#### EXPLANATORY MEMORANDUM TO

#### THE HEATHER AND GRASS etc. BURNING (ENGLAND) REGULATIONS 2007

#### 2007 No. 2003

- 1. This explanatory memorandum has been prepared by the Department for Environment, Food and Rural Affairs and is laid before Parliament by Command of Her Majesty.
- 1.1 This memorandum contains information for the Joint Committee on Statutory Instruments.

# 2. Description

2.1 The Heather and Grass etc. Burning (England) Regulations 2007 (the "2007 Regulations") revoke the Heather and Grass etc. (Burning) Regulations 1986 (the "1986 Regulations") in relation to England and replace them with new provisions governing the burning of heather, rough grass, bracken, gorse and vaccinium. Such burning takes place particularly in the management of grouse moors; and in the management of rough grazing land.

# 3. Matters of special interest to the Joint Committee on Statutory Instruments

- 3.1 Reference is made in the definition of "uplands" in regulation 2 of the Regulations to three volumes of maps showing the "less favoured farming areas in England". The Department has provided a copy of a map showing all the Less Favoured Areas in the UK, printed at a considerably smaller scale than the maps referred to in regulation 2. The official maps of the English Less Favoured Areas are in three volumes containing 235 pages of coloured A3 maps at a scale of 1:50,000. These may be viewed (by prior appointment) at the Department's Information Resource Centre which is located at 2 Horseferry Road, London SW1 2AL (telephone 020 7238 6712).
- 3.2 The location of Less Favoured Areas in England can also be found using the interactive map at the website of Multi-Agency Geographic Information for the Countryside. The interactive map can display the less favoured area status of any land in England with a co-ordinate accuracy of one metre at a scale of 1:25,000. This service is available at no cost and can be found at: http://www.magic.gov.uk/.

### 4. Legislative Background

4.1 The Regulations are made by the Secretary of State under section 20(1) of the Hill Farming Act 1946.

# 5. Extent

5.1 The Regulations apply to England only.

# 6. European Convention on Human Rights

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

# 7. Policy background

- 7.1 Detailed policy background can be found in pages 5 to 16 of the attached Regulatory Impact Assessment, a summary of which follows.
- 7.2 Controlled burning is used particularly on moorland and heathland, predominantly in the uplands but also in some lowland areas. It is used by game shooting estates to create patchworks of different-aged heather on which grouse thrive. Farmers use it to improve grazing. It is also used in conservation management, scrub and reedbed management, and in controlling vegetation to reduce risks posed by wildfires.
- 7.3 When used with skill and understanding, burning can benefit agriculture, game birds and wildlife. However, fire is inherently destructive and sometimes unpredictable, and if it is used carelessly or irresponsibly it creates risks for people, property and the environment.
- 7.4 The Government's general policy on burning is to ensure (i) that burning takes place safely; (ii) that environmental benefits are maximised, and environmental impacts minimised; and (iii) that land managers are able to use fire responsibly to manage their land and to benefit their businesses. To this end the Government:
  - uses legislation, including the 1986 Regulations (and now the 2007 Regulations) and various other wildlife, safety and archaeology laws, to set minimum standards and outlaw irresponsible practices. This legislation forms a relatively "light touch" regulatory framework. The various measures are outlined in paragraph 13 of the attached RIA;
  - uses guidance, mainly via the voluntary Heather and Grass Burning Code, to encourage good practice. An updated version of the Code is being relaunched to accompany the 2007 Regulations ahead of the start of the 2007 burning season;
  - uses financial incentives (e.g. through agri-environment schemes) to ensure environmentally sensitive management in specific cases.
- 7.5 The vast majority of burning in England is conducted safely and the risk to people and property is low (although there remains an inherent risk). The low level of risk is largely due to the responsible behaviour of most burners for the good of their land and businesses, it is in their interests to burn safely, and strongly not in their interests to do otherwise.

# 7.6 With regard to the environment:

• most burners burn responsibly, although in many cases there is probably some room for improvement. Most burners have probably not read the Heather and Grass Burning Code for many years, if at all (and this is something we hope to tackle by

launching a new 2007 version of the Code). Also, inappropriate burning is the second most common reason (after overgrazing) why a Site of Special Scientific Interest (SSSI) might fail to meet the high standards of Defra's Public Service Agreement target to have 95% of SSSIs in England in favourable or recovering condition by 2010. We hope and expect the 2007 Code will help reduce burning as an obstacle to the target.

a minority of burners burn irresponsibly. In particular, this might involve (i) burning
in ways which harm wildlife and sensitive habitats; and (ii) burning in ways which
lead to a high risk of soil erosion and exposure (which, among other things, can lead
to emission of greenhouse gasses from carbon-rich peat soils, and pollution of water
courses).

#### Consultation

- 7.7 The review of the 1986 Regulations (and the associated Heather and Grass Burning Code), resulting in the 2007 Regulations and Code, was subject to considerable stakeholder consultation. In summary:
  - leading stakeholders were invited to give evidence to an expert Science Panel (formed to advise the review by assessing evidence on burning and its effects on soils, hydrology and biodiversity). The Panel reported in June 2005;
  - a Stakeholder Panel (consisting of a range of interested organisations including representatives of grouse moor managers, farmers, and the Fire Service) advised on issues to be raised in a public consultation;
  - a public consultation was held from September to December 2005. An executive summary of responses is at page 41 of the attached RIA. A full summary of responses can be found at <a href="http://www.defra.gov.uk/rural/uplands/burning.htm">http://www.defra.gov.uk/rural/uplands/burning.htm</a>;
  - since the public consultation, Defra has worked closely with key stakeholders in developing the details of the new Regulations (via a Natural England-chaired burning stakeholder group). The Group commented on various drafts of the RIA, including specifics of what the Regulations should do. Some of the Group's members (the Moorland Association, the National Gamekeepers Organisation, the National Farmers Union, the Country Land and Business Association and the Heather Trust) are joint-branding the accompanying Code with Defra and Natural England.

### The effect of the Regulations

- 7.8 The two main provisions of the 1986 Regulations are also given effect in the 2007 Regulations:
  - they continue to require that burning of specified vegetation only takes place within a "burning season" (unless under licence from Natural England). The season is 1 October 15 April in the uplands, and 1 November 31 March elsewhere. The main aim is to limit burning to the colder, wetter months when the risk that fires may burn out of control are much lower.

- they continue to require (i) that burns must be controlled over the entire period of the burn; (ii) that all reasonable precautions must be taken to prevent injury to people or damage to adjacent land and property; and (iii) that burning must not start between sunset and sunrise.
- 7.9 The 2007 Regulations differ (significantly) from the 1986 Regulations in the following respects:
  - Natural England is the new regulator.
  - there are new prohibitions against burning in ways likely to raise a significant risk of soil exposure and erosion (practices which, among other things, can lead to release of peat-based carbon into the atmosphere, pollution of watercourses and have negative effects on biodiversity).
  - the licensing procedure is extended to cover the new prohibitions (thus a person can apply to Natural England for permission to burn either (i) outside the burning seasons; and/or (ii) contrary to the new prohibitions).
  - the criteria under which Natural England may grant a licence have changed. Under the 1986 Regulations the Secretary of State had the power to grant a licence if he considered it was necessary and expedient for the improvement of the land. Under the 2007 Regulations, Natural England may grant a licence only if it is satisfied that the proposed burning is necessary and expedient for (i) the conservation, enhancement or management of the natural environment for the benefit of present and future generations; or (ii) the safety of any person.
  - the licensing procedure is no longer subject to an appeals procedure (under the 1986 Regulations, an applicant who disagreed with a licensing decision could make representation to the Secretary of State).
  - there is a new power by which, if Natural England believes that burning has taken place in contravention of the Regulations, it may issue a "burning notice" requiring the occupier of the land concerned to notify Natural England of future burns for a period of up to two years. There is provision for persons to make representations to a person appointed by the Secretary of State against the imposition of such a requirement.
  - burners will no longer be required to notify their neighbours prior to burning (and thus it will no longer be a criminal offence to fail to do so) but will instead be recommended to do so by the 2007 Code.

### Cross Compliance

7.10 Farmers who apply for Single Payment are required to comply with aspects of the 2007 Regulations as part of "cross compliance" (under which the payment of a full farm subsidy is dependent on adherence to certain laws and rules). Like the 1986 Regulations, the 2007 Regulations will be part of cross compliance in-so-far as they require (i) adherence to the burning season; and (ii) burning safely and taking reasonable precautions. However, cross compliance will no longer apply to (a) not starting burning between sunset and sunrise; and (b) notifying neighbours prior to burning.

