the role of a pre-operational diffuse pollution control plan and the role of operator training. This should be in guidance before supervision.
	[F01 SEPA] Column 1, its not just adoption of management practices it's the point about following good forestry practices to reducing the risks of causing diffuse pollution. Column 2 – pre commencement site meetings to discuss roles and responsibilities Column 3 - Siltation of water courses or drains that connect to water courses- delete double reference to watercourses. There's more text on deer management than pollution. There needs to be text to cover the importance of adhering to the Forest & Water Guidelines, UKFS and operational guidance. There's plenty out there. Reinforcement that pollution prevention rather than pollution remediation saves environmental damage, remediation costs and time.

3.8.2	[F01 SEPA] The term ‘relevant workers’ needs changing as its vital to prevent pollution for **all** forestry workers, site supers and management. Everyone involved should be part of that discussion.

4. Natural, historical and cultural environment	
4.1 Statutory nature conservation sites	
4.1.1	[A02 Seafield & Strathspey Estates] b) - It is not appropriate to "require" that all designated sites "are …. brought in to good condition over time". Maintenance is appropriate but progress to good condition may not be possible for a range of reasons, ownership, financial, technical, practical, interpretation of requirements etc., This is alluded to in the guidance. The guidance should be discussion with the manager and evidence of discussion with the statutory body, either directly or through consultation in the forest planning procedure, over what might be practical and a justified decision process to back up the management proposal, which might be maintenance of condition only.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] This section aims to protect red list species, yet by insisting that all PAWS are replaced with native species (broadleaves) this will be a massive habitat loss for the red squirrel. Point b – this assumes sites are not already in good condition, this is not always the case. Revert back to original wording 'where possible enhanced' Point c - reference to biological record centres should be removed as they make a significant charge for providing information and the records they provide include endless lists of **all** species records for the site including irrelevant records which just adds to the administrative burden when the system worked before.
	[A05 Buccleuch Estates] In relation to point B – [sic]
	[A06 Moray Estates] The requirement to bring all statutory sites into good condition may be exceptionally onerous if the forest is to remain economically viable. The previous version of UKWAS included 'where possible' and this should be reinstated. The 'where possible' question should be thoroughly tested by auditors especially as there are developing natural capital funds that my assist. There are many areas where invasive species (eg.Grey squirrels, *Rhododendron ponticum*) may cost very significant sums to deal with and are constantly subject to recolonisation from adjacent ground out with management control. There needs to be a recognition, perhaps in the form on a WMU policy statement and evidence of communication that should collaborative working be agreed with neighbouring landowners then action on invasive species shall be taken.
	[B02 Stuart Wilkie] Over enthusiastic wording here! The requirement to bring all statutory sites into good condition may be unachievable if the forest is to remain economically viable and may turn some away from certification. We need to bring back the 'where possible' which would be consistent with 2.11.2.

	There are many areas where rampant rhododendron would cost mid six-figure sums to deal with and are constantly subject to recolonisation from adjacent ground out with management control. Are we really saying that an owner who is doing their best to contain the situation is no longer welcome into a certification scheme? Also, how is the owner of a woodland in the upper catchment of a SAC such as the River Tweed or within the Tweedsmuir Hills SSSI able to exert sufficient influence over the site in order to bring it into good condition when they may own only a tiny fraction of the site. It must be up to the CB to decide if the manager is making all reasonable efforts to maintain and enhance the site. This has worked in the past quite well.
	[B22 Scottish Woodlands Ltd] In some circumstances the requirement to bring all statutory sites into good condition may be exceptionally onerous if the forest is to remain economically viable. The previous version included 'where possible' and this should be reinstated. There are many areas where invasive species may cost very significant sums to deal with and are constantly subject to recolonisation from adjacent ground out with management control. Also, how is the owner of a woodland which represent a small portion of a SSSI able to exert sufficient influence over the site in order to bring it into good condition? As now, it must be up to the CB to decide if the manager is making all reasonable efforts to maintain and enhance the site and meeting the 'where possible' requirement.
	[B23 Andrew Heald] b) Adopting a precautionary approach, the identified areas, species and features of high conservation value shall be are maintained and, where possible, enhanced brought into good condition over time. Rewrite to b) Adopting a precautionary approach, the identified areas, species and features of high conservation value ~~shall be~~ are maintained and where possible brought into good condition over time. The reasons for a site not being in good condition might be outwith the control of owner/manager .
	[D02 Ancient Tree Forum] Sample verifiers to include reference to historic maps of enclosed parklands, MAGIC website with parkland/wood pasture overlay, Ancient Tree Inventory (ATI).

	[D03 RSPB] Whilst it is correct that where the boundary of the protected site extends beyond the WMU it may not be possible for the manager to resolve any condition problems alone-the emphasis should be to do what can be done and cooperate with neighbours in this endeavour. See last para re guidance. However of more concern is that priority habitats more generally that occur outwith the designated site network seem to have lost any protection or requirement for them to be considered at all. We are very concerned at this. See our comments at 4.1.2. The remedy may be to change the header to : statutory nature conservation sites and priority habitats; and add priority habitats back in the guidance. The glossary references the legal basis for priority habitats correctly so this is a sensible workaround.
	[D04 Scottish Raptor Study Group] 4.1.1 c) Specialist raptor workers and Raptor Study Groups should be mentioned as a key consultees as they often have the most detailed and up to date information on raptor status in WMUs in their area. It often falls to RSGs to provide data on species and nesting locations to statutory conservation agencies and FMs alike, so they have an important role to play here.
	[F03 NatureScot] In our previous comments we recommended that, to address the nature crisis, UKWAS should include a requirement for areas of high conservation value to be brought into good condition. Our concern with the previous version of the Standard was that it did not require improvement on conservation objectives. In several paragraphs it used the phrase 'Areas and features of high conservation value' to be 'maintained and, where possible, enhanced' (4.1.1). This phrasing allowed compliance whilst areas of high conservation value are maintained in poor condition. The new draft Standard (V5) does not address this concern, as there is no requirement to restore damaged areas and features of high conservation value. The most significant change in para 4.1.1 b for protected woodlands suggests that these areas and features 'are maintained and brought into good condition over time'. The final words 'over time' do not provide sufficient clarity on the expected timescales for woodland managers to do any restoration now, and could be conceived as consigning that obligation to an unspecified point in the future. For ancient semi-natural woodlands (4.2.1d) and semi-natural habitats (4.4.1b) the wording is unchanged at 'conservation values are maintained and where possible enhanced' a phrasing which we consider to similarly remove any requirement for woodland managers to do any restoration. Hence, our recommendation is that UKWAS includes wording in sections 4.1, 4.2, 4.4 that requires areas of high conservation value to be brought into good condition within a fixed timescale – perhaps 5 years. The definition of good condition needs to be agreed with the statutory conservation agencies, but for protected (designated) woodlands would be the standard definition of 'favourable condition'. As a further clarification, in this context good condition means that key stressors – like high grazing levels or rhododendron – are removed, and the area can develop in a natural way. It doesn't seek impossible outcomes like instant old trees or deadwood.

	[G01 FSC UK] UKWAS 4.1.1(a) addresses assessing the presence of HCV 1 and HCV 3 in the form of designated sites, but does not explicitly address recording presence (although this is arguably addressed in Indicator 9.3.2/UKWAS 4.1.1(d)), and does not address assessing and recording status, as per Criterion 9.1. For consistency with uses of 'statutory nature conservation sites' in the standard, consider changing 'statutory designations' to 'statutory nature conservation designations'.
4.1.2	[A02 Seafield & Strathspey Estates] UKWAS should defer to UK and devolved legislation which sets the country requirement for approval of land use change. It is not UKWAS's role to state whether afforestation is appropriate.
	[B02 Stuart Wilkie] The guidance on afforestation is not relevant here as for the requirement to apply there must already be a WMU. It is already correctly located in the woodland creation section 2.6.1.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] In the guidance add roosting sites for protected species....e.g. Sch 1 raptors.
	[B22 Scottish Woodlands Ltd] This requirement is about existing woodland so the comment on afforestation seems odd.
	[D03 RSPB] This section now appears to cover just statutory sites as stated above. We consider that priority habitats that were identified under EU conservation Directives, and which have been rolled forward under domestic legislation appear to be excluded. Designated sites only contain a representative sample of such areas, but protection is afforded beyond the designated sites for all such priority habitats. This is especially worrying for priority open ground habitats, and where cases of new planting are being considered which may impact them. This seems to have arisen during the editing of recent versions of the consultation draft and requires to be addressed. If our reading of the text is correct UKWAS appears to be inadvertently ignoring the value of such areas in the planning and management process, which could lead to the loss of such priority areas through lack of appreciation of what is required and regulatory compliance issues being raised. We are most concerned at this as it is a backward step. The solution may be to revisit the header and wording in 4.1.1 or reword 4.1.2 significantly to make clear what is required. Furthermore where new afforestation is proposed it is unrealistic to expect a management plan to be in place agreed with a statutory conservation agency, where the site is not designated and indeed land may be changing ownership to allow afforestation. Reinforcing our concern that undesignated priority habitats have been downgraded by unfortunate editing. We stand ready to help address this important matter. Our immediate suggestion is to change the header title to statutory nature conservation sites and priority habitats, and reinstate the reference to priority habitats in guidance.

