

NOTES TO AID COMPLETION OF THE WILDFIRE MANAGEMENT PLAN

to support an application for a licence to burn vegetation on deep peat within a SAC or SPA

This version of the Notes provides guidance for the completion of a version of a Wildfire Management Plan that is required when applying under the Heather & Grass Burning Regulations 2021 for a licence to burn on deep peat for the purpose of reducing wildfire risk within a SAC and/or SPA that is also a SSSI.

See Defra's guidance "[Heather and grass burning: rules and applying for a licence](#)", which has a link to "[Find out how to apply to Defra for a licence to burn on deep peat in an SSSI, and either an SAC or SPA](#)".

INTRODUCTION

1 The Wildfire Management Plan (DPBL)

- 1.1 Practitioners may not welcome the introduction of The Heather & Grass Burning Regulations 2021, but the aim of the UMG's guidance is to set out how to satisfy the requirements of an application for a deep peat burning licence (DPBL).
- 1.2 The application process for a DPBL must provide Defra with sufficient information to be able to undertake a Habitats Regulations Assessment.
- 1.3 Before a DPBL can be applied for from Defra, applicants must have consent to carry out prescribed burning on the land holding. If there is no existing consent to burn on the SSSI / SPA / SAC, before applying for a deep peat burning licence, a consent must first be obtained from Natural England.
- 1.4 To meet the requirements for granting a licence, a Wildfire Management Plan for a Deep Peat Burning Licence (WMP DPBL) will be required. Completion of: a Wildfire Check List, a Wildfire Risk Assessment and a Wildfire Response Plan is also recommended, as these documents will support the development of a WMP. See the guidance produced by the Uplands Management Group (UMG)¹
- 1.5 The WMP(DPBL) must cover all the open land in the same ownership that forms part of the same management unit.
- 1.6 The UMG has produced a separate template and notes for a Wildfire Management Plan to be used in other situations.
- 1.7 To help the DPBL application process to run as smoothly and quickly as possible, applicants are asked to provide all the information required to develop an effective WMP that will mitigate the wildfire risk. Applicants are encouraged to follow this guidance, but if it can be justified, a different approach can be adopted.

¹ www.uplandsmanagement.co.uk/wildfire

2 Outputs

2.1 The complete WMP(DPBL) process will generate two outputs:

- 2.1.1 The completed WMP(DPBL) template, supported by Maps if appropriate, and
- 2.1.2 Details of the areas where it is proposed to carry out burning of protected deep peat under licence.
 - A “Proposed Burn Area Information” form that sets out the information required is available from the UMG website (see Footnote 1).
 - A separate form is required for each location where burning is proposed.

2.2 In addition, to complete the wildfire planning process, it is recommended that the other documents the UMG has produced are also completed: Wildfire Check List, Wildfire Risk Assessment and a Wildfire Response Plan. It will be helpful to include these documents with the application for a DPBL.

3 Relationship to a Blanket Bog Restoration Plan

- 3.1 A Blanket Bog Restoration Plan is likely to be required as part of the application for a DPBL, where the conservation and enhancement of the blanket bog is the purpose of the proposed burning.
- 3.2 Guidance on the information required in a Restoration Plan is available from Defra on the GOV.UK website².
- 3.3 Information that is already included in the Restoration Plan does not need to be repeated in the WMP(DPBL), but it should be referred to. The two plans can be presented as one combined plan.

4 Additional support / guidance

- 4.1 UMG can provide general advice to applicants about the DPBL application process.
- 4.2 To make contact, use the form on the UMG’s website³

5 Response to the Application

- 5.1 If the application is successful, Defra will issue an approval, which may include some conditions. If all other permissions are in place, and other conditions are satisfied, the applicant will be free to carry out the proposed burning in accordance with the licence.
- 5.2 If the application is unsuccessful, Defra’s notification will include the reasons for this. After reviewing the feedback, and making any appropriate amendments, Defra will encourage the applicant to resubmit the application.