### Further details of changes

7.11 A detailed comparison of the 1986 Regulations and the 2007 Regulations, including reasons why the changes are being made, can be found in Table 1 of the attached RIA (beginning at page 20).

#### Guidance

- 7.14 Guidance to burners will come from three main sources:
  - the 2007 Heather and Grass Burning Code contains a summary of the 2007 Regulations (and various other legislation relevant to burning).
  - detailed guidance on the Regulations will be published on the Natural England website in advance of 1 October 2007.
  - updated guidance on cross compliance is due to be published in January 2008. This will include details of how the 2007 Regulations relate to cross compliance.

# 8. Impact

- 8.1 A Regulatory Impact Assessment (RIA) has been prepared for this instrument and is attached at Annex 1.
- 8.2 Copies of the RIA are available from the contact given immediately below.

#### 9. Contact

9.1 Tom Coles (Environmental Land Management Division, Defra, Nobel House (Area 3C), Smith Square, London SW1P 3JR) can answer any queries regarding the instrument. Tel: 020 7238 5484 or e-mail: <a href="mailto:tom.coles@defra.gsi.gov.uk">tom.coles@defra.gsi.gov.uk</a>.

# **Annex A**

# The Heather and Grass Burning Regulations 2007

and

The Heather and Grass Burning Code 2007

**Final Regulatory Impact Assessment** 

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# Regulatory Impact Assessment

# Title of Proposal

- 1. This RIA covers two related measures, both of which will update existing measures. They are:
  - (a) the Heather and Grass etc Burning (England) Regulations 2007 made under section 20 of the Hill Farming Act 1946, and replacing similar Regulations made in 1986; and
  - (b) the *Heather and Grass Burning Code (2007 edition)* replacing a similar Code published in 1994.

# 2. Summary

- Fire has been used in land management for thousands of years. Today, it is used mainly on moorland and heathland, particularly in upland areas of North and South West England. Game shooting estates use it to create patchworks of different-aged heather on which grouse thrive. Farmers use it to improve grazing by removing old grass and encouraging more palatable new growth. It is also used in wildlife management and scrub control.
- The Government's general policy is to ensure (i) that burning takes place safely;
   (ii) that environmental benefits are maximised, and environmental impacts minimised; and (iii) that land managers are free to use fire sustainably for the good of their businesses, and the rural economies and employment to which they contribute.
- Responsible burning can benefit some wildlife (including game birds) and reduce
  the risk of wildfire. It brings economic benefits for some farmers and enables
  game estates to produce the surplus birds they need for sporting purposes.
- Irresponsible burning is potentially harmful to people and property. It can cause
  impacts including harm to wildlife, soil erosion and exposure. Effects can include
  declines in biodiversity, emission of greenhouse gasses from peat soils, and
  pollution of water courses.
- Generally, it is good practice to conduct "fast and cool" burns. "Hot and slow" burns are more likely to harm the environment and should be avoided.
- The level of risk depends on many factors, including (a) competence of burners;
   (b) terrain; (c) wind strength, direction and changeability; (d) dryness of vegetation and soil; (e) woodiness of vegetation; (f) amount of combustible vegetation; (g) relative heat of burn; (h) proximity to people, property and wildlife; and (i) available equipment.

- Controlled burning is subject to several laws, including the *Heather and Grass Burning Regulations 1986*. The legislation forms a "light-touch" framework for burning. There are potentially tighter controls on Sites of Special Scientific Interest.
- Good practice is encouraged through the (voluntary) *Heather and Grass Burning Code* and various site-specific agreements and agri-environment schemes.
- Generally, we think the large majority of burners burn responsibly, although in many cases there is probably some room for improvement. There is anecdotal evidence that most burners have not read the voluntary Code for many years, if at all.
- A minority of burners burn irresponsibly. We are particularly concerned about (i) burning which harms wildlife and sensitive habitats; and (ii) burning which exposes and erodes soils, particularly the carbon-rich peat soils on many upland areas.
- In late 2004, Defra began a review of the Heather and Grass Burning Regulations and Code. We considered various options, including (a) scrapping the Regulations; and (b) making them considerably more stringent with new mandatory requirements on all burners.
- Following a public consultation, Defra proposes:
  - an updated voluntary Code, supplemented by new best practice guidance notes giving more detail on specific issues;
  - to reduce red-tape and maintain "light-touch" regulation for responsible burners:
  - targeted new bans aimed at the irresponsible minority on burning in way which risks significant soil exposure and erosion (supplementing existing law on safety and protection of wildlife);
  - to improve awareness and enforcement of the full range of existing legislation which applies to controlled burning.
- This Regulatory Impact Assessment analyses the various issues raised, and assesses the various costs and benefits of the proposal and other options considered.
- This work has been taken forward in close consultation with Natural England, in line with the Government's commitment to principles of "better regulation". The details of the policy have been developed in consultation, among others, with key representatives of the burners who will be directly affected by the policy.

# 3. Purpose and intended effect of measure

# **Objective**

2. Our objective is that the updated Regulations and Code should lead to more responsible controlled burning and less irresponsible burning. The aim is to bring about (i) safety for workers, people and property; (ii) more environmentally responsible burning, and reduced environmental damage; whilst (iii) leaving land managers with the freedom to use responsible burning for the benefit of their businesses and livelihoods. This will advance Defra's objective of promoting sustainable land management, particularly with regard to moorland and heathland.

### **Rationale for Government intervention**

- 3. When used with skill and understanding, burning can benefit agriculture, game birds and wildlife. However, fire is inherently destructive and sometimes unpredictable, and if it is used carelessly or irresponsibly it creates risks for people, property and the environment. The Government considers that without intervention the level of risk would be unacceptably high. Therefore we:
  - use legislation to set minimum standards and outlaw irresponsible practices;
  - use guidance and awareness-raising to encourage good practice;
  - use financial incentives to ensure environmentally sensitive management in specific cases.

# Controlled burning – main issues

4. This section of the RIA gives detailed background on burning, covering issues such as who burns, where it takes place, how government controls it, and various economic and environmental issues raised.

# **Controlled burning**

5. Controlled burning of heather, rough grass and other vegetation is used for three main purposes – game management, agriculture and conservation – as covered in the paragraphs below.

### **Burning for game management**

- 6. Grouse moor estates in the North of England (including the Peak District) conduct most of the controlled burning in England. The key points are:
  - a. there are around 160 estates on which grouse shooting occurs, covering an estimated area of 275,000 hectares, with an average estate size of 2,000 hectares. (This compares with around 1.6 million hectares of upland in England, of which around 774,000 hectares is within the Moorland Line);

- burners, often gamekeepers, tend to conduct "patchwork" burning of small plots of around 0.4-1 hectare. Each "patch" is burned once every 7-25 years

   the length of the cycle depending on how fast heather regenerates in a particular area;
- the aim is to encourage a mix of heather age and structure which grouse need for their life-cycle – to produce surplus grouse for sporting purposes, while maintaining a sustainable breeding stock;
- much of this traditionally burned land is designated as Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA) and/or Special Areas of Conservation (SAC);
- often this land is both grazed and used for sporting purposes e.g. commoners or tenants may have rights to graze the land, and landlords and others may have rights to burn the land for shooting.

# **Agricultural burning**

- 7. Another significant group of burners are farmers, including some commoners, who manage rough grazing land (e.g. in the South West, the South Pennines and the Welsh Borders). The key points are:
  - they use burning to encourage new growth of rough grass, heather and other vegetation, to improve its grazing capacity. It can also be used to stop scrub encroachment;
  - we do not have accurate information on how many burners are in this group.
     We estimate they may number in the high hundreds, with some burning regularly and others perhaps every few years;
  - the rights of commoners to burn vegetation are not always clear cut. In some cases there may be an explicit right, in others it may be more a matter of custom or prescription;
  - some experts consider that some burners in this group are more likely than burners in other groups (i) to burn out of season, perhaps because they burn less often and are less aware of the law; and (ii) to burn in ways more likely to damage the environment, for instance they tend to burn larger tracts of land more frequently than grouse-moor burners, and land can take longer to recover.