	The wording of the requirements may also require some attention 4.1.1 a) could read: a) Areas and features of high conservation value having particular significance for biodiversity ~~shall be~~ are identified by reference to statutory designations, and Country lists of priority habitats, at national or regional level and/or through assessment on the ground.
	[D04 Scottish Raptor Study Group] The Hen Harrier (Red-listed and Schedule1) is a good example of a bird of prey which nests in traditional locations on open ground which can be lost to inappropriate afforestation. However, liaison with specialist raptor workers or Raptor Study Groups can provide pragmatic advice on how to work around this species within a new woodland scheme.
	[M03 Scottish Land Commission] This issue has cross-boundary implications beyond the WMU and good practice could include some dialogue and collaboration between neighbours.
4.2 Conservation of ancient semi-natural woodlands (ASNW)	
4.2.1	[B22 Scottish Woodlands Ltd] This is a clearer expression of the requirements.
	[D02 Ancient Tree Forum] Definition of 'old trees' required, unless 'veteran' is adopted throughout. 'Ancient tree' has an additional layer of meaning and value: see definition here (repeated in Glossary): https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#use-of-buffer-zones Ancient Woodland Inventories are unreliable, particularly in relation to wood pasture and historic parkland . See also comments under 4.1.1 above. The reference to other inventories can also be found in the above link.
	[D03 RSPB] Invasive species must include commercial conifers self-seeding into ASNW from adjacent plantations. Clarify in guidance. We support this section.
	[D05 Woodland Trust] The Woodland Trust would like to suggest the following change within the guidance section. Statutory nature conservation bodies such as NatureScot and Natural England carries guidance and information on the management of semi-natural woodlands and this should be reflected in the guidance. Management should be in accordance with the relevant forestry authority and/or statutory nature conservation agencies guidance ~~FC practice guides~~ for semi-natural woodlands.
	[F03 NatureScot] In our previous comments we recommended that, to address the nature crisis, UKWAS should include a requirement for areas of high conservation value to be brought into good condition. Our concern with the previous version of the Standard was that it did not require improvement on conservation objectives. In several paragraphs it used the phrase 'Areas and features of high conservation value' to be 'maintained and, where possible, enhanced' (4.1.1). This phrasing allowed compliance whilst areas of high conservation value are maintained in poor condition.

	The new draft Standard (V5) does not address this concern, as there is no requirement to restore damaged areas and features of high conservation value. The most significant change in para 4.1.1 b for protected woodlands suggests that these areas and features 'are maintained and brought into good condition over time'. The final words 'over time' do not provide sufficient clarity on the expected timescales for woodland managers to do any restoration now, and could be conceived as consigning that obligation to an unspecified point in the future. For ancient semi-natural woodlands (4.2.1d) and semi-natural habitats (4.4.1b) the wording is unchanged at 'conservation values are maintained and where possible enhanced' a phrasing which we consider to similarly remove any requirement for woodland managers to do any restoration. Hence, our recommendation is that UKWAS includes wording in sections 4.1, 4.2, 4.4 that requires areas of high conservation value to be brought into good condition within a fixed timescale – perhaps 5 years. The definition of good condition needs to be agreed with the statutory conservation agencies, but for protected (designated) woodlands would be the standard definition of 'favourable condition'. As a further clarification, in this context good condition means that key stressors – like high grazing levels or rhododendron – are removed, and the area can develop in a natural way. It doesn't seek impossible outcomes like instant old trees or deadwood.
	[G01 FSC UK] UKWAS 4.2.1(a) addresses assessing the presence of HCV 3 in the form of ASNW, but does not explicitly address recording presence, and does not address stakeholder engagement, as per Criterion 9.1. UKWAS 4.2.1(b) addresses assessing the status of HCV 3 in the form of ASNW, but does not explicitly address recording status, and does not address stakeholder engagement, as per Criterion 9.1.
4.3 Management of plantations on ancient woodland sites (PAWS)	
4.3.1	[A02 Seafield & Strathspey Estates] Requirement g conflicts with the other requirements and guidance and should be removed. Applying requirement g to a practical situation then the UKWAS definition of PAWS is: "The term ancient woodland site refers to the site of an ancient woodland irrespective of its current tree cover. Where the native tree cover has been felled and replaced by planting of tree species not native to the site it is referred to as a plantation on ancient woodland site (PAWS)." What it does not say is who determines what an ancient woodland site is. For Scotland, Is it only the 1a category in the ASNW inventory or is it ASNO, LESNO and LEPO? What happens for ASNO which is also a Historic Landscape, which takes priority, if the primary management objective is to restore to native then we lose the cultural heritage of the Historic Landscape. This is overly prescriptive and does not allow for individual and reasonable exceptions and justified management including a proportion of non native where the sensible interpretation of the guidance does permit this.

	In guidance the statement “Restoration to native woodland of a type appropriate to the site should be the primary objective where there is potential.” This should be qualified for the situation where the main plantation species is Scots pine and the appropriate type is also W18. Continuing timber production should also be a requirement of restoration.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] Requirement g should be removed. PAWS has been discussed in v4 there is no need to discuss it again, it was made clear at the time that reducing the wording on PAWS from previous versions was acceptable due to the PAWS agenda having moved on and a greater understanding of the issues was prevalent in the wider forest industry. Attempts to ramp up the requirements and verifiers is not necessary and appears to be an attempt by certain organisations to advance their 100% restoration agenda. Some PAWS areas have already been through several rotations of productive conifer and are unsuitable for restoration. The identification and assessment of sites with PAWS designation is important but we must avoid a requirement to 100% restore when in many cases this is inappropriate. This requirement is likely to make many woodlands completely unviable and therefore drop out of the scheme. Adding in requirements such as g undermines the rest of the scheme. Requirement g is also contradicts 2.11.1 which states ‘where possible enhance the status of….’ Version 4 wording was sufficient. Expecting the mapping of the features is potentially a huge additional cost. The requirement to identify and assess PAWS sites is sufficient.
	[A04 Buccleuch Estates] Requirement (g) is impractical and unnecessary. The preceding requirements cover the topic adequately. The designation of PAWS sites has been subjective to say the least. As I alluded to in the general comments section, this requirement would require about 800 ha of mixed woodland to be removed from our certified holding. Far better to have PAWS’ restoration viability assessed and recorded and pragmatic management prescriptions put in place.
	[A05 Buccleuch Estates] Requirement g should be removed. This requirement is likely to make small woodlands completely unviable and therefore drop out of the scheme. Requirement c allows enough flexibility to restore the PAWS site and still retain some economic viability. Adding in requirements such as g undermines the rest of the scheme. The determination of what counted as PAWS in all version up to and including version 4 has as far as we are aware been successful. The change suggested by clause g needs to be risk assessed. It is likely to lead to the unintended consequence of PAWS woodland coming out of certification. There is little point in it being in the certification standard if it is native. Apart from Scot’s Pine plantations in the north there is not a penalty for uncertified native timber.

	[A06 Moray Estates] The use of lower intensity management approaches including continuous cover forestry would appear to be a logical component of the active management noted under the guidance section. g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site. PAWS sites represent a wide range of conditions from pretty much destroyed to near native. The decision to restore a site should be an informed choice based on the site condition, its extent relative to the WMU as a whole, other features of biodiversity and conservation value within the WMU and management objectives otherwise you can create perverse outcomes which can have a negative effect on biodiversity. It is not possible to pre-determine the best course of action within a standard. This part of the requirement is also at odds with the preceding a to f which correctly describes the process. It should also be noted that on occasion PAWS restoration can be in stark opposition to the maintenance of other designations such as Historic Scotlands Gardens and Designed Landscapes. The decision making as to which designation is given the higher priority in time and place should be part of a forest planning document on a site by site basis.
	[B01 Rebecca Haskell] Disagree with the addition of g which was not in the original draft. Although the original 'Maintain and enhance or restore' could be strengthened, does it have to be as prescriptive as complete restoration to native woodland? Not 100% sure about the intention of the statement 'Establishing the validity of the site's status need not solely rely on ancient woodland inventories.' This could be interpreted either way ie if an area is on the AWI but showing no AW characteristics then is the guidance stating that the owner can decide it's not PAWS after all and therefore no requirement to completely restore to native woodland, or was the intention the other way round ie areas which are not on the AWI but very obvious on the ground that they are indeed PAWS – or is that the point of this sentence ie that you have the flexibility to interpret in either direction according to what you find on the ground then manage accordingly? Obviously would need to justify any such decisions eg survey results, especially if claiming areas on the AWI are not PAWS, otherwise could use a reason not to restore to native woodland…
	[B02 Stuart Wilkie] (g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site. This is a requirement which ignores the three-legged stool of Social, Environmental and Economic sustainability by imposing a conservation imperative over others without considering the consequences. UKWAS must not economically write-off all PAWS. PAWS sites represent a wide range of conditions from pretty much destroyed to near native. The decision to restore a site should be an informed choice based on the site condition, its extent relative to the WMU as a whole, other features of biodiversity and conservation value within the WMU and management objectives otherwise you can create perverse outcomes which can have a negative effect on biodiversity or completely undermine the productive and economic potential of a woodland. It is not possible to pre-determine the best course of action within a standard. UKWAS should not seek to take the place of the manager in determining the best course of action or the CB in assessing the appropriateness of the managers decisions.