² <https://www.gov.uk/government/publications/creating-a-blanket-bog-restoration-plan/creating-a-blanket-bog-restoration-plan>

³ <https://www.uplandsmanagement.co.uk/contact>

APPLYING FOR A LICENCE TO BURN VEGETATION ON DEEP PEAT

6 What you need to do to apply for a licence to burn vegetation on deep peat to reduce wildfire risk

- 6.1 You will need to submit a Wildfire Management Plan. This will provide the main evidence on which your application will be assessed. It should cover the whole land holding, not just the deep peat area, and show how your proposals to burn on deep peat fit into a comprehensive plan that sets out all the measures being taken to actively reduce wildfire risk and build natural resilience.
- 6.2 Defra will undertake a Habitats Regulation Assessment (HRA) to determine the impact of your proposals on the protected site, including the blanket bog habitat.
- 6.3 The Plan will need to provide evidence that burning vegetation on deep peat to reduce wildfire risk meets all the following criteria:
 - 6.3.1 It is necessary – this is where the likelihood of ignition and combustion is very likely e.g. recognised ignition points.
 - 6.3.2 It will be effective – explain why burning is the right thing to do in the proposed location(s).
 - 6.3.3 There are no alternative management options that could be used – burning should only be proposed where all other methods, such as cutting, have been tried or considered, and shown to be impractical.
 - 6.3.4 That measures are in place, or planned, that will restore the blanket bog habitat and natural resilience.
- 6.4 The **Wildfire Management Plan** needs to:
 - 6.4.1 Identify high risk ignition points.
 - These may include known or recorded ignition points or localised areas with evidence of the risk.
 - The level of risk is a combination of the likelihood of ignition and the combustibility of the adjacent vegetation.
 - To be considered high risk there is a high likelihood of ignition and high risk of combustion with records of past ignition.
 - 6.4.2 Provide evidence of wildfire management planning on the site and adjacent land (as appropriate). This should include short-term measures to address risk, and long-term measures to restore the condition and resilience of the deep peat habitat.
 - 6.4.3 Identify proposed locations for burning on deep peat with information about vegetation type and structure, size of burn and description of the adjacent vegetation.
 - 6.4.4 Demonstrate that all reasonable alternatives to burning in the proposed locations have been tried, or considered, and deemed impracticable or inappropriate.
 - 6.4.5 Provide information about how it is proposed to manage the burn area(s) in the future, and what specific steps are being taken to increase the resilience of the adjacent habitat.

COMPLETION OF A WILDFIRE MANAGEMENT PLAN (DPBL)

The following sections describe the information that should be included in the Wildfire Management Plan, and all the options that should be considered as part of a comprehensive plan. They also set out the specific information that is required when applying for a licence to burn on deep peat under the Heather & Grass etc. Burning Regulation 2021.

1. Title

Include here information about the date of the Plan, authors and who has contributed. This will help with revision. The Plan should be reviewed at intervals to make sure it remains fit for purpose. Reviews should be carried out whenever there has been a significant change on the land, for example, change of personnel. We suggest a thorough review at least every 5 years.

2. Summary of risks on the land

This section is intended to make sure that all the relevant issues are included and that the focus is on **key risks** identified in the Risk Assessment (the Wildfire Risk Assessment template includes a list of potential hazards).

Include here a concise description of the land with i) a summary of habitats, structures, commercial interests or other assets at risk, ii) the likely sources of ignition and iii) the potential impacts of fire.

Record here any key infrastructure assets, such as: roads, electricity supplies, water resources, fuel pipelines, masts, wind turbines.

Record here any likelihood of risk to the public and how this might arise.

Main features and habitats

- ☐ Protected sites¹ (e.g. SAC, SPA, SSSI)
- ☐ Historic or archaeological sites
- ☐ Main habitats (e.g. blanket bog (peat depth more than 40cm, dry heath (peat depth less than 40cm), grassland, forestry etc)
- ☐ Watercourses (rivers, streams, gullies, ponds etc)
- ☐ CROW² open access land
- ☐ Property (residential, commercial, industrial)
- ☐ Other commercial assets
- ☐ Rights of Way (roads, footpaths, bridleways, tracks)
- ☐ Other infrastructure (e.g. grouse butts, fuel pipelines, masts etc)