### **Burning for conservation**

- 8. Burning is also used in conservation management. For instance:
  - land managers sometimes use burning, normally in the lowlands where vegetation has become overgrown as a result of reduced or no grazing management. Burning in this way is normally a part of a restoration programme;
  - on Exmoor and Dartmoor, burning has been used to manage scrub and gorse, and to create habitat for rare butterflies;
  - most lowland heaths are Special Protection Areas (SPA) for nightjar, woodlark, Dartford Warbler and other birds of European importance. All can

- benefit from sensitively undertaken controlled burning to provide their niche habitats:
- lowland areas such as the East Devon pebblebeds, Dorset heaths, New Forest, Thames Basin and Suffolk heaths are all areas which use, or could consider, controlled burning;
- burning can be used to maintain visibility of archaeological features and encourage preferential grazing around them.

# Alternatives to burning

- 9. There is often no viable alternative to controlled burning because alternatives (i) are not practically possible; (ii) do not produce the desired result; or (iii) are not economical. Having said this:
  - cutting, using flails mounted on a tractor, may be an alternative. But it is only
    possible where land is accessible to tractors and not too rocky, which
    excludes many upland areas. Cutting tends to be more expensive than
    burning. Environmental pros and cons compared to burning are arguable;
  - grazing management may be a substitute for burning, although it would not produce conditions desired by grouse moor managers. There may also be a risk that increased grazing pressure may harm the environment;
  - cutting and grazing alternatives tend to be more viable in the lowlands;
  - it may be possible to have less or no burning, and accept reduced productivity for game birds and livestock, with corresponding loss of income for businesses which rely on this productivity.

#### Science Panel

- 10.To inform the review of the Regulations and Code, Defra formed an expert Science Panel to report on the current state of scientific knowledge on how burning affects biodiversity, soils and hydrology. The Panel reported in June 2005 (their report is at <a href="www.defra.gov.uk/rural/pdfs/uplands/science-panel-full-report.pdf">www.defra.gov.uk/rural/pdfs/uplands/science-panel-full-report.pdf</a>). The Panel's advice informed this RIA and the drafting of the revised Code and Regulations.
- 11. Scientific knowledge of the environmental effects of moorland and heathland management (including burning) is growing. Over the next few years we expect to learn more about issues such as how the management of peat soils can either add to global warming or help slow it (by either emitting greenhouse gasses or absorbing atmospheric carbon). We will also know more about the implications of our changing climate e.g. should we further restrict burning in the spring to increase protection for earlier-nesting wild birds?...or might we need more controlled burning to limit increased risks from wildfires and arson? These and other broad topics are discussed below. Defra and Natural England will monitor emerging evidence and take action as necessary which may include further changes to the Heather and Grass Burning Regulations and Code in future.

# Legislation

- 12. Over the last few decades, governments have introduced a range of legislation which applies to controlled burning.
- 13. One of the main pieces of law (and the subject of this RIA, alongside the Code) is the *Heather and Grass etc (Burning) Regulations 1986*. A detailed description of the 1986 Regulations, and the changes we propose, is in the "Options" section below. In summary they:
  - set a burning season (October to mid-April in the Uplands, November to March in the Lowlands). Burning outside these dates is not allowed, unless specifically permitted by Natural England;
  - ban beginning burning at night time;
  - address some safety issues;
  - require that interested parties are notified prior to burns.
- 14. Other legislation also applies. This is not the subject of this RIA and it will not be changed as part of this review but it is relevant because it is part of the regulatory framework in which burning must take place in England. The main measures are:
  - section 28 of the Wildlife and Countryside Act 1981: this applies only on Sites
    of Special Scientific Interest (SSSIs) to operations likely to damage an SSSI,
    including burning where relevant. Such operations may only proceed with
    Natural England's consent, to which conditions can be attached such as how,
    when or where burning can take place;
  - other sections of the Wildlife and Countryside Act and the "Habitats Regulations": these rules apply throughout the countryside (not just in SSSIs). They prohibit any activity, including burning, which disturbs or destroys (i) wild birds or their nests; and (ii) protected animals and plants. These rules apply regardless of the burning season or section 28 consents;
  - various other safety and environmental legislation. For instance, there are bans on burning which (i) endangers anyone, including the public; (ii) is likely to cause injury, interruption or danger to road users; or (iii) causes emission of smoke which is prejudicial to health or causes a nuisance;
  - the *Commons Act 2006* which enables statutory commons councils to establish proper management regimes for burning on common land;
  - the Ancient Monuments and Archaeological Areas Act 1979, under which it is an offence to damage Scheduled Monuments.

# Voluntary and financial measures

15. We also use non-legislative measures to encourage good practice, including:

- the Heather and Grass Burning Code: (also the subject of this RIA, which will be updated as part of this review). This is a voluntary Code which promotes good practice on how, where, and when to burn. It also summarises the laws which apply to burning;
- agri-environment agreements: under which land managers (usually farmers) and Natural England enter into an agreement where land is managed to a high environmental standard in return for money. The schemes include moorland management plans and cover burning where relevant;
- cross compliance: this makes full payment of Single Payment farm subsidies dependent on adherence to certain rules, including the *Heather and Grass Burning Regulations*. It only influences burners in receipt of the Single Payment (i.e. almost all the farmers, and a few grouse moor owners);
- moorland management plans: a relatively new type of voluntary agreement (usually concerning SSSI land) between grouse moor estates and Natural England, which promote good environmental management (including burning practice). Estate owners receive some financial incentive via the Wildlife Enhancement Scheme;
- other voluntary management agreements: for instance, National Park Authorities (NPAs) on Dartmoor and Exmoor have agreed with farmers on how and when burning (often called "swaling" in the South West) should take place.

# Risks to people and property

16. The vast majority of managed burning is conducted safely, and the risk to people and property is low. Legislation is already in place to outlaw burning in ways likely to harm people or property, and any remaining risk is offset by the fact that controlled burning is thought to reduce the risk of occurrence and severity of wildfires (as discussed below).

### **Economic and social factors**

- 17. The Moorland Association (which represents game shooting estates) estimates that:
  - in England and Wales, grouse shooting businesses (together) receive direct revenue of about £10.6 million from an average total of around 1,300 shooting days per year;
  - annual revenue varies on each estate according to whether there are enough grouse to shoot in any given year (a natural 5-7 year cycle in grouse numbers

means that for 3-4 years per cycle there are often insufficient numbers of grouse to shoot at all). In a shooting year an average sized estate might expect a revenue of around £70,000, but in non-shooting years there will be no revenue:

- around 280 moorland gamekeepers are employed in England and Wales, with a total wage bill of around £3.6 million per year;
- in England and Wales, the estates provide local, seasonal work by employing beaters for shoots (around 32,500 beater days, amounting to about £1.1 million per season);
- local hotels, pubs and restaurants benefit, as do other local businesses.
- 18. Game shooting in the North of England has social and cultural importance for three main reasons:
  - some rural communities rely heavily on game shooting businesses;
  - over many decades (often as far back as the mid-1800s), controlled burning has helped shape the character of much of England's upland landscape and associated wildlife;
  - English grouse moors have an international reputation as world-class sporting venues. They attract shooters from across the world.
- 19. We do not have detailed figures on the economics of burning for the purpose of grazing management (e.g. as practised by some farmers). However, it provides an inexpensive way of removing unpalatable old moor grass and encouraging more palatable new growth. This helps farmers make an economically viable return from land which often has very small profit margins.
- 20. There are other economic costs (and benefits) potentially raised by burning management, which are discussed in the *environmental issues* section below. Potential costs include (i) the cost of carbon emissions to the extent that burning may contribute to carbon-loss from peat soils; and (ii) costs to water companies to the extent that burning may contribute to colouration of water supplies. In both cases there are indications that burning is a contributing factor, but scientific understanding is at too early a stage to say accurately the extent to which it is a factor. The potential economic costs should be balanced against the role of burning in reducing the risk of wildfires (also discussed below). There may also be wider socio-economic benefits from improved wildlife and landscape protection resulting from better burning practices.

#### **Environmental issues**

21. Burning has a wide range of positive and negative environmental effects. The sections below cover the broad issues of:

- soil exposure and erosion;
- wildfires:
- biodiversity;
- Sites of Special Scientific Interest;
- colouration of water: and
- the historic environment.