	This part of the requirement is also at odds with the preceding a to f which correctly describes the process.
	[B03 Simon Jeffreys] 431g should be deleted as should all allied clauses elsewhere relating to this overly prescriptive approach that was shown to be erroneous way, way back in UKWAS1.
	[B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] PAWS has been discussed in v4 there is no need to discuss it again, it was made clear at the time that reducing the wording on PAWS from previous versions was acceptable due to the PAWS agenda having moved on and a greater understanding of the issues was prevalent in the wider forest industry. Attempts to ramp up the requirements and verifiers is not necessary and appears to be an attempt by certain organisations to advance their 100% restoration agenda. Some PAWS areas have already been through several rotations of productive conifer and are unsuitable for restoration. The identification and assessment of sites with PAWS designation is important but we must avoid a requirement to 100% restore when in many cases this is inappropriate. This requirement is likely to make many woodlands completely unviable and therefore drop out of the scheme. Therefore requirement g should be removed. Requirement c allows enough flexibility to restore the PAWS site and still retain some economic viability. Adding in requirements such as g undermines the rest of the scheme. Requirement g is also contradicts 2.11.1 which states 'where possible enhance the status of….' Expecting the mapping of the features is potentially a huge additional cost. The requirement to identify and assess PAWS sites is sufficient.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] A more nuanced approach would be better depending on the degree of modification of the PAWS. Highly modified PAWS on second/third rotation conifer with no AW remnants within the canopy or the ground layer may be less of a priority than a site with veteran trees and ancient woodland indicators in the ground layer. Item g would be the starting point for say the Woodland Trust but not for the private sector where cost/benefits come in to play.
	[B22 Scottish Woodlands Ltd] (g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site. PAWS sites represent a wide range of conditions from pretty much destroyed to near native. The decision to restore a site should be an informed choice based on the site condition, its extent relative to the WMU as a whole, other features of biodiversity and conservation value within the WMU and management objectives otherwise you can create perverse outcomes which can have a negative effect on biodiversity. It is not possible to pre-determine the best course of action within a standard. This part of the requirement is also at odds with the preceding a to f which correctly describes the process.
	[B23 Andrew Heald] UKWAS is about finding a balance – and long term resilience – g should be deleted –

	(g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site.
	[B24 CCFG] The use of lower intensity management approaches including continuous cover forestry would appear to be a logical component of the active management noted under the guidance section.
	[C01 DAERA Forest Service] The definition of PAWS should be linked to survey data and the identification of remnant features.
	[C02 Forestry England] Section g) The primary management objective for PAWS is restoration to native woodland of a type appropriate to the site, a more appropriate wording would be The primary silvicultural management objective for PAWS is restoration to native woodland of a type appropriate to the site. The owners may have legitimate multiple objectives eg social and recreational.
	[D02 Ancient Tree Forum] Comments in relation to 4.1.1 again relevant. If a PAWS site was historically managed as wood pasture or enclosed parkland, those historic features and values should be restored.
	[D03 RSPB] This section needs to be strengthened to signal that PAWS sites should be restored over the long term to appropriate native woodland wherever possible. Requirement g) should come earlier in the list of requirements-we advise it should be the new c). This then follows a more logical chain of steps and decision making. Restoring PAWS could be a big win for nature and biodiversity over time, and right some of the destruction of natural features and biodiversity that occurred in post war land management until this conversion was prohibited from the mid 1980's. And it should be remembered this loss was also of native pine woodland sites as well as conversion of broadleaved woodlands to commercial conifer plantations. The onus should be to encourage managers to ask why not restore, rather than why restore.
	[D05 Woodland Trust] The Woodland Trust welcomes and supports the strengthening of the requirements and guidance in this section relating to the evaluation, protection and enhancement of remnant and conservation features. As ancient woodland/PAWS is by default a finite resource and clearly an important and yet highly-threatened component of the UK's High Conservation Value sites it particularly welcomes the requirement that such areas have as their primary objective their long term restoration to native woodland.
	[G01 FSC UK] UKWAS 4.3.1(a) addresses assessing the presence of HCV 3 in the form of PAWS, but does not explicitly address recording presence, and does not address stakeholder engagement, as per Criterion 9.1. UKWAS 4.3.1(b) addresses assessing the status of HCV 3 in the form of PAWS, but does not explicitly address recording status, and does not address stakeholder engagement, as per Criterion 9.1.

4.4 Protection of conservation values in other woodlands and semi-natural habitats	
4.4.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Why does a positive management need to be planting broadleaves only? Scots Pine is native and a valuable part of many locations. Remove word 'broadleaves' and replace with species. This new guidance wording feels like a swipe at commercial forestry, there are plenty of good examples of sites managed with non-native species which are in good condition. UKWAS is there to recognise sustainable forestry, of which non-native species are a valuable part.
	[A05 Buccleuch Estates] Many of these are undertaken as part of good forest practice. The risk with defining them in the standard is the expectation that will now be built that it is done everywhere possible. This will be unsustainable economically. Where does it end?
	[A06 Moray Estates; B24 CCFG] A reference to continuous cover forestry should be included as one of the positive management operations listed in the Guidance section.
	[D03 RSPB] Reference could usefully be made to local wildlife sites as a source of information. In some local authority areas such sites receive a measure of statutory protection in local plans for example. And the local biological record centres are a useful source of information on them. No mention is made of priority habitats see earlier comments. Amend section in guidance beginning Positive management operations or interventions to promote semi-natural woodland structure may include: To Positive management operations to promote semi-natural woodland or other semi-natural habitats may include:
	[D04 Scottish Raptor Study Group] "Areas of Conservation Value are identified": Mature woodland often represents an area of high conservation value – e.g., mature larch, pine, fir, and should be identified for their HNCV in their own right. But such woodland containing traditional nest-sites of e.g., Goshawk and Red Kite, can be felled (completely within the law) in the non-breeding season, with catastrophic impact on the local population if there is no alternate woodland of similar stature available. Careful consideration in liaison with experts needs to be given to identifying areas of HNCV so that they can be maintaining or enhanced as per requirement. – as stated below. "Species of Conservation Value are identified" "Field observation" requires specialist input from, and liaison with, e.g., raptor workers to locate nest-sites of high nature conservation species (which can be difficult to find and which can change location from year to year) within a WMU. Too often this is left to untrained forest managers who cannot be expected to have the necessary field skills which take years to develop.

	• Evidence of liaison and survey work results required. • All felling carried out in the breeding season should require an experienced surveyor to carry out a pre-felling survey as a requirement of the felling license. “Identified features are maintained or enhanced”: This puts the onus on the FMs to carry out the above work to a sufficient standard so that this requirement can be fulfilled. “Historical maps” and “”Monitoring records” require detailed information and formalised archiving, not word of mouth communication; statutory bodies such as Forestry Scotland have GIS systems to store such info (if FMs don’t), and this can be done confidentially. There isa need to formalise this system so that FMs are aware of raptors nesting in their woods
	[E01 James Jones & Sons Ltd] Why does a positive management need to be planting broadleaves only? Scots Pine is native and a valuable part of many locations. Remove word ‘broadleaves’ and replace with species. This new guidance provides an overall negative implication concerning commercial forestry, there are plenty of good examples of sites managed with non-native species which are in good condition. UKWAS is there to recognise sustainable forestry, of which non-native species are a critical part.
	[F03 NatureScot] In our previous comments we recommended that, to address the nature crisis, UKWAS should include a requirement for areas of high conservation value to be brought into good condition. Our concern with the previous version of the Standard was that it did not require improvement on conservation objectives. In several paragraphs it used the phrase ‘Areas and features of high conservation value’ to be ‘maintained and, where possible, enhanced’ (4.1.1). This phrasing allowed compliance whilst areas of high conservation value are maintained in poor condition. The new draft Standard (V5) does not address this concern, as there is no requirement to restore damaged areas and features of high conservation value. The most significant change in para 4.1.1 b for protected woodlands suggests that these areas and features ‘are maintained and brought into good condition over time’. The final words ‘over time’ do not provide sufficient clarity on the expected timescales for woodland managers to do any restoration now, and could be conceived as consigning that obligation to an unspecified point in the future. For ancient semi-natural woodlands (4.2.1d) and semi-natural habitats (4.4.1b) the wording is unchanged at ‘conservation values are maintained and where possible enhanced’ a phrasing which we consider to similarly remove any requirement for woodland managers to do any restoration.

	Hence, our recommendation is that UKWAS includes wording in sections 4.1, 4.2, 4.4 that requires areas of high conservation value to be brought into good condition within a fixed timescale – perhaps 5 years. The definition of good condition needs to be agreed with the statutory conservation agencies, but for protected (designated) woodlands would be the standard definition of 'favourable condition'. As a further clarification, in this context good condition means that key stressors – like high grazing levels or rhododendron – are removed, and the area can develop in a natural way. It doesn't seek impossible outcomes like instant old trees or deadwood.
4.4.2	[D03 RSPB] We support this section.
4.4.3	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] In most cases semi natural woodland are broadleaves, so this is a direct attack on species selection. In Southern England the Grey Squirrel population will prevent meaningful establishment and early death for many broadleaves. Increasing from 5% to 10% but still within the 15% managed for primarily for conservation is unneeded. Most sites are already managing over the 5% so this change would require a change in maps only which is increasing the administrative burden for no real gain. Those sites that are only managing 5% is likely for a good reason, so it would be a struggle to then increase to 10%, therefore it could be targeting those sites that are marginally economically viable and making them unviable. The result would be to drop out of UKWAS.
	[B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] The focus should be on the habitats suitable for the site. We don't want to be too prescriptive on percentages when some forests may not be able to support a higher percentage. In these forests there is a chance of a loss of resilience/productivity/sustainability as a result of trying to hit an arbitrary percentage target.
	[B22 Scottish Woodlands Ltd] The emphasis on a preference for woodland should be stronger. UKFS has a minimum of 5% but there is no minimum in UKWAS. Also, clarify that in Scotland this requirement could be met from native pine.
	[B23 Andrew Heald] UKWAS should be focussed on finding a balance – a doubling of the area of semi-natural habitat is not appropriate. Suggest that as a compromise, that an additional requirment is added that A minimum of 15% of the WMU where management for timber production is the primary objective.
	[D03 RSPB] See our earlier comments about transitioning the 15% of the WMU to a more progressive 30% over time. If that were agreed we would wish the 10% figure referenced here to be raised proportionately. In our view safeguarding and extending/enhancing semi-natural habitats should be the primary focus of public benefit management, rewarded as appropriate by taxpayer funded grants as will increasingly be the case for agriculture.