Risk areas and access for firefighting

- ☐ Human behaviour hotspots (car parks, camping sites, BBQ areas, viewpoints etc)
- ☐ Recognised ignition points
- ☐ Access points and routes for firefighting

Factors influencing fire risk management

- ☐ Vegetation types (e.g. blanket bog state, tall heather dominated heath etc)
- ☐ High fuel load areas
- ☐ Areas with ground fuels (peat)
- ☐ Topographic features that affect fire behaviour
- ☐ Natural firebreaks and control lines
- ☐ Areas where vegetation management already taking place

Management actions to reduce wildfire risk

- ☐ Areas where peatland restoration work is in progress or completed
- ☐ High fuel load areas to be managed by cutting
- ☐ High fuel load areas to be managed by burning (typically peat depth less than 40cm)
- ☐ Areas targeted for changing vegetation type and structure e.g. diversifying heather dominated vegetation on deep peat by the introduction of species such as sphagnum moss
- ☐ Areas targeted for re-wetting
- ☐ Strategic firebreaks
- ☐ Bare peat areas targeted for revegetation

Include all features that are relevant to your landholding making it clear which are not applicable and that they have been omitted deliberately

¹ See: <https://magic.defra.gov.uk>

² Countryside & Rights of Way Act 2000

3. Proposed actions to reduce wildfire risk

- Describe here what actions you will take and how they are expected to achieve reduction or mitigation of the risks identified in the risk assessment across the landholding.
- Actions should include the full range of land management activities including vegetation management. Ensure you have consulted the relevant authorities to ensure relevant permissions have been given.

4. Management of behaviours

Consider how you can change your activity and the behaviour of others both generally and at times of heightened fire risk to reduce likelihood of fires starting. Options include:

- Suspension of management actions (e.g. cease management burning, avoid use of vehicles or machinery likely to generate sparks or hot exhaust gases) when risk is high.
- Use of posters and other awareness raising (consider how you will ensure that information posted remains relevant).
- How can you work with others to raise awareness – for example:
 - The local police force may be able to help stress that arson is a crime through press or signage,
 - Fire & Rescue Services or Wildfire Groups/Fire Operations Groups may help co-ordinate messages, and
 - Local Authorities may be able to use road signage or signage on rights of way to alert the public.
- Use of media, including social media, to alert heightened risk / need for vigilance and encouraging reporting.
- Asking visitors to report fires.
- Adopt a local fire watch initiative.
- Deployment of staff or volunteers as lookouts.
- Closing access points/routes, where this is possible.
- Regular management of hotspots of human activity to reduce litter and biomass.

- Monitoring of ignition points (such as, vehicle parking on vegetation, BBQ use etc.)
- Patrolling - for moorlands close to urban areas there may be options for Police and/or Fire and Rescue Service support in terms of weekend or Bank Holiday presence, for instance via patrols by Community Police Officers. There may be capacity to deploy estate staff, countryside rangers etc to fire watch duty.

5. Use of strategic firebreaks – purpose, siting, scale, management, monitoring and maintenance

Purpose

Be clear about the purpose of fire and fuel breaks. Do you intend the break to stop a fire or slow fire spread to help tackle it? Fire breaks may be intended to cause fire behaviour to change, rather than stop fire altogether, so may be used as firefighting control lines.

Maps

Maps would be useful to show the location of existing breaks and more resilient wet areas in relation to assets at risk, likely sources of ignition, prevailing wind(s), and topographic factors that will influence fire behaviour, as well as the location of new firebreaks.

Siting of firebreaks

Plan for wildfire by working out where a fire may be brought under control or may stop due to changes in topography or vegetation. Fire breaks should be sited taking account of wind direction, slope, aspect, history of ignition points, surrounding fuel load as well as special features, infrastructure and habitats to be protected. Experience of previous fires (wildfire and prescribed burning) may help to predict how a fire may behave and the direction it may take.

Breaks can also be sited where fire behaviour can be predicted to change anyway, so reducing intensity, and in these situations may be co-ordinated with firefighting 'control lines', for example where a vegetation fire break runs up to a hard track, allowing access to a fire front of reduced intensity.