# Soil exposure and erosion

- 22. This issue is important to this review because we plan to introduce new regulatory provisions, among other things, to deter burning which leads to risk of significant soil exposure and erosion.
- 23. All burning has the potential to result in some degree of soil erosion i.e. it affects surface vegetation and the remaining vegetation is temporarily less able to protect the soil from eroding forces such as rain and wind. Where burning is carried out in line with the Code, the extent of the problem is limited because (i) a ground-level litter layer and vegetation such as mosses remain, which limits soil exposure and drying; and (ii) other vegetation tends to recover within 1-3 years.
- 24. However, *irresponsible* burning has the potential to result in a relatively high risk of soil erosion and loss of soil-based carbon, as discussed below. It is widely recognised by experts (including burners) that burns which cause this type of risk (i) are easily avoidable; (ii) should not happen if burners follow the Code; and (iii) it is not in the interests of land managers to cause such significant damage to their land.
- 25. There is a high risk of <u>soil erosion</u> when burning destroys most (or all) surface vegetation over large areas, leaving topsoil prone to erosion from rain and wind. This can be magnified (i) if it occurs on slopes or close to water courses; (ii) in peat areas; and (iii) if the root systems of vegetation are damaged or destroyed. Soil erosion is a problem because:
  - when soils disappear, land is permanently degraded (unless it is specifically managed to reverse the damage, which might take many decades);
  - it causes siltation of water courses and contributes to water colouration (see paras 42-43);
  - it can be self perpetuating, particularly in peaty moorland soils i.e. once erosion channels have formed they tend to increase in length, width and depth, which causes more erosion, and the regular flow of water makes it difficult for vegetation to re-establish. This increases drainage from moors, which contributes to drying of soils and can contribute to carbon loss.
- 26. There is a significant risk of <u>carbon loss</u> (i) if burning exposes large areas of peat soils, which become prone to drying-out and oxidising; (ii) if peat is carried into water courses where further processes release carbon into the atmosphere; and (iii) if there is direct burning of the peat surface. The main points are:

- soil is an important natural resource which takes many years, often centuries, to form;
- peat soils contain much higher proportions of carbon than other types of soil sometimes up to 60% of peat is carbon. England's peat soils are vast stores of carbon, containing hundreds of millions of tonnes of carbon;
- if peat dries out, oxygen in the air increasingly comes into contact with the carbon, and the two can react to form carbon dioxide which escapes into the atmosphere;
- it is likely that large areas of England's peat soils have become much drier over the last many decades, mainly due to widespread drainage (e.g. the digging of grips). Burning-related exposure of topsoil may also contribute, as may generally higher temperatures.
- 27. In particularly bad cases on peat soils, burns can set fire to the peat itself (peat is combustible when it is relatively dry). This can cause severe damage to the soil structure, which may take many decades to recover. It also causes high levels of carbon emissions. It can also be difficult to extinguish such fires, which may smoulder underground for weeks, creating a high risk of secondary wildfire as the underground fires resurface.
- 28. We do not yet have detailed evidence on precisely how widespread burning related soil erosion is, or how much carbon may be released by irresponsible burning. However:
  - there is clear evidence that poor burning practice can contribute to erosion and loss of carbon, as recognised by the Science Panel which advised the review of the Regulations and Code;
  - some recent scientific opinion suggests it may be a nationally significant source of carbon emissions, although there is not yet conclusive evidence;
  - we expect the science to continue to develop over the next few years.
- 29. The very large quantities of carbon in peat and organic soils mean that the management of such soils (including burning where relevant) is important to the Government's broader work on tackling climate change. We need to promote management which keeps carbon locked in organic soils. There may also be some potential to manage such soils so they form new peat, thus taking carbon from the atmosphere and locking it in the soil (although this process is likely to be slow). This could be done, for example, by blocking drains to create water-logged conditions, and encouraging vegetation which will eventually form peat. We expect to learn more about this sequestration potential e.g. how much it could help over what timescale over the next few years as scientific knowledge grows.

### **Wildfires**

- 30. Generally, controlled burning is likely to reduce the risk of occurrence and impacts of wildfires. The main points are:
  - there are hundreds of wildfires in England each year, mainly occurring in the warmer, drier months. Most are brought under control before they develop into major incidents, but a few cause major destruction to large swathes of land:
  - wildfires tend to be started by carelessness (e.g. in disposing of cigarettes) or arson. They are rarely caused by managed burns which go out of control, although this can occur;
  - many factors influence the occurrence, severity and extent of wildfires –
    including the amount of combustible material present; its relative dryness; and
    whether it is likely to burn relatively "hot and slow" (e.g. woody material like
    older heather) or "cool and fast" (e.g. most grasses). The extent of a fire will
    depend on factors such as wind speed and direction and the extent of
    combustible material:
  - generally, controlled burning reduces the risk of occurrence and severity of wildfires by reducing the amount of combustible material present, and making areas with large fuel loads more dispersed;
  - if burning were to cease on traditionally burned heather moorland (which, by design, tends to have high proportions of heather), over time the current patchwork of young and old heather would be replaced by swathes of old, woody heather. On such areas (unless the heather were managed in some other way) there would be a much increased risk that if a wildfire were to start, it could be very destructive over a large area.
- 31. Severe wildfires can damage habitats and soil on a far worse scale than controlled burns. They can cover large areas of many hundreds of hectares and more, and land may take many decades to recover economically and environmentally. They are also costly to bring under control, and restoration takes large amounts of time, effort and money over a long time scale. For instance, a large wildfire in 2003 at Fylingdales on the North York Moors cost approximately £50,000 in fire fighting costs alone. Meanwhile, a wildfire on Bleaklow Dark Peak in 1957 resulted in bare peat which endured for nearly fifty years before it was reseeded in 2004.
- 32. Wildfires also place burdens on the Fire Service and the Police, which reduces their ability to respond to emergencies elsewhere.

# **Biodiversity**

- 33. There are two main ways that burning management may affect biodiversity (i) irresponsible burning may directly harm wildlife; and (ii) over time grouse moor burning often leads to heather displacing other vegetation.
- 34. Irresponsible burning can disturb or destroy wildlife and habitat, particularly if it takes place when wild birds and animals are breeding, or if burn-size is too large, or if burns are too hot, or if they damage sensitive habitat features. (Defra and Natural England are already tackling this problem using the range of measures discussed in paragraphs 12-15 above. In addition, through this review, we plan: (i) generally to raise awareness of the revised Code; (ii) to highlight in the Code that it is illegal to burn in a way which disturbs or destroys wild birds or their nests, protected animals and plants, or habitats and features; and (iii) a proportionate enforcement response).
- 35. In the public consultation, most environmental interests felt that the current burning season should be changed to provide further protection for wild birds in the spring in light of evidence that many birds are now nesting earlier. The bodies which have since become Natural England argued that in order to protect both nesting birds and reptiles the season should be shortened by 2 weeks in the uplands (to finish on 31 March) and 1 month in the lowlands (to finish on 1 March). This issue is dealt with in the "Options" section below, page 23 section 11.
- 36. Another effect (particularly on grouse moors) is that burning reduces the range of habitat that would otherwise have been present. One of the aims of such burning is that relatively fire-adapted heather and its associated wildlife (including grouse) becomes increasingly dominant whilst other moorland vegetation, such as grasses and mosses and their associated wildlife, becomes increasingly scarce.
- 37. Many experts, including Natural England, are concerned by reduced biodiversity in many burned areas. The main points are:
  - they are most concerned about heather dominance in sensitive habitats (e.g. blanket bog and upland wet heath), which are particularly important for upland biodiversity. These habitats have declined historically as a result of upland management practices including drainage, burning and overgrazing. Natural England are working to see this trend stopped and reversed. There is general agreement (and the Code supports this) that the burning of such habitats is generally unnecessary, and often detrimental;
  - ideally they would prefer all moorland to be managed, on the landscape scale, to create varied mosaics of vegetation. There would be areas where certain species (including heather, grasses and mosses) dominate, and many areas with mixed vegetation. The overall effect would be to have many species coexisting, with patchworks of micro-habitats supporting the widest possible range of wildlife.

- 38. Grouse moor and farming representative bodies (and some academics) generally:
  - agree with Natural England and the Code that there should be a strong presumption against burning sensitive habitats, although there may be cases where careful burning is justified;
  - grouse moor interests do not consider that heather dominance is a major issue outside sensitive habitats. They argue that (i) burning only takes place on perhaps up to 30% of England's moor and heath, so there are many areas where other species can thrive; (ii) whilst mosaics of vegetation would be more biodiverse, heather-based ecosystems are still rich in wildlife; and (iii) grouse moor management provides a significant public benefit to which the public has rights of access, and it comes at little cost to the taxpayer because grouse businesses are usually self-supporting.