	[E01 James Jones & Sons Ltd] Increasing from 5% to 10% but still within the 15% managed for primarily for conservation is not necessary. Most sites are already managing over the 5% so this change would require a change in maps only which is increasing the administrative burden for no real gain. Such an increase would inevitably result in further areas either not adopting or dropping out of UKWAS.
	[K01 Grown in Britain] % in left hand column and right hand columns seem to conflict? Why have a minimum in the requirements and then contradict in the guidance? It makes it confusing.
4.5 Watershed management and erosion control	
4.5.1	[D03 RSPB] We support this proposal.
	[G01 FSC UK] UKWAS 4.5.1(a) addresses assessing the presence of HCV 4, but does not explicitly address recording presence, and does not address assessing and recording status, as per Criterion 9.1.
	[M03 Scottish Land Commission] This is supported by the Good Stewardship Protocol which states, "d. Where land is highly suitable for a primary use (for example, food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making. The impact of relative options on the environment and on communities should be taken into account."
4.6 Maintenance of biodiversity and ecological functions	
4.6.1	[A02 Seafield & Strathspey Estates] In respect of the last requirement bullet point see comments in section 4.1.1.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] The percentages wording in the requirement can be interpreted in two ways. i. Does it mean that 1% of the plantation is to be classed as natural reserve AND 5% of the semi natural woodland is classed as natural reserve? ii. Does it mean the natural reserve can all be in semi natural woodland if the semi natural woodland is large enough to account for the 1% of the plantation area? A lot hinges on the term 'equivalent', please can this requirement be clarified, there are times when it has been interpreted both ways with different outcomes.

	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd] The new wording 'maintained in a favourable condition'. Who decides what favourable is and does this become another cost burden on the WMU to hire an ecologist to provide evidence to the auditor. Poorly thought out designations can lead to impossible management objectives focused around maintaining an ecological static stage in an otherwise dynamic succession system.
	[B01 Rebecca Haskell] The wording of the second bullet point is the same as current UKWAS 4 wording. This is interpreted in two different ways ie some read this as meaning the requirement is for 1% of the plantation to be designated as Natural Reserve **and** 5% of the semi-natural woodland ie the nat reserve must include both plantation and semi natural woodland areas. Others read it as meaning that, so long as the natural reserve is of a size equivalent to 1% of the plantation and 5% of the semi-natural area it doesn't have to include plantation ie it can all be within the semi-natural woodland area if this is sufficiently large to comprise at least 1% of the plantation area as well as being at least 5% of the semi-natural area. To use an example, if an area of woodland is 110ha in size and is comprised of 100ha plantation and 10ha semi-natural woodland, would it be compliant to have 0ha of the plantation area designated as natural reserve so long as all of the 10ha of the semi natural woodland area is designated as natural reserve ie representing 1% of the plantation and 100% of the semi-natural woodland? Also, how does one account for the fact that areas managed as natural reserves can also include non-woodland habitat ie 4.4.2'valuable small scale semi-natural habitats? This just adds to the confusion eg can this non-woodland habitat element contribute towards the 1% plantation target (if using the interpretation that nat reserve must include 1% of the actual plantation)? To summarise, please can this requirement be spelled out very clearly as 'equivalent to' is currently being interpreted in two different ways.
	[B02 Stuart Wilkie] Are maintained in a favourable condition. – This seems at odds with the definition of NR and implies active management and an unnecessary addition. Should this be in guidance or is the definition in the glossary sufficient?
	[B22 Scottish Woodlands Ltd] Are maintained in a favourable condition. – This seems at odds with the definition of NR and implies active management on NR is required. Perhaps this issue should be dealt with in guidance as sites which may require intervention are a minority.
	[D03 RSPB] We would prefer that the area devoted to nature recovery is increased over time to a minimum of 30% of the WMU through targeted enhancement or establishment of semi-natural habitat types and the provision of suitable conditions to encourage the recovery of nature. Given that ambition we think this requirement would naturally form a part of the menu of options that managers might adopt.
	[D04 Scottish Raptor Study Group] Natural Reserve areas can be used to retain mature woodland as nesting areas for raptors bridging successive rotations. Selecting the best locations should be carried out in liaison with specialist raptor workers and/or raptor study groups.
	[K01 Grown in Britain] % in left hand column and right hand columns seem to conflict? Why have a minimum in the requirements and then contradict in the guidance. It makes it confusing.
4.6.2	[A06 Moray Estates] LISS is a poor term and should be replaced with Continuous Cover Forestry (CCF).
	[B24 CCFG] Replace LISS by 'continuous cover forestry'.

	[D01 Soil Association] Although requirements in Section 2 are best positioned to influence LISS, this minimum threshold of 1% remains disappointing. We provided this feedback at both the initial stakeholder consultation and in response to the 1st Consultation on UKWAS V5.0. In the absence of management planning setting any minimum requirements for CCF/LISS, this is all there is by way of a target: 1%. Also, the 'impracticable' caveat remains.
	[D03 RSPB] See comments above.
	[D04 Scottish Raptor Study Group] Long Term Retention areas potentially provide a mechanism for retaining suitable nesting habitat for birds of prey. Forest managers should liaise with specialist raptor workers or Raptor Study Groups to ensure that the best locations are selected, especially where large raptors are already known to be nesting in a forest/management unit.
	[K01 Grown in Britain] % in left hand column and right hand columns seem to conflict? Why have a minimum in the requirements and then contradict in the guidance. It makes it confusing.
4.6.3	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] In the example verifier replace 'recruitment' with 'replacement'. Otherwise it reads that all forest plans should include veteran trees, even through the guidance states to maintain continuity of existing veterans.
	[A06 Moray Estates; B24 CCFG] We welcome the recognition of the valuable role of continuous cover as a management option in this situation.
	[D03 RSPB] We support this section, but again refer to comments made above.
	[D04 Scottish Raptor Study Group] Continuity of veteran trees and habitat has an important role to play in providing nest-trees for large raptors (Buzzard, Honey-Buzzard, Goshawk, Red Kite, White-tailed Eagle, Golden Eagle) as well as for providing ecological continuity. Consideration/priority should be given to maintaining such trees/habitats in areas of the forest suitable for breeding birds of prey, e.g. secluded areas free from disturbance; areas of woodland with nesting raptors present.
4.6.4	[A02 Seafield & Strathspey Estates] Consideration must be given in this section to impacts of pests and disease and associations with the deadwood resource.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] The term 'decaying wood' is not required here. WMU owners and managers should not need to quantify the state of the deadwood on site. Decay is a natural process which would be difficult to emulate – continue to use the word 'deadwood' only and remove references to decay.

	The new guidance stating that 150m3 or more is the target is a considerable amount of material to be left or created as suggested in b). The volume for large accumulations should be left to the site manager to decide given the differences between sites, species, access and safety concerns. Further more 150m3 or six lorry loads, even in guidance (not a requirement or verifier) this has the potential to drive owners/managers away from certification and makes no accommodations for commercial imperatives. Organisations with a environmental and not economic outlook will undoubtedly strive to achieve such volumes anyway. Can the working group provide evidence of why this figure was chosen?
	[A06 Moray Estates] With resilience in mind the provision of larger quantities of deadwood should be risk assessed (species of deadwood) and not undertaken where there is a risk a build up of potentially damaging pest species (eg. *Ips typographus*).
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] We need clearer guidance on how the retention of deadwood is demonstrated at operation planning and delivery and how deadwood retention is being achieved as planned. Once approach is to ensure Forest Managers use the Biodiversity Map and Monitoring Table to demonstrate compliance but is this sufficient. Possible suggestions as below Identify within the management plan areas where deadwood will be of greatest value? Demonstrate how the retention of deadwood is recorded at operation planning and delivery? Evidence deadwood retention being achieved as planned?
	[D02 Ancient Tree Forum] There is still a reference to 'safety of the public or workers or health of the woodland'. Management as 4.6.3 above.
	[D03 RSPB] We support this section but again refer to our comments above.
	[D04 Scottish Raptor Study Group] As well as their hugely important ecological function. large diameter deadwood trees often provide nesting holes and crevices for Barn Owl and Tawny Owl, as well as woodpeckers, especially in native species such as ash and oak. Every effort should eb made to retain these trees and not to "tidy them up."
	[D05 Woodland Trust] Recent surveys have indicated that 90% of native woods in Britain have less than 40m3/ha, 70% have less than 10m3/ha and 45% have practically zero accumulations of deadwood. This would suggest that the majority of even our native woodlands have deadwood accumulations that are deemed to be too low and so are considered functionally fragmented for many deadwood specialist flora and fauna. Increasingly the role of deadwood in carbon storage, water retention and promotion of tree regeneration as well as it biodiversity value is also being recognised The Woodland Trust feels that the lack of any clear targets or minimum values within the requirements of this section mean that UKWAS is not driving positive change to this key component of woodlands. The Woodland Trust therefore requests that the UKWAS revision panel consider the inclusion of minimum deadwood accumulation values within the requirements of this section, particularly where the sites are identified as HCV's. Possible Requirement wording suggested below:

	c) In woodlands identified in sections 4.1-4.3, where possible, owners/managers should aim to accumulate a minimum of 40 m³ per hectare averaged – though not uniformly distributed – across the WMU. d) In all woodlands, where possible, owners/managers should aim to accumulate a minimum of 20 m³ per hectare averaged – though not uniformly distributed – across the WMU. This would also require a change to the guidance section and again some suggested wording is provided below: Current evidence suggests that, over the long term, deadwood (not including stumps, which are usually retained after felling) should accumulate to roughly ~~2~~40 m³ per hectare averaged – though not uniformly distributed – across the WMU in order to provide for a functional deadwood ecosystem / habitat.
4.7 Maintenance of local native seed sources	
4.7.1	[B23 Andrew Heald] This requirement needs to be rewritten to reflect the reality of climate change and the best available science on assisted migration - https://www.fs.usda.gov/ccrc/topics/assisted-migration
	[D03 RSPB] Support.
4.8 Protection of cultural and historic environment sites	
4.8.1	[B23 Andrew Heald] This is significant expansion of this requirement and will greatly increase costs of forest management planning. a) Through engagement with the relevant statutory historic environment agencies, local authorities, local people and other interested parties, and using other relevant sources of information, the owner/manager ~~shall~~: Rewrite a) Through engagement with the relevant stakeholders and using other relevant sources of information, the owner/manager ~~shall~~:
	[C02 Forestry England] [Re. requirement 'Identifies significant heritage features and other aspects of special cultural and historical significance'] This wording ['Identifies known heritage features and other aspects of special cultural and historical significance'] is preferable as the current wording makes it sound like they should only look for significant features. Under UKFS all known sites should be mitigated for regardless of their significance. Mitigation can vary depending on significance however.

	[Re. guidance 'Many historic environment sites in woodland have no statutory designation or protection and management advice on these sites can be provided by…'] This is not required if they are receiving advice from other quailed historic environment professionals. We do not receive advice on all our works from local authorities (other than through up to date HER data). [Re. guidance '…than the national statutory historic environment agencies.'] I have changed this to bodies as these include: • Historic England • Local authorities (some listed buildings) • Parks and Gardens Trust • Ministry of Justice (Burial Act 1857/human remains) • Ministry of Defence (protection of military remains) [Re. guidance 'Significant heritage features such as important historic structures and archaeological sites'] Not sure this is needed. Can be captured in the point above. [Re. guidance 'Where relevant, a professional archaeological walkover survey may be required to inform decisions and provide baseline evidence.'] Walk over survey is just one example of what may be required. [Proposed changing 'walkover survey' to 'consultation'.]
	[D03 RSPB] Support.
	[F02 Historic Environment Scotland] We welcome the refinement of historic environment site management in the new draft standard and have no further detailed comments.
	[M03 Scottish Land Commission] Guidance can be found in the Protocol on Community Engagement in Decisions Relating to Land.
4.9 Game-rearing, shooting and fisheries management	
4.9.1	[A02 Seafield & Strathspey Estates] b) If game release pens are appropriately managed sustainably and in accordance with the codes of practice as per requirement a) then impacts from locating them in high conservation value areas "Areas and features of ecological and biodiversity interest identified in sections 4.1-4.3 and 4.5" (UKWAS 4 definition) will be mitigated and b) becomes irrelevant. This has the potential to impact on local communities and culture where small scale syndicated shoots taken by local people are located in woodland. The strict adherence to this will impact on management of small woodlands and discourage uptake of certification.
	[A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Disagree with point B, however it seems like it is here to

	stay. It should be noted that if the list of high conservation areas in 4.1.1. changes then this section should also be reconsidered due to is potential impact.
	[B02 Stuart Wilkie] While personally I support b, I think as worded this may be highly problematic for some owners given the short timescale. Could we somehow work in a transition period?
	[B22 Scottish Woodlands Ltd] b) Game release pens are located outside areas of high conservation value. This may be highly problematic for some owners given the short timescale and could cut across existing lease agreements. In some areas it could mean an end to the shoot. As a minimum a transition period would be appropriate. Is b necessary or should this be audited on the ground against a?
	[D03 RSPB] We support this section as amended.
	[D05 Woodland Trust] The Woodland Trust welcomes the inclusion of requirement b) as both the evidence and need to adopt a precautionary approach when it comes to the protection of HCV's would indicate this is an appropriate strengthening of this requirement.
	[G01 FSC UK] Guidance from FSC International on hunting includes an indicator on monitoring to identify and mitigate potential adverse impacts of reintroduction, restocking programs or other animal releases. The following proposal is based on UKWAS 2.9.1(d): Proposed new requirement: All releases of game are carefully monitored, and effective mitigation measures are implemented to control negative impacts.
	[H01 BASC] The Game Wildlife & Conservation Trusts 'Guidelines for sustainable gamebird releasing' (https://www.gwct.org.uk/media/208606/Sustainable-gamebird-releasing.pdf) should be listed as the relevant code of practice for this item. 'High Conservation Value' is a woolly term, and its definition will be open to wide interpretation. Therefore, BASC believes that 4.9.2 b) is not required as this is adequately covered in 4.9.1 a) because the 'Guidelines for sustainable gamebird releasing' covers the location of release pens. Furthermore, on sites designated for their nature conservation value there is a requirement for the landowner to gain consent for a release pen.
	[M03 Scottish Land Commission] Transparency protocol is relevant here.
4.9.2	[B01 Rebecca Haskell] In the guidance should it not be 'pest and predator control' not just predator control – would then cover a wider range of activities ie pigeon shooting, corvid control, grey squirrel / rabbit control etc etc
	[D03 RSPB] Support.
	[G01 FSC UK] Guidance from FSC International on hunting includes an indicator on safety measures to protect the public. We believe that shooting in accordance with codes of practice, as per UKWAS 4.9.2, addresses this requirement.

	[H01 BASC] The Code of Good Shooting Practice (http://www.codeofgoodshootingpractice.org.uk/) which is endorsed by all major shooting organisations and enshrines the principles of responsible and sustainable shooting should be listed as the relevant code of practice for this item.
	[M03 Scottish Land Commission] Transparency and community engagement relevant here.
4.9.3	[A01 Richard White] I am very concerned about the proposed ban on lead based ammunition in UKWAS certified woods. Sections 2.12.1 and 4.9.3 of the draft refer. I do not believe this proposal is based on good science. I suspect that it is part of an underhand attempt by the increasingly noisy 'animal rights' movement to limit consumptive utilisation of wildlife which is essentially sustainable if not mismanaged. My understanding is that metallic lead is relatively inert and un-reactive under normal climatic and soil conditions. That is the reason why it was the roofing material of choice for churches and other large mediaeval buildings. The biggest problem with lead in this use is downward creep due to its ductility. Once it has formed a protective oxide coating it hardly reacts at all. It is noteworthy that lead musket balls are regularly picked up at Culloden and on English Civil War battlefields which have lost almost none of their original weight. This concern was first raised in North America where ingestion of lead shot by ducks lead to enhanced levels of lead in their tissues. There are several factors responsible for this:- • hunting pressure along migratory waterfowl flyways in North America is higher and more concentrated spatially than elsewhere so much more shot ends up in the water, • lead shot ingested by ducks ends up in their gizzards where is ground down finely before passing into the acidic environment of their guts where the expose metallic lead reacts to form lead compounds which are toxic, These conditions do not apply in woodland and forest ecosystems. Enhanced levels of lead in the tissues of waterfowl in the UK and Europe lead to a ban on the use of lead ammunition for shooting waterfowl over wetlands and on the foreshore. In the UK, at least, this ban has proved to be ineffectual and is largely ignored. Apart from its harmful impacts on waterfowl which are well documented and whose mechanisms are well understood, the harmful impacts of the use of lead based ammunition in dry-land habitats are much less clear. What is clear from the material supplied by proponents of this ban is that the most significant source of lead in shot game comes from the lead shot itself. What is not at all clear from this material is how much lead in birds (and other wildlife) is due to ingestion from the environment of lead originating as lead shot. A major source of lead in other birds is from wounding with lead shot. Overall, the material contains too much extrapolation and too many estimates and assumptions to be a reliable source of evidence justifying a major change to what is supposed to be a science and fact based protocol.