Fire breaks may be used to 'compartmentalise' a moor or isolate locations identified as likely ignition sources, fire pathways (e.g. gullies) or to isolate features, habitats or infrastructure that require specific protection.

Fire breaks should incorporate existing infrastructure, such as tracks, which may form a starting point for fire break development. Other features such as ribbon ponds, walls and patches of less fire-prone vegetation such as wet flushes or short grazed grass may also be used as part of the fire break network. Drainage or erosion gullies, blocked as part of a re-wetting scheme, can maintain networks of wet areas and provide a water resource where dams maintain deeper permanent pools. Strategic siting of plastic piling dams could be considered as a method of pool creation.

Lines of grouse butts could be integrated into the plan as infrastructure that needs to be protected. Butts often have access routes that may be used for firefighting and where vegetation is kept short for picking up it may be built into the network of fire breaks.

Areas of short grazed grassland can act as a firebreak. Where there are neutral or alkaline soils, grazing stock are more likely to take off the herbage and dead plant material decays more quickly leaving less litter as fuel load.

Type of firebreak

Fire break width will depend on purpose, soil and vegetation type and on expected fire characteristics. As a rule of thumb break width needs to be a minimum of 2.5 times expected flame height.

Naturally exposed mineral soil is the most effective fire break but creating bare mineral soil may not be appropriate or desirable on open moorland.

Where there are peat soils even a bare peat surface represents a residual fuel load. Severe fires can propagate through or beneath the peat.

What method is being used to create the firebreak?

- Where cutting is used to create fire breaks, it may be possible to adopt techniques to reduce the likelihood that brash forms readily drying fine fuels. Forage harvester type machinery can fine-chop dwarf shrub canopies so that material is blown away from cut areas and dispersed. Fine-chopped material left on the ground surface is more likely to remain in contact with the ground and resist drying.
- If burning is to be used on deep peat you should:
 - explain specifically why it is necessary, what you are aiming to achieve and why you think it will be effective
 - explain why alternative management options cannot be used
 - show that measures are in place, or scheduled, that will restore the blanket bog habitat and natural resilience – cross reference with section 3.

Maintenance of firebreaks

Breaks that remain vegetated will require frequent and repeated maintenance and may have limited effect if any remaining vegetation or brash provides large quantities of rapidly drying fine fuels. Breaks may require less frequent maintenance if they become and remain dominated by Sphagnum or other moss species. Cut vegetation may create a mulch that helps retain moisture and reduces vegetation regrowth but must be chopped fine so that it stays in contact with the ground and remains damp. All vegetation will burn if it is dry enough.

Fire breaks will need to be monitored regularly to assess build-up of vegetation and review effectiveness. Indicate here when that will be carried out and by whom.

6. Changing vegetation type and structure, and soil wetness

It is important that the Wildfire Management Plan includes measures to restore the blanket bog habitat across the moor thereby developing wetter peat and more diverse vegetation.

Describe here measures to modify vegetation for example, to change fuel quantity or type and changes to habitat.

Re-wetting

Changing vegetation composition by rewetting and peatland restoration will in most cases result in vegetation with lower biomass and wetter soils that are less likely to be severely damaged by fire. For example, restored bog vegetation will be likely to have more moss and other low growing vegetation that is naturally damp and in contact with the ground and so less likely to dry out. By comparison, unrestored areas may have a canopy of heather, which, if not managed, dries readily to form flammable fine fuel. Consider here the options for re-wetting and peatland restoration including blocking grips and gullies and restoring peatland vegetation. These measures are likely to be part of a restoration plan to which you could refer.

They may be included in an agri-environment agreement or other scheme (link to new Peat Capital Grant Scheme?).

Role of Sphagnum

For blanket bogs, management to achieve abundant moss (especially Sphagnum) will naturally ensure ground is damp and also support a varied and often sparse fuel load. Even at relatively low coverage, patches of moss dominated (especially Sphagnum) vegetation will break up the homogenous higher fuel-load vegetation typical of drier habitats. There are numerous methods available to re-introduce Sphagnum (link to UMG page).