# **Sites of Special Scientific Interest**

- 39. Inappropriate burning is an obstacle to Defra and Natural England (NE) achieving their Public Service Agreement target of bringing 95% of Sites of Special Scientific Interest (SSSIs) into *favourable* or *recovering* condition by 2010. Inappropriate burning is one of the foremost reasons for unfavourable condition in area terms (alongside overgrazing and drainage). Without a solution to inappropriate burning the PSA target will be unachievable.
- 40.NE is using a range of measures to tackle problem-burning on SSSIs, including agri-environment incentives and moorland management plans. Whilst NE would prefer to work in partnership with land managers to achieve the SSSI target through voluntary measures, the SSSI legislation does provide for extant Section 28 consents (explained in paragraph 14), which were issued by NE's predecessor in the 1980s and 90s to be amended or revoked.
- 41. Defra and NE expect the revised Code and Regulations to help meet the SSSI target. Generally, we expect the re-launch of the Code and Regulations, with strong support from grouse moor and farming representatives, to increase understanding and implementation of good burning practice.

#### Colouration of water

- 42. There may be a link between controlled burning and colouration of water supplies in moorland areas in the North of England, but there is scientific uncertainty over the nature of the link. For instance:
  - in the South Pennines since the early 1990s, increased burning rates have been accompanied by an increase in water colour caused by dissolved organic carbon in streams (which stains water to varying degrees, similar in appearance to water stained by a tea bag).
  - however, it is not yet clear to what extent burning is responsible because the processes which cause such colouration are complex, and other factors could

have caused the increase. For instance, lower rainfall and higher temperatures over the same period may be drying peat soils to greater depths, which may be causing the colouration. Also, some colouration may be caused by suspended particles other than dissolved organic carbon. Problems of water colouration are regional and seasonal (i.e. colouration tends to peak when heavy rainfall washes out particles built up in periods of low rainfall).

43. Water colouration is not an issue for all water companies – but where it occurs, it has to be removed because consumers are reluctant to drink and use coloured water. The staining is difficult and expensive to remove (e.g. a water company may spend many hundreds of thousands of pounds per year treating the water), which results in higher water bills for customers.

# **Historic environment**

- 44. Burning can have mixed effects on the historic environment. The main points are:
  - English moors and heaths are internationally important for their historic environment interest because, largely speaking, many hundreds of years of agriculture or development has not damaged or destroyed historic features (as has happened in most of the rest of England). They can be particularly rich in prehistoric and industrial features. Over one fifth of all Scheduled Monuments are found in upland moorlands;
  - peaty soils preserve organic remains which are rarely preserved elsewhere.
     This can tell us what vegetation was like in the past, and what effects humans have had over the centuries, which can be invaluable to our understanding of our potential effects on the environment into the future;
  - responsible burning can help our understanding of cultural heritage by making historical landscape features more visible (e.g. removing vegetation can make them easier to see from the ground or the air);
  - however, irresponsible burning (particularly hot burns) and wildfires could potentially damage historic features – e.g. by oxidising peaty soils, causing soil erosion and potentially causing damage to stones forming part of archaeological features (such as prehistoric hut circles).

# 5. Consultation

#### Within Government

45. In developing policy on the Code and Regulations, our key partner was Natural England, which will implement and enforce the Regulations. Throughout policy development, Natural England and its predecessor organisations have been

- closely involved in helping develop policy, and influencing and providing technical advice to Defra.
- 46. We also consulted others in government e.g. the Environment Agency, Forestry Commission, Association of National Park Authorities, the Police and Fire Service, the Local Government Association, English Heritage and the Devolved Administrations for Scotland and Wales.

#### **Public Consultation**

47. A public consultation on the review of the Regulations and Code was conducted from September to December 2005. Around 120 responses were received from a variety of stakeholders, including grouse moor managers, farmers, environmental and wildlife interest groups, local authorities, national park authorities, the National Trust and other major land owners including the Ministry of Defence. A summary of responses to the public consultation is at Annex B.

### Stakeholder consultation

48. In addition to public consultation, we also worked closely with key stakeholders through a Stakeholder Panel which advised on the development of the public consultation paper. Since the public consultation, key stakeholders have been closely involved in advising on working out the details of the revised Code and changes to the Regulations. Defra and Natural England have found this advice very helpful, and we would like to thank all those who put considerable time and effort into commenting (e.g. on drafts of this Regulatory Impact Assessment and the revised Code).

# Impact of public and key stakeholder views

- 49. Views received from stakeholders during the public consultation and afterwards helped us shape the new Regulations and Code, both in confirming assumptions and recommendations we made in the consultation paper, and in suggesting alternative approaches.
- 50. The main example of where consultees had a particular influence in the public consultation was in helping us strike what we consider to be a fair balance between (i) trusting the majority of burners to burn responsibly within a light-touch framework of legislation and guidance; whilst (ii) targeting increased regulation and improved, proportionate enforcement to deal with (what we hope and expect to be), a small minority of burners who burn irresponsibly and damage the environment. As a result we plan to pursue a "partnership" approach which falls between two of the options we consulted on, and applies some of the "red-tape" cutting of the third option. (More detail is in the "options" section below).
- 51. There are a wide range of other examples. For instance:

- in response to advice from burners we propose to cut unnecessary red-tape from the 1986 rules on when and how neighbours must be notified of burns (see table in "options" section below);
- in response to concerns over the possible negative effects of some burning on soil erosion and exposure, we have introduced new measures to deter such practices (see table in "options" section below). We crafted the new measures in further consultation with key stakeholders.

# 6. Options

- 52. In the 2005 consultation, Defra proposed three broad options for how we might change the Heather and Grass Burning Regulations:
  - Option 1: minor changes. Very similar to the current light touch Regulations;
  - Option 2: tough new blanket rules. All current requirements <u>plus</u>: a ban on burning on blanket bog and shallow soils; mandatory burning plans for SSSIs, which would need to be approved by Natural England (NE); and notification to the Fire Service of intention to burn. Also (possibly) a shorter burning season. Some consultees suggested that mandatory burning plans should be extended to all burners;
  - Option 3: scrap the Regulations. Rely on an improved voluntary Code, new best practice guidance, and other existing measures.
- 53. All options included various updates and improvements to the voluntary Code.
- 54. The consultation responses showed that opinion was split between the three options. Generally, the burning community preferred Option 3, although there was some acceptance of Option 1. Environmental interests tended to favour Option 2. (A summary of consultation responses is at Annex A).

# **Assessment of consultation options**

- 55. In light of consultation responses, Defra considered that *Option 1 (minor changes)* had good and bad points. For instance:
  - a light-touch approach for the responsible majority was proportionate and fitted with principles of good regulation. Also, most of the burning community actively wants to work in partnership with Government to encourage good practice;
  - but it was too light-touch to tackle the small minority who ignore the Code and burn irresponsibly. In particular, it would not deter burning-related soil exposure and erosion. We are increasingly aware of this area of environmental risk. It is not currently covered by legislation, and we think it should be.
- 56. Defra decided against *Option 2 (tough new blanket rules)*. This option could significantly reduce the risk that controlled burning might have negative environmental effects. However, we considered it to be disproportionate

#### because:

- it would probably stop a lot of current controlled burning, which would (a) have negative effects on businesses, jobs and local rural economies; and (b) increase the risk of occurrence and severity of destructive and costly wildfires;
- it would impose large new regulatory burdens on businesses, which would go against Defra's and Natural England's aim of minimising red tape;
- there would be practical difficulties. For instance, Option 2 would be difficult to achieve without duplicating and undermining other legislation, such as the Wildlife and Countryside Act.
- 57. Option 3 (scrap the Regulations) would go against the scientific evidence and the advice of the Science Panel. For instance, the burning season protects wildlife and reduces the risk of fires getting out of control in the warmer, drier months so we would not want to scrap it. Also, it would be difficult to justify removing safety requirements e.g. the requirement that enough people must be on hand to control a burn.