	Moreover, the practical alternatives to lead in ammunition, steel shot and monolithic brass or copper rifle bullets have quite serious drawbacks of their own. They are more expensive than lead-based ammunition and are less dense which means that projectiles lose momentum faster due to air resistance and thus are less lethal at longer ranges. This is significant in shotgun ammunition, less so with rifle ammunition. Copper rifle bullets are significantly more expensive than lead based bullets as their manufacture is more complicated. Less dense copper or brass rifle bullets are longer and thus potentially more stable in flight, but they need to rotate faster calling for tighter rifling and thus higher pressures which require heavier and stronger rifles. Forests need to be protected against deer in particular but also rabbits, hares and squirrels. Shooting is the only legal, economically affordable and practicable method of deer control in most cases and has its place in the control of other species. Moreover, sport shorting is a major source of income for many woodland owners and income from it justifies the retention of large areas of semi-natural broadleaved woodland in lowland Britain which would be more profitable under conifers without the 'sporting' income. Despite being relatively inert in elemental form, lead compounds, particularly organic lead compounds, are well known to be dangerously toxic substances. The Centres for Disease Control in the USA and the WHO state that a blood lead level in people of 10 µg/dL or above is cause for concern, while paediatricians deem such a level in children to constitute lead poisoning. This is due to the greater sensitivity and vulnerability of children to the impact of lead compounds on the development and functioning of the brain and the nervous system as a whole. In adult humans, symptoms of lead poisoning become apparent when the lead level in blood reaches around 40 µg/dL and become severe at a level of around 70 µg/dL. A study in the Dakotas in the USA of a sample of almost 800 people who regularly ate birds killed using lead shot found that 1.1% had a blood lead level in excess of 5 µg/dL i.e around half the level of concern. The proposal to ban the use of lead-based ammunition is controversial because there is insufficient evidence now as to whether the use of lead shot in woodland is leading to a measurable - or even detectable - increase in the amount of lead in the soil and how much lead originating from lead-based ammunition is being ingested by woodland wildlife and what impact this is having. This is a gap which can and should be addressed before action is taken. The carcasses of road-killed pheasant poults, which are notoriously stupid and get themselves killed in numbers on the roads, would make an excellent source of data to elucidate these issues. I submit that before action is taken, research should focus on the following issues: • is there a detectable increase in lead in the soil in woodlands resulting from the use of lead-based ammunition? • if so, by how much? • is there a detectable increase in lead in the tissues of woodland wildlife resulting from the use of lead-based ammunition? • what impact, if any, is this resulting increase in lead in the tissues of woodland wildlife having on wildlife health?

	There is some evidence that scavenging birds have elevated levels of lead in their tissues but most populations of these birds are either stable or increasing, so is this actually causing measurable and real harm? Are the proponents of this ban within UKWAS responding to proper scientific concerns or to what they perceive to be the trend or an alternative agenda? If UKWAS moves prematurely on this issue it runs the risk of bringing itself into disrepute for responding to woke rather than scientific concerns and for failure to be sufficiently scientifically rigorous. A partial ban, applying to woodland but not farmland or moorland is highly likely to be ineffectual and ignored and to also weaken the repute of UKWAS. If UKWAS is to retain credibility it must be seen to following advances in knowledge and science and not merely "following the curve" of fashionable opinion. In the final analysis, this is a public and environmental health issue which requires to be resolved by the state. I do not believe that it is the proper role or place of UKWAS to move unilaterally or lead the pack over this issue. If the evidence indicates that the continuing use of lead based ammunition for hunting (and target shooting) poses a significant threat to public or environmental health, then the state should act to ban the manufacture, sale and use of lead-based ammunition for all civilian purposes. That would deal with the problem if one exists. We have to accept that the military is unlikely to comply or follow suit! I do not believe that this proposed ban is in the best interests of the forest industry or wider conservation and I urge UKWAS to remove it until and unless reliable scientific evidence of harm due to the use of lead-based ammunition in woodland becomes available.
	[A02 Seafield & Strathspey Estates] Lead should not be used for all game and game based food products but until legislated against at country level should still be permitted for vermin control when there is no risk of it entering the human food chain.
	[A03 Confor; A05 Buccleuch Estates; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House] Lead should be banned for all game and game based food products, but should be allowed for vermin control when there is no risk of it entering the human food chain. This would dramatically reduce the amount of lead shot used in woodlands, but not remove a tool in the foresters stores. The levels of lead required to poison a person are unlikely to be reached in a game shooting scenario Research carried out in the USA by David Edwards and a second paper by Caleb Scheetz on formal shooting grounds with a rate of over a metric tonne of lead per year was still unlikely to enter the wider environment. This is due to the way the shot buries itself into the ground and once surrounded by soil is fairly static in terms of breakdown and movement of particles. The lead free pellets used in air guns are steel and plastic. The plastic is needed to expand and grip the rifling. Grey Squirrels caught in live traps are killed via air gun or cranial dispatch. The inclusion of a lead ban here would by default make cranial dispatch the only method, as the new plastics would be releasing micro plastic into the environment. Cranial dispatch is also the harder of the two methods and under the Wildlife and Countryside Act 1981 the more controversial.

	[A05 Buccleuch Estates] Guidance is under development for the removal of lead from ammunition from 2025. It would be wise to wait for the guidance rather than pre-judge it and create a scenario where it is impossible to comply due to the alternatives not yet being available.
	[B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] See comments raised under 2.12.1 regarding the use of non-toxic ammunition.
	[C01 DAERA Forest Service] A landowner can consider and meet this requirement where they own the sporting rights as per the example verifiers. There is an issue where sporting rights for certified forest land are held by others. The landowner in this case has little or no powers to require non-toxic ammunition.
	[D01 Soil Association] Positive.
	[D03 RSPB] We support this measure and practise it already across our entire estate of c76,000ha.
	[D05 Woodland Trust] The Woodland Trust supports this new requirement and would like it noted that a number of organisations, including the Woodland Trust and statutory bodies already have or are looking to specify this requirement within the timescale for the introduction of UKWAS 5. The Woodland Trust therefore supports this requirement and its own experience suggests it is practicable and achievable within the timeframe of the UKWAS 5 implementation.
	[H01 BASC] BASC and eight other shooting organisations are continuing to encourage a voluntary transition away from lead and single-use plastics in shotgun ammunition for live quarry shooting by 2025. This timeframe was established as there are still significant issues with regard to the suitability and supply of alternatives. Shotguns - currently only steel shot, plated steel shot and bismuth shot are widely available in 12 bore and 20 bore. Smaller and larger bores currently have few or no commercially available non-lead alternatives. It is highly unlikely that there will be non-lead loads commercially available by 2023 in these bores. Initially tungsten or bismuth loads will be all that is available in for the most commonly used smaller bores (16 bore, 28 bore and .410), which will be significantly more costly than lead. Steel is really the only cost comparative alternative and the technical feasibility of this in 28 bore and .410 is not clear. There would be a disproportionate impact on young people, female and disabled shooters who favour these 'lighter' bores if restrictions were imposed in the absence of commercially available, effective and cost-effective alternative loads to lead. Rifles - non-lead loads in rimfire ammunition and airgun ammunition are problematic. There are only two products in rimfire (copper and copper with polymer) and these are high velocity rounds. Initial trials suggest that these are poor performing in terms of accuracy and efficacy on live quarry. There is insufficient testing of non-lead alternatives for airguns. However, the tin and tin amalgams are very light in comparison to traditional lead 'hunting' pellets, and so their efficacy on live quarry at normal ranges is questionable. These smaller rifle calibres are widely used for grey squirrel and rabbit control. It should be born in mind that air rifles are used extensively for selective grey squirrel control as they are the

	main means of dispatch when using cage traps. Further research & development is required to ensure that non-lead ammunition for these rifles is accurate and lethal, both of which have major implications for animal welfare. In short, a transition to non-lead by April 2023 in these areas will be problematic. The technical possibilities and manufacturing capabilities for suitable alternatives is limited. The EU are derogating 5-year transitions from January 2023 in shotgun and small rifle calibres (<5.6mm, including airguns) because of these capability / technical issues. Again, we are very disappointed that animal welfare has taken such a low priority within this consultation and that where animals need to be controlled within a woodland environment the most effective ammunition should be used. We therefore recommend that the requirement for the use of 'non-toxic' ammunition in all shooting activities is removed.
	[K01 Grown in Britain] Lead free bullets is the term that has been agreed with Forestry England, Deer Initiative and BASC for wild venison production.
4.9.4	[B23 Andrew Heald] Delete 4.9.4 Fishing and associated activities are carried out sustainably and in accordance with the spirit of codes of practice produced by relevant organisations. How is this good use of precious time during a forest management audit ? This simply increases costs with no evidence of any benefit.
	[D03 RSPB] Support.
	[K01 Grown in Britain] Suggest adding the following to the guidance 2nd para: Leases **and management** should require appropriate…

5. People, communities and workers	
5.1 Public access rights, permissive uses, traditional rights, and the health and wellbeing of local people, visitors and communities	
5.1.1	[D03 RSPB] Support.
5.1.2	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] Section [or Requirement 5.1.2] b – remove new wording as all water supplies are important and should be considered equal. In guidance – it should not be within UKWAS's power to remove permissive access and turn it into permanent right of way. This is a land owners choice and will present problems and conflicts at times of woodland operations. The public are not known for their understanding and ability to follow signs. It is far easier to legally close the path for operations than it is to give a alternative or diversion as would be required of a public right of way. However this can only be carried out if the permissive route has been closed historically each year even for a short period.
	[B02 Stuart Wilkie] b seems to sit as an oddity among the access requirements. Might is be better as a full requirement, in its own right now? It should also include public water supplies.
	[B22 Scottish Woodlands Ltd] b should also include public water supplies.
	[D03 RSPB] Support.
	[F01 SEPA] SEPA welcomes the inclusion of private water supplies here but this needs reinforcing in section 3 for pre commencement assessment to avoid damaging these assets. It's the supply source that's most vulnerable to damage.
	[G01 FSC UK] Consideration should be given to adding an explicit requirement (most obviously under UKWAS 5.1.2) to assess and record the presence and status of private (household or community) water supplies, including through engagement with stakeholders, in line with the appropriate treatment of HCV 5 under Criterion 9.1.
	[M03 Scottish Land Commission] This is particularly relevant to principles 2 and 3 of the Scottish Government's Land Rights and Responsibilities Statement (LRRS): Principle 2 - There should be a more diverse pattern of land ownership and tenure, with more opportunities for citizens to own, lease and have access to land. Principle 3 - More local communities should have the opportunity to own, lease or use buildings and land which can contribute to their community's wellbeing and future development.