Grazing

Low stocking rates will often allow the increased development of moss in the field layer, both Sphagnum mosses and also 'feather-mosses' that are still relatively good at holding moisture, inhibiting the dense high fuel load vegetation growth that is seen in mono-cultures of heather and purple moor-grass. Where there is vegetation made up of native grasses that are relatively palatable to grazing stock low biomass can be achieved through effective utilisation of herbage. In some situations, grazing livestock can be used to maintain or create breaks in the continuity of fuels across the landscape.

Management of heather or Purple moor-grass dominated vegetation

On deep peat, suitable management of heather or purple moor-grass dominated vegetation can likewise promote the development of a more moss-dominated vegetation, particularly if accompanied by work to re-wet peat by drain or gully blocking and inoculation of bog plant species, particularly Sphagnum mosses. Consider here the options for restoring peatland vegetation. Cutting may be used to remove a heather dominated canopy to allow for the introduction of Sphagnum and other bog species. These measures are likely to be part of a restoration plan to which you could refer.

Change can take place in only a few years where a combination of reduced grazing, water table restoration and Sphagnum restoration is carried out.

Such changes will not prevent fire. In the right conditions all vegetation and peat will burn and facilitate fire spread but retaining more moisture in vegetation and soils reduces the severity of fire and its impact.

7. Fuel Load management

For effective wildfire resilience consider the types, structure and composition of vegetation, which can be described as 'fuel loading', across the whole site.⁴

Describe here where fuel load management is required and why and what actions you will undertake to reduce fuel loads. Describe how fuel load reduction will be achieved and how build-up of load will be monitored.

Reduction of fuel load is likely to be most effective around ignition points or in high risk areas, but can be challenging in areas with significant open access. Fuel includes both man-made litter and vegetation. Management of vegetation to reduce fuel load around access points will require repeated and possibly frequent management.

Over a wider area, management could be undertaken to reduce biomass and break the continuity of fuels. On deep peat where there is a high fuel load associated with heather dominated vegetation a strategic programme of cutting may be used to reduce the risk.

⁴ See Wildfire Management Zones in the FC Practice Guide (Appendix 2).
<https://www.forestresearch.gov.uk/research/building-wildfire-resilience-into-forest-management-planning/>

In naturally wet areas, such as active blanket bog, re-wetting work and restoration management, for example following the Blanket Bog Land Management Guidance (see Further Information) will help reduce the fuel load over time. As described in the section above, wet ground and wetland vegetation, particularly Sphagnum moss, inhibits the growth of more combustible vegetation, and the combination of wet pools and moss cover keeps the peat damp through some drier weather periods. All vegetation will dry out in prolonged and exceptionally warm periods.

Grazing may contribute to management of fuel load but at the levels required to be effective on its own may conflict with other objectives for the land especially on protected sites.

8. Infrastructure

Include here details of any infrastructure (eg tracks, ponds, firefighting equipment left on the land) that is intended to contribute to reducing the risk and effects of wildfire.

Include measures required to maintain infrastructure to ensure that it is fit for purpose.

Include measures to protect public or utility infrastructure on or adjacent to the site (e.g. roads, powerlines). Some utilities may require protection as part of wayleaves and this will normally be the responsibility of the utility company. Nevertheless, any vegetation management to protect wayleaves could be incorporated in the Plan.

Include details of buildings or other infrastructure at risk.

9. Protection of critical infrastructure, property and high value natural heritage or archaeological sites

Some features may require specific protection over and above that normally required.

Consider creating ‘defendable space’⁵ for properties and critical infrastructure to improve fuel loading and to improve fire suppression.

Detail here any specific measures required to protect critical infrastructure or high value natural heritage or archaeological sites that would justify measures that might not otherwise be considered as acceptable. This information will be crucial in engagement with statutory agencies about your Plan.

10. Strategic wildfire management

Consider how any of the measures adopted in the Plan contribute to wildfire risk management at the landscape scale. How can you work in co-operation with neighbours to reduce fire risk in the wider landscape?

Share your Plan with the local Fire and Rescue Service, and where there is one, the local Fire Operations Group.

Operate an early warning system with neighbours.

⁵ See Appendix 2 of FC Practice Guide for more details
<https://www.forestresearch.gov.uk/research/building-wildfire-resilience-into-forest-management-planning/>