# The "partnership approach"

- 58. Following the consultation, Defra developed an approach, with advice from Natural England, which falls between Options 1 and 2 from the consultation. It involves:
  - (i) a "partnership approach" for the responsible majority of burners, based on existing legislation and an improved voluntary Code;
  - (ii) proportionate enforcement of existing rules, and targeted new bans on burning which risks significant soil exposure and erosion.
- 59. The approach is in line with Defra's *Farming Regulation and Charging Strategy*, which advocates working in partnership with (and minimising regulatory burdens on) people and businesses wherever possible, whilst using regulation to target those who refuse to behave responsibly.
- 60. The main features of the partnership approach are:
  - an improved voluntary Code joint-branded by Defra, Natural England, the Moorland Association, National Farmers Union, Country Land and Business Association, and the National Gamekeepers' Organisation. The Code will encourage burners to adopt good practice, and it will incorporate recommendations of the Science Panel. It will have advice for burning on different habitats, and encourage burners to produce burning plans and attend training courses. It will explain the law and raise awareness that poorpractice may result in penalties.
  - new best practice guidance notes. These notes will cover specific topics in more depth than can be covered in the generic Code e.g. they might cover areas such as fire behaviour and control, or introduce slightly different guidance for burning in specific types of environment. The notes will be produced as necessary by Natural England in consultation with relevant stakeholders. The guidance notes should be capable of forming a basis for training, alongside the Code.

- <u>revised Heather and Grass Burning Regulations</u> (as described in the table immediately below).
- <u>simplified</u>, <u>modern enforcement</u> (as covered in the "enforcement" section below).
- 61. The table below gives a detailed comparison of provisions of the 1986 Heather and Grass Burning Regulations, and proposed changes in the 2007 Regulations.

<u>Table 1: Comparison of 1986 Regulations with the 2007 Regulations</u>

Provisions of the 1986 Regulations	Type of change	Changes in the 2007 Regulations
1. Application The 1986 Regulations applied in England and Wales. In 1999, the National Assembly for Wales assumed devolved responsibility for the Regulations as they apply in Wales.	Amendment.	1. Application The revised Regulations will only apply to England.
2. Regulator Under the 1986 Regulations, Natural England (and previously one of its predecessor organisations, the Rural Development Service) dealt with licensing applications. Enforcement could have been dealt with by either Local Authorities, the Police or Natural England. In practice it seems this was not always clear, and we are not aware of any enforcement activity under the Regulations since 1986.	Amendment	2. Regulator Natural England is now given functions in relation to the regulation of burning – e.g. dealing with licensing applications and undertaking enforcement activity.

Provisions of the	Type of	Changes in the 2007 Regulations	
1986 Regulations	change		
3. Exemptions	Amendment	3. Exemptions	
The 1986 Regulations exempt:		The exemptions for private gardens and allotment gardens will remain.	
(i) land cultivated as pleasure grounds, private gardens or		We have removed the exemption for "pleasure grounds" because:	
allotment gardens; and		(i) the term is vague (it was not defined in the 1986 Regulations). It could be taken to include areas which should be covered by the Regulations – e.g. open spaces or fields where	
(ii) burning of cut vegetation on railway land (which is exempt from some provisions		game shooting takes place. It could also be seen to cover areas (e.g. of moor or heath) where sports such as clay pigeon shooting or the driving of all terrain vehicles take place.	
of the Regulations).		(ii) we consider the term was intended by the 1986 Regs to cover areas such as municipal parks and similar cultivated pleasure grounds. It is unlikely that burning would be part of the management of such land – and if it were, it is reasonable that it should be conducted in line with the safety and environmental requirements of the Regulations.	
		We have also removed the exemption for burning of cut vegetation on railway land. This is because we feel the Regulations should apply only to the burning of living specified vegetation (i.e. and not cut vegetation e.g. which may reasonably be taken elsewhere and burned).	
4. Starting burning at	No change	4. Starting burning at night time	
night time The 1986 Regs require that no person commences burning		No change.	
between sunset and sunrise.			
5. Notification of interested persons	Amendment	5. Notification of interested persons	
The 1986 Regulations (as amended in 1987) require burners to give		The 2007 Regulations will not require notice to be given to neighbours or commoners prior to burning (i.e. all provisions in the 1986 box opposite will no longer exist). Instead the Code	
notice in writing (between 24 hours and 7 days before the		will recommend that burners communicate with neighbours and inform anyone who wants to be notified.	
burning starts) of the date or dates, time and place, and extent of		The reason for the change is that the 1986 requirement did not meet principles of good regulation. For instance:	
intended burn to:  (i) any person who has		<ul> <li>unpredictable weather conditions (particularly in the uplands)     often make it difficult or impossible for burners to tell even     hours in advance whether they will burn, and if so when,</li> </ul>	
an interest in the land either as owner or occupier; and		where and the extent of the burn. Thus, obeying the current notification rules may curtail burners' flexibility to burn in suitable conditions – and might prompt them to burn in less-than-suitable conditions;	
(ii) any person who the burner knows (or could reasonably have		it is difficult to justify a criminal offence for failing to notify (as was the case in the 1986 Regulations). For instance, in many	

discovered) to be in charge of any land adjacent to that on which the burning is to take place.

The 1986 Regulations also require that anyone burning on or adjacent to a common (or similar land) must inform interested people (i.e. people with rights of common, grazing rights, or people in charge of such land) before they burn. This can be done by placing a notice in a prominent place on the relevant land.

The 1986 Regulations require that railway authorities may not burn uncut specified vegetation on railway land unless they have, between 7 and 28 days before burning starts, notified persons likely to be affected.

The 1986 Regulations list various means by which notice to interested parties may be given in a satisfactory manner.

cases neighbours will be used to burning and have no issue with it. Also, there is little reason to notify neighbours who are unlikely to be affected by fire or smoke – e.g. because they are upwind, protected by a natural or man-made firebreak, or far away;

- the risks posed by controlled burning to people and property are low, particularly because most burning takes place away from populated areas;
- some neighbours may be absentees or unknown;

There is strong anecdotal evidence (from burners themselves) that the 1986 notification rules have been largely ignored. Thus, probably many burners have been breaching this aspect of the law routinely for many years. To the best of our knowledge, the notification requirements have not been enforced since 1986 – probably because there has been no particular problem reported to the authorities.

In the absence of notification requirements, it will still be unlawful to cause emission of smoke which is prejudicial to health or causes a nuisance. Also, burners will still have to take all reasonable precautions to prevent injury or damage to any adjacent land, or to any person or thing whatsoever on that land.

# 6. Notification of the Regulator

The 1986 Regulations have no provision for burners to inform the regulator before burning.

# New provision

#### 6. Notification of the Regulator

The 2007 Regulations will give Natural England (NE) a new power to require a burner to notify NE prior to each burn he undertakes where NE reasonably believes the burner has burnt other than in accordance with the Regulations in the past.

The new power is being introduced:

- (i) to improve NE's awareness of when and where higher-risk burning is taking place. This will make it easier for NE to undertake targeted, risk-based, site-inspections in line with Hampton recommendations.
- (ii) to increase the chance that higher-risk burners will choose to obey the law (and embrace the Code) because they know they might be inspected during or after burning.

Provisions of the 1986 Regulations	Type of change	Changes in the 2007 Regulations
7. Power of inspection The 1986 Regulations did not need specifically to give the regulator a power to inspect land for the purpose of implementing and enforcing the Regulations. This was because the power was already within the Hill Farming Act 1946. The Act requires at least 24 hours notice to be given before inspection.	No change	7. Power of inspection No change.
8. Sufficient people and equipment The 1986 Regulations require that where burning takes place, there must be sufficient people and equipment to control and regulate the burning during the entire period of the operation.	No change	8. Sufficient people and equipment No change.
9. Reasonable precautions The 1986 Regulations require that burners (before commencing burning and during the entire period of the operation) take all reasonable precautions to prevent injury or damage to any adjacent land, or to any person or thing whatsoever on that land.	No change	9. Reasonable precautions No change.