	To help further the aims of the principles of the LRRS, the Scottish Land Commission (SLC) has produced a protocol on Diversification of Ownership and Tenure which invites landowners to undertake regular reviews of their holdings to assess where there may be opportunities to work with others to make more productive use of land or buildings to meet the local community's needs and aspirations. For landowners or managers, a collaborative working relationship with the local community can contribute to improved public profile and relationships and provide opportunities for innovation. The SLC has produced a useful Route Map to support landowners or managers considering this type of collaboration, entitled Opportunities for more diverse ownership, management and use of land We note the following FSC criteria also relate to this point: **4.3** *The Organization** shall provide *reasonable** opportunities for employment, training and other services to *local communities**, contractors and suppliers proportionate to scale and intensity of its management activities. **4.4** *The Organization** shall implement additional activities, through *engagement** with *local communities**, that contribute to their social and economic development, proportionate to the scale, intensity and socio-economic impact of its management activities.
5.1.3	[B23 Andrew Heald] b) Where there is a special demand for further public access, specific types of access provision or community use ~~for the purpose of environmental education~~, the owner/manager ~~shall~~ makes reasonable efforts to meet this demand. This demonstrates a high level of naivety in the challenges of managing urban fringe woodland in particular, and again places significant cost burden on the woodland owner/manager. This requirement will simply force owner/manager to drop out of certification and padlock the gate. Rewrite to b) Where there is a special demand for further public access, the owner/manager shall co-operate with relevant local authorities and statutory agencies, to determine whether this demand can be reasonably met.
	[D03 RSPB] Support.
	[D05 Woodland Trust] The Woodland Trust welcomes and supports the widening of requirement b) in terms of owner/managers considering "specific types of access provision or community use" beyond educational uses as this better reflects the present value placed on woodland access/use in terms of health/ welfare and community benefits and will help to continue to reunite and integrate woodlands with their local communities.
	[M03 Scottish Land Commission] This seems to align fairly well with the protocol on Community Engagement which sets out the following expectations (however, please note the timeframes): a. Up to date contact information for people with local decision-making authority over the land and for the office bearers of community organisations should always be publicly available.

	b. Where a community aspiration or concern about current or proposed land management emerges, this should be communicated promptly to the owner or manager of the land. Reasonable opportunity should be given for them to respond to issues raised and enter into constructive dialogue about it. c. Where a relevant party makes a request for information, or for a meeting to discuss matters relevant to that organisation; and where the information requested is appropriate and proportionate, this should be accommodated. It is recommended that this is within six weeks of a request. d. Those who take decisions about land which can significantly impact on a local community should create an engagement plan that sets out what, how and when they will engage with the community on the decisions that affect them, particularly where a community organisation or elected representative proposes it, or where it becomes clear that such a plan would be useful. It is recommended that this is developed jointly within twelve months. e. Where plans to significantly alter an aspect of land management or use can be reasonably anticipated in advance, information about the proposed change should be publicly available at a stage when there is opportunity for the decision to be influenced. It is recommended that this be at least three months in advance of the planned change. f. Arrangements for recording actions and decisions taken at consultation/engagement meetings should be agreed in advance of the meeting with the record made available to relevant parties. It is recommended that this is within six weeks of the end of the consultation period or of feedback being been received unless otherwise agreed. g. Where decisions about land use or management may have a significant impact, the people making them should explain how views from the community have been considered in their decision-making process. It is recommended that this is within six weeks of the end of the consultation period, or of feedback from a community consultation exercise being received.
5.2 Minimising adverse impacts	
5.2.1	[A02 Seafield & Strathspey Estates] The legal implications of the wording in the guidance relating to natural hazards should be reviewed.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Tree safety policy would be better in guidance. For many woodlands a formal policy is not needed just another piece of administration for the sake of it.
	[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] Include timber Transport Management Plans as a verifier.
	[D02 Ancient Tree Forum] Tree safety policy & mitigation should default to keeping the public away from natural hazards and follow guidance here: See NTSG 2011 (under revision) www.ntsgroup.org.uk HSE(2007,2013) Sector Information Minute
	[G01 FSC UK] UKWAS 5.2.1 could explicitly address proportionality of actions to mitigate risk, as per Criterion 4.5:

	4.5 The Organization, through engagement with local communities, shall take action to identify, avoid and mitigate significant negative social, environmental and economic impacts of its management activities on affected communities. The action taken shall be proportionate to the scale, intensity and risk of those activities and negative impacts. It could also explicitly address the extent of responsibility for mitigation, as per the associated instructions for standard developers.
5.2.2	[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] Sometimes complaints either start of as or become deliberately vexatious especially through social media. At what point does it become acceptable to disengage as the best available advice is “don’t feed the troll”.
	[D03 RSPB] Support.
	[M03 Scottish Land Commission] This appears to be in line with protocol on Community Engagement.
5.3 Local economy	
5.3.1	[A02 Seafield & Strathspey Estates] The definition of local can give rise to uncertainty in interpretation. What is “local” and in what context? The current UKWAS 4 definition is “Local People” and is deliberately not closely defined. There is no definition of “Local” in the context of the local economy.
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] The term local would be deemed to refer to physically close to the WMU, when actually timber can be moved considerable distance, such as by ship or rail (road haulage tends to be closer).
	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] In guidance it is excellent to see that carbon storage is accounted for past the forest gate, however it is important that recording this does not become a burden on the WMU owner. Carbon should be represented positively in two ways, carbon stored on site (soil, permanent vegetation) and carbon captured but no longer on site ie for others to store. This would help to indicate the importance of woodlands in terms of both capture and storage.
	[B23 Andrew Heald] Delete When considering local or specialist markets for different wood products, their potential for carbon storage and cascading uses should be taken into account. In reality cascading use will depend on local market conditions at the time of harvest and the availability of machinery etc

	[D03 RSPB] We would advise that this is subject to environmental sustainability tests to prevent over exploitation of resources driven by the need to sustain such economic activity eg the harvesting of non-woodland products, or other commercial activities. This could be covered by adding sustainable to the first bullet point of the requirement.
	[G01 FSC UK] UKWAS 5.3.1 could better address the strengthening and diversification of the local economy, as per Criterion 5.1. With the identification of potential products and services already addressed in UKWAS 2.2.1(b), the most relevant IGI is: 5.1.2 Consistent with management objectives, the identified benefits and products are produced by The Organization and/or made available for others to produce, to strengthen and diversify the local economy.
	[M03 Scottish Land Commission] The Scottish Land Commission (SLC) has produced guidance on Diversification of Ownership and Tenure that may be useful here, as well as a useful Route Map to support landowners or managers, entitled Opportunities for more diverse ownership, management and use of land. In cases where agreements may be entered into with community groups, the guidance on Negotiating Transfer of Land to Communities may also be helpful. We note the relevance of the following FSC criteria here: **5.1** *The Organization** shall identify, produce, or enable the production of, diversified benefits and/or products, based on the range of resources and *ecosystem services** existing in the *Management Unit** in order to strengthen and diversify the local economy proportionate to the *scale** and *intensity** of management activities. **5.4** *The Organization** shall use local processing, local services, and local value adding to meet the requirements of The Organization where these are available, proportionate to *scale, intensity and risk**. If these are not locally available, The Organization shall make *reasonable** attempts to help establish these services.
5.4 Health and safety	
5.4.1	[D03 RSPB] Agree.
5.5 Training and continuing development	
5.5.1	[A02 Seafield & Strathspey Estates] In guidance, what is meant by “commensurately”.
	[B23 Andrew Heald] Where volunteers work on a site, they are treated commensurately with employees – so they will be paid ?
	[D03 RSPB] Agree.
	[D04 Scottish Raptor Study Group] Throughout out other comments we have identified the need for specialist training of staff who are tasked with carrying out pre-felling or protected species surveys.

5.5.2	[B23 Andrew Heald] Owner/managers should promote equality so that all workers are able to access and enjoy the same recruitment, training, development and promotional opportunities. This seems to be duplicating 5.6.1.
	[D03 RSPB] Agree.
5.6 Workers' rights	
5.6.1	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E01 James Jones & Sons Ltd; E02 BSW Timber Ltd] Section b - This should remain in guidance as it cannot be audited. How can 'promotion' of equality be assessed? The requirement in section a) is sufficient. Guidance – how would it be audited for a[n] owner to have been encouraged to pay higher than the statutory national living wage. The original wording was fine.
	[D03 RSPB] Agree.
5.7 Insurance	
5.7.1	[D03 RSPB] Agree.
	[K01 Grown in Britain] The term 'adequate' is difficult to audit.