Provisions of the 1986 Regulations	Type of change	Changes in the 2007 Regulations
The 1986 Regulations established a burning season by banning burning (unless under license from Natural England) between 15 April and 1 October (for upland areas) and 31 March and 1 November (elsewhere).  The burning season does not apply to the burning of cut vegetation on railway land.	No change	No change.  This issue was one of the most debated issues in the review of the Regulations.  The 1986 Regulations limited burning (1 October to 15 April in the uplands and 1 November to 31 March elsewhere) for two main reasons. First, to give land managers enough suitable-weather days to practice burning. Second, to avoid the much increased risk that burning in the warmer, drier months may result in hot, damaging burns, which may potentially go out of control.  However, there is some evidence that many birds may be nesting earlier, and many environmental interests wanted the current burning season changed to provide further protection for wild birds in the spring. The bodies which have since become Natural England argued that in order to protect both nesting birds and reptiles the season should be shortened by 2 weeks in the uplands (to finish on 31st March) and 1 month in the lowlands (to finish on 1st March).  Defra, whilst recognising these concerns, has decided to leave the season as it is for the time being, mainly because (i) the Science Panel advised that there was no clear evidence to justify shortening the season; (ii) burning in a way which destroys of disturbs wild birds, their nests, and protected plants and animals is already illegal under the Wildlife and Countryside Act (WCA); and (iii) in line with the "partnership" approach, we expect burners to obey the rules. We plan to emphasise the WCA provisions more clearly in the Code.  However, we recognise that our knowledge of the effects of climate change is growing year-by-year – so Defra and NE will keep this under review.

Provisions of	Type of	of Changes in the 2007 Regulations	
the 1986 Regulations	change		
11. Burning-related soil exposure and	New provision	11. Burning-related soil exposure and erosion.	
erosion The 1986	,	The 2007 Regulations will prohibit various types of burning (unless under licence from Natural England) which may create a high risk of soil exposure and erosion.	
Regulations had no provisions aimed at reducing the chance that poor burning		The bans were crafted in close consultation with representatives of burners and other experts. Each ban only takes effect over a threshold to avoid catching responsible burners and minor accidents. The new provisions are that:	
practice may create		Single burns must not exceed 10 hectares in area.	
an increased risk of soil exposure or erosion.		• In any burning season a person must not burn in a way that exposes a single area of more than 0.5 hectares of bare soil (or two or more areas within 5 metres of each other with a combined area of more than 0.5 hectares of bare soil). This can happen particularly when hot/slow fires destroy all surface vegetation and plant litter, leaving soil directly exposed to rain and wind. An area of soil is "bare" for these purposes if no more than 2% of it is covered by vegetation or plant litter.	
		• In any burning season a person must not burn in a way that exposes an area of bare soil which extends more than 25 metres along the bank of a watercourse and which is at least a metre wide at all points. (Again, soil is considered "bare" if no more than 2% of it is covered by vegetation or plant litter.)	
		<ul> <li>Burns must not leave soil smouldering for more than 48 hours. This may happen particularly when fires burn into peat, destroying the soil and raising a risk of secondary wildfires.</li> </ul>	
		<ul> <li>In any burning season a person must not burn a single area of more than 0.5 hectares on slopes over 45 degrees (or two or more areas on such slopes within 5 metres of each other with a combined area of more than 0.5 hectares).</li> </ul>	
		<ul> <li>In any burning season a person must not burn a single area of more than 0.5 hectares where more than half of that area is covered by exposed rock or scree (or two or more areas of such land within 5 metres of each other with a combined area of more than 0.5 hectares).</li> </ul>	
		The new bans fill a gap in existing legislation. We already have various laws requiring that burning is conducted safely and without harming wildlife. But there was nothing to protect soil against irresponsible burning – mainly through burning "too hot and too slow", and burning on areas particularly prone to erosion. This can lead to (i) soil erosion; (ii) loss of peat-based carbon into the atmosphere; (iii) pollution of watercourses; and (iv) negative effects on biodiversity.	
		Currently, this type of burning is rare. Perhaps there are a few dozen cases per year, mainly caused by a few inexperienced or careless burners. Expert burners agree that any competent burner would not cause serious risk of soil exposure and erosion (unless by accident) because doing so would damage the economic value of the land (in addition to harming its environmental value).	

Provisions of Type of Changes in the 2007 Regulations			
the 1986	change	Changes in the 2007 Regulations	
Regulations	onango		
_			
12. Licence to burn contrary to the	Amendment	12. Licence to burn contrary to the Regulations	
Regulations The 1986 Regulations provide for people who want		The 2007 Regulations extend the licensing procedure to cover the new prohibitions mentioned immediately above. Thus a person can apply to Natural England for permission to burn either (i) outside the burning seasons; and/or (ii) contrary to the new prohibitions.	
to burn outside the season to apply to the regulator for permission. Such people must supply details of how and where the burning would take place, and satisfy the regulator that the proposed burning is necessary and expedient for the purpose of improving the land.  The term "natural environment", as used in the criteria for intended to have broad meaning, to include the physical landscape and all the plan and on it). It has the same meaning as in the legislation England. Thus the term "management of the natural broad enough for Natural England, if it chooses, to licen burning in contravention of the Regulations would provide and have no significant negative effect on the environment. The licensing procedure is no longer subject to an appeate 1986 Regulations, an applicant who disagreed with could make representation to the Secretary of State had licence if he considered it was necessary and expedient of the land. Under the 2007 Regulations, Natural England licence only if it is satisfied that the proposed burning in contravention, enhancement or man natural environment for the benefit of present and future the safety of any person.  The term "natural environment", as used in the criteria for intended to have broad meaning, to include the physical environment (i.e. the physical landscape and all the plan and on it). It has the same meaning as in the legislation England. Thus the term "management of the natural broad enough for Natural England, if it chooses, to licen burning in contravention of the Regulations would provide and have no significant negative effect on the environment in the 1986 Regulations, and applicant who disagreed with could make representation to the Secretary of State). The main points are:  • in the case of the burning season: (1) there is a against burning out of season because of the considered in the natural environment.		The criteria under which Natural England may grant a licence have changed. Under the 1986 Regulations the Secretary of State had the power to grant a licence if he considered it was necessary and expedient for the improvement of the land. Under the 2007 Regulations, Natural England may grant a licence only if it is satisfied that the proposed burning is necessary and expedient for (i) the conservation, enhancement or management of the natural environment for the benefit of present and future generations; or (ii) the safety of any person.	
		The term "natural environment", as used in the criteria for licensing, is intended to have broad meaning, to include the physical and living environment (i.e. the physical landscape and all the plants and animals in it and on it). It has the same meaning as in the legislation setting up Natural England. Thus the term "management of the natural environment", is broad enough for Natural England, if it chooses, to licence cases where burning in contravention of the Regulations would provide economic benefit and have no significant negative effect on the environment	
		The licensing procedure is no longer subject to an appeals procedure (under the 1986 Regulations, an applicant who disagreed with a licensing decision could make representation to the Secretary of State). This is because we see no need to have an appeals procedure in addition to judicial review. The main points are:	
		• in the case of the burning season: (1) there is a strong presumption against burning out of season because of the considerably higher risks of burning in the warmer, drier months; and (2) there shouldn't be any need to burn out of season, given that people have plenty of time for burning (6.5 months in the uplands and 5 months in the lowlands).	
		• in the case of the new bans: (1) there is a strong presumption against burning contrary to the bans; (2) we plan to extend licensing to allow for rare occasions where it may be sensible to do so; but (3) we have no desire to add potential red-tape to the process by allowing people to dispute NE's decision.	
		<ul> <li>as a public body, NE is required to act fairly and take due consideration in its decisions. If an applicant feels they have not done this, they are entitled to seek judicial review.</li> </ul>	
		<ul> <li>scrapping the time-consuming appeals procedure would cut potential red- tape for NE and the Defra staff who would have to deal with any appeal. This reduces potential costs for NE/Defra, allowing us to concentrate resources more productively.</li> </ul>	

Provisions of the 1986 Regulations	Type of change	Changes in the 2007 Regulations
The 1986 Regulations did not have any provisions on specific offences. Instead this was covered directly by section 20(2) of the 1946 Hill Farming Act (as amended), which provides for any person who breaches any provision of the Regs to be liable, on conviction, to a fine.	No change.	No change. Any breach of the Regulations will continue to be subject, upon conviction, to a fine not exceeding level 3 on the standard scale, as provided by section 20(2) of the Hill Farming Act 1946.

# 7. Benefits and Costs

- 62. This section estimates the likely benefits and costs of the chosen "partnership approach" and the three consultation options. It looks at likely effects of options for the Regulations and Code (i.e. not the costs and benefits of controlled burning itself, which is covered in the "Background" section above).
- 63. Each option is compared to a *baseline* of what is currently delivered by the 1986 Regulations and the 1994 Code. The assessment is divided into three main areas of benefits and costs, namely (i) risk to people and property; (ii) environmental issues; and (iii) socio-economic issues.