Glossary of terms	
Ancient woodland	[D02 Ancient Tree Forum] Add Ancient Trees An ancient tree is exceptionally valuable. Attributes can include great age size, condition, biodiversity value as a result of significant wood decay and the habitat created from the ageing process, cultural and heritage value. Very few trees of any species become ancient.
Ancient woodland site	[D02 Ancient Tree Forum] Also includes Wood Pasture & Parkland.
Buffer	[B22 Scottish Woodlands Ltd] A buffer may also be an area in which alternative management techniques are adopted. A buffer may be used for social reasons as well. E.g., one might put a buffer around a domestic property.
Carbon balance	[B23 Andrew Heald] Carbon balance must also consider carbon implication off-site.
	[M03 Scottish Land Commission] Support the proposed change.
Felling licence	[A02 Seafield & Strathspey Estates] This needs to be revised to take into account the Forestry and Land Management (Scotland) Act 2018 which provides for Felling Permissions, not Licences.
	[E02 BSW Timber Ltd] [Change to 'Felling licence/permission'.]
Forest resilience	[K01 Grown in Britain] Would add term 'resilience' to this as this will identify in text that the term is defined. All uses of resilience are either listed as 'forest resilience' or 'resilience of the woodland'.
Genetically modified organisms (GMOs)	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] Strongly disagree with this definition as it would exclude gene editing. Gene editing is different to modifying. This would prevent the release gene edited grey squirrels.
	[A05 Buccleuch Estates] Strongly disagree with this definition as it would exclude gene editing. Gene editing is different to modifying. This would prevent the release gene edited grey squirrels which is key to providing a chance for eh red squirrel's survival.
High conservation value	[D04 Scottish Raptor Study Group] We would wish to see this expanded to make it clear all species listed in the Wildlife & Countryside Act (& other relevant legislation) are included in this definition. Sections 4.1 – 4.3 refer to features identified in statutory designated sites – but these do not necessarily include Schedule 1 raptors.

	[G02 PEFC UK] Useful to PEFC if we can make some reference to HCVs being equivalent to 'Ecologically important forest areas'
Interested parties	[M03 Scottish Land Commission] POSSIBLE ADDITION TO GLOSSARY, BETWEEN 'HORTICULTURAL' AND 'INTERESTED PARTIES'. Integrated Land Use – A model of land use decision making which takes a holistic systems view of the context and the impact of relative options on the environment and on communities.
Local people	[A02 Seafield & Strathspey Estates] There is no definition of "Local" as used in 5.3.1.
Lower-impact silvicultural systems (LISS)	[A02 Seafield & Strathspey Estates] This should remain and not be replaced by lower intensity forest management approaches.
	[A06 Moray Estates; B24 CCFG] There are a number of problems with this definition. Underplanting is not a silvicultural system; minimum intervention is a management designation, not a silvicultural system; small coupe felling is not a silvicultural system but a method used in various systems such as group shelterwood, patch clear felling and group selection. Because of the confusion in the definition we prefer the alternative term that has been suggested. Whatever the decision on these two terms, it is essential that Continuous Cover Forestry is defined separately within the Glossary – we have included a possible definition in the General remarks at the beginning of the Consultation template.
	[C01 DAERA Forest Service] We would prefer the retention of LISS. Stakeholders are increasingly familiar with this acronym.
Lower intensity forest management approaches	[A06 Moray Estates] We prefer this term as it makes a clear and helpful distinction between the management approach and the silvicultural systems chosen to implement the approach. However, the second paragraph could be rephrased as follows to give greater clarity. 'Examples of operations with limited impact would include […]'.
	[B02 Stuart Wilkie] Why do we feel a need to keep changing these things? At least I can pronounce LISS I can't say LIFM as is comes out like a golf course near St Anne's where they play the Open! Nearly at the end now Owen!
	[B03 Simon Jeffreys] Not sure I see where this is intended to end up.

	[B20 ICF] We suggest the review group might consider more mention of different options of silvicultural systems. In many (though not all) circumstances, the adoption of continuous cover approach can be well suited to meeting a range of public and private objectives. However, with some of the additions there is a risk of reinventing terminology without adding much in the way of sense, for example using Low Intensity Forest Management Approaches instead of LISS.
	[B23 Andrew Heald] The working group seems to be a little confused. Lower impact and lower intensity are significantly different – continuous cover forestry for example a group strip shelter wood system, could be a very intensive form of management, with interventions every 5 years, but overall have a lower environmental impact compared to a clear fell system. In contrast a no-thin clear fell system would be the opposite and a have a very un-intensive form of management with no interventions at all from planting to clear felling at the end of the rotation after 40 years. Perhaps the Working Group needs more input and advice more experienced professional foresters ?
	[B24 CCFG] We prefer this term as it makes a clear and helpful distinction between the management approach and the silvicultural systems chosen to implement the approach. However, we think some minor amendments could be helpful as shown below: In the first paragraph, we propose 'silvicultural interventions' rather than 'silvicultural operations'. However, the second paragraph could be rephrased as follows to give greater clarity. 'Examples of interventions with limited impact would include […]'.
	[D05 Woodland Trust] The Woodland Trust supports this change as this definition is a more accurate reflection of the common understand of low intensity forest management and what it covers. Lost of the glossary term LISS does however require such references in UKWAS to be replaced by LIFMA or for this glossary definition to simply replace the existing LISS definition and keep the term LISS.
Native (species)	[A03 Confor; B04 Pryor & Rickett Silviculture Ltd; B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18 Gresham House; B19 Tilhill Forestry Ltd; B21 Cawdor Forestry Ltd; E02 BSW Timber Ltd] The last study into native tree species was 1981 and listed Beech as only in Southern England and did not list Sycamore at all. Beech grows well when planted in Scotland which shows that had it been given time it would have become a native to Scotland. It did

	cross the land bridge before the sea levels rose. Given the climate change predictions allowing Beech to be a UK mainland native would give some flexibility to planting schemes in the North and Scotland. Sycamore was not classed as native to the UK, but there should be further work done on this aspect. Sycamore has all the characteristics of a native such as spread across the whole UK, and strong wildlife connections. Its ease of spread would indicate that it could have crossed the land bridge without assistance. Other than timber it has little use to man, and when there is abundant Ash, Elm, and Oak it would seem unlikely that it was brought here for that purpose. It may not be in UKWAS gift to grant native species status but the term naturalised could be used as well in several instances to give flexibility in planting / restocking especially considering productive Ash woodlands being hit by ADB[, when Sycamore would be appropriate].
Non-toxic ammunition	[A05 Buccleuch Estates] There are a lot of options out there worse than lead so I think this should refer to the guidance that is coming out shortly.
	[B03 Simon Jeffreys] Is this really a subject to revisit, I thought it had proved to be unfeasible?
	[K01 Grown in Britain] Lead free ammunition (shot or bullet) is the term used by Deer initiative, BASC and FE.
Non-Wood Forest Products (NWFP)	[B03 Simon Jeffreys] Stop Dancing on pinheads, is this now the third change of title for the same thing, keep NTFP.
PAWS	[D02 Ancient Tree Forum] Still no reference to 'Parkland' in spite of repeated references in text. Perhaps qualified by 'enclosed' or 'historic', to differentiate from urban parks or more recent designed parkland with exotic trees.
Peatland	[B23 Andrew Heald] Recommend using the JHI definitions of peat and organic soils https://www.hutton.ac.uk/learning/exploringscotland/soils/organicsoils
Pest	[K01 Grown in Britain] Just to make it clear we would add 'A pest can be a disease or insect or other animal that causes harm.' Throughout the document you have used the term 'pests and diseases'.
Priority species	[A05 Buccleuch Estates] The need to address habitat for priority species on adjacent land to the woodland should also put equal onus on the occupier of that land to improve the woodland edge. i.e. it should not always be the forest that gets pushed back.
Publicly available	[M03 Scottish Land Commission] OK.
Root zone(s)	[D02 Ancient Tree Forum] Replace with Root Buffer Zone: A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter.

Semi-natural habitat	[G01 FSC UK] The glossary definition of 'Semi-natural habitat', which emphasises modification by and continuation of human activity, does not seem to be consistent with the definition of 'Semi-natural woodland' under 'Woodland', which emphasises native species and structural characteristics of natural woodland.
Statutory body(ies)	[M03 Scottish Land Commission] The Scottish Land Commission may also be seen as a relevant statutory body here.
Traditional	[D02 Ancient Tree Forum] Tree Buffer Zone.
Veteran tree	[D02 Ancient Tree Forum] Preferred & consistent definition A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. All ancient trees are veteran trees, but not all veteran trees are ancient.
Water course	[B02 Stuart Wilkie; B22 Scottish Woodlands Ltd] Not correct – to be a watercourse it has at some point to be directly connected with the natural drainage system. A properly disconnected drain is not a watercourse.
	[F01 SEPA] Any **directly connected** natural or man made channel through which……..
Wood pasture	[D02 Ancient Tree Forum] Add: /Parkland - definition is the same 'open grown' tree canopy cover
Woodland	[A05 Buccleuch Estates] Although the text of what constitutes PAWS as not changed in the glossary the way it is referred to through the text indicates otherwise and will lead to significant problems at audit. The system in place all the way through from vs 1 to 4 where the sites were assessed and ranked and scored is as far as we are willing to go.