# Table 2: the "baseline" (benefits and costs of the current Regulations and Code)

# Risk to people and property - baseline

- (a) In terms of risk to people and property, the 1986 Regulations and 1994 Code deliver some benefits and no costs (other than compliance costs dealt with under "economic factors" below).
- (b) The vast majority of managed burning in England is conducted safely, and the risk to people and property is low (although there remains an inherent risk). The low level of risk is largely due to the responsible behaviour of the large majority of burners it is in their interests to burn safely, and strongly not in their interests to do otherwise.
- (c) The 1986 Regulations make a significant contribution to the low level of risk, mainly through setting burning seasons for the uplands and elsewhere. The seasons:
  - confine burning to the colder, wetter months in which fires are easier to control;
  - prohibit burning in the warmer, drier months when risks are much higher;
  - are of sufficient length to give enough suitable-weather-days to conduct burning safely, thus:
    - limiting the chance that burners may be pushed to burn on less suitable (more-risky) days to fit into a more restrictive season;
    - allowing land managers, particularly on heather moorland, to control fuel loading of vegetation, which reduces risks posed by wildfires.
- (d) Other safety provisions of the 1986 Regulations may also help encourage safe burning. This effect would only apply to a (probably) small minority who might burn unsafely in the absence of legal requirements. The large majority would probably burn safely with or without such requirements, not least because it is not in their interests to do otherwise.
- (e) The Code helps reduce risks to people and property to the extent that it is read and followed. However, there is anecdotal evidence that most burners have probably not read it for many years, if at all.
- (f) It is impossible to put accurate monetary estimates on benefits in this area, because they depend on how much damage each hypothetical unsafe fire (which might have occurred in the absence the Regulations and Code) might have caused. The consequences of such fires could range from a negligible cost through to very significant costs in terms of human health, human life, and potentially £millions of damage to property and the wider environment.

#### Environmental factors – baseline

- (g) Environmentally, the Regulations and Code provide benefits and no costs (other than compliance costs dealt with under "economic factors" below).
- (h) The main benefits of the 1986 Regulations come from the burning season, which:
  - stops burning in the warmer, drier months, thus:
    - reducing the risk that summer burns go out of control, which could have serious negative environmental effects; and
    - giving added protection for birds and animals bringing up young (reinforcing the protection already offered by wildlife legislation).
  - allows burning in the colder, wetter months, which:
    - helps reduce the risk of wildfires (particularly on heather moorland), which can have devastating effects on wildlife and the wider environment;
    - allows burners on grouse moors to create ideal habitat for game birds, heather and associated wildlife (...there is some dispute over whether burned land could be managed in ways which support a greater range of wildlife see section on "biodiversity" at para 36 above).
- (i) The 1994 Code sets out good practice on environmentally responsible burning, and it is likely to produce environmental benefits to the extent that it is read and followed. (As mentioned above, there is evidence that most have not read it for many years, if at all).

#### Economic and social factors - baseline

- (j) Currently, there is a "light touch" framework of law applying to burning in England, under which burners are free to go about their business, provided they do not cause undue risk to people, property or wildlife. This allows grouse moor businesses to produce the surplus birds they need for their businesses to operate. It also provides a relatively inexpensive tool for farmers to improve grazing on (often inaccessible) rough-grazing land. In both cases this can lead to positive economic effects for the businesses concerned and their employees. The success of these businesses also brings follow-on positive effects for associated businesses in the local area (see section on "economic and social factors" at paras 17-20 above).
- (k) The requirement for burning seasons potentially brings minor economic costs. The representatives of burners tend to agree that the current seasons are broadly sensible (accepting the difficulty of setting firm dates when there is such high geographical and climatic variance regionally, locally, and from year to year). Generally:
  - in some cases the season may stop burning on days (particularly near the start and end of the season) which would be suitable for responsible burning;
  - but the dates must be set somewhere, and generally the seasons (i) make little difference because responsible burners would not burn in the close-season anyway; and (ii) guard against the chance that irresponsible people may burn in summer, posing a risk to their own and their neighbours' property.
- (I) Other (minor) costs arising from the Regulations include:
  - Arguably, safety provisions of the Regulations bring compliance costs for businesses (of perhaps a few hundreds of pounds per year on average, with smaller-scale burners spending less, and larger-scale burners more). Having said this, all responsible burners would buy this equipment regardless of the law.
  - Current requirements to notify interested parties are in many cases an example of unnecessary "red-tape" (as discussed in the table comparing the 1986 Regs with the 2007 Regs above). In practice this probably amounts to little administrative burden (perhaps a few thousand pounds p.a. across all burners), mainly because the provisions, particularly the less-necessary aspects of

them, appear to be largely ignored.

- Applications to burn out-of-season. Natural England estimate there are on average about 20 such applications per year, with most coming from people wishing to burn small areas for conservation purposes (i.e. not grouse moor burners and farmers).
- (m) There are <u>low costs for the taxpayer</u>. Natural England estimates that it takes around 2 staff years to implement the Regulations, mainly from dealing with applications to burn out of season.

Table 3: Option 1 (minor changes) compared to the baseline

	Costs	Benefits
Risk to people and property	No additional as similar to the baseline	No additional as similar to the baseline
Environmental	No additional as similar to the baseline	No additional as similar to the baseline
Economic and Social	No additional as similar to the baseline	No additional as similar to the baseline

Table 4: Option 2 (tough new blanket rules) compared to the baseline

	Costs	Benefits
Risk to people	Increased risk. Main points:	None
and property	<ul> <li>would probably result in considerably less controlled burning (e.g. because burners are put off by the administrative burden, or because permission is refused). Over many years this would probably lead to a build-up of large swathes of combustible vegetation (particularly old, woody heather), creating a much increased risk that if and when wildfires start in future, they might be far more damaging and extensive.</li> <li>difficult to quantify likely monetary costs because of many variables. Some years cost may be relatively low (i.e. in the £tens of thousands or lower). Other years it could potentially cost anywhere up to many £millions.</li> </ul>	

Option 2 (tough new blanket rules) continued...

	new blanket rules) continued…  Costs	Benefits
		_ 5
Environmental	Increased risk of wildfire in the longer term (see explanation in box above). Likely to be major long-term damage where such wildfires occur. Likely to cost the taxpayer many £millions p.a. in remediation for many years. Risks likely to grow as time goes on.  Some land may become less managed. If land managers are not allowed to burn certain areas of their land (or possibly none of it), it may become uneconomic to continue managing the land. This could have major long-term implications because most moor and heath only exists in its current form because it is managed. In the absence of management much of it would start to revert to its "natural" state of being either forest or wetland. Environmental pros and cons are arguable – but there would be a major change in landscape character unless alternative management (probably funded by the taxpayer) were undertaken.	Burning becomes more environmentally benign. Where Natural England allowed burning, it would have tight control over burning plans, so the burning is likely to be environmentally benign. The likely effects would be the creation of more varied "mosaics" of vegetation (as discussed in paras 36-38 above) — resulting in greater biodiversity in affected areas.  Possible benefits from "re-wilding" of land, if it becomes less managed (see costs section).
Economic and Social	For burners who are no longer allowed to burn all or part of their land, there would likely be reduced revenues for businesses (e.g. grouse moor businesses and farmers). Some businesses would suffer, others may fold. Likely to be some job losses, fewer contractors employed by estates. Farmer burners less able to use rough grass for livestock.  For burners subject to new mandatory burning plans:  • there would be a large increase in administrative burden (i.e. drawing up a burning plan, communicating with NE etc). The monetary cost would depend on how detailed NE required the plan to be  • there would also be an increased risk of enforcement – i.e. if someone failed to follow a required burning plan.  For the taxpayer we would expect increased costs from:  • higher implementation costs for NE – e.g. from dealing with increased paperwork, conducting site visits etc. The level of cost would depend on several factors, but could be estimated at between 10-15 staff years p.a., at a cost of around £500k-£750k p.a.  • higher enforcement costs for NE – i.e. a significant increase in regulation is likely to lead to a significant increase in enforcement either (i) because some burners ignore the new rules; or (ii) there is confusion and dispute over where burning is banned e.g. what is "blanket bog" and what are "shallow soils" etc. The cost would depend on many variables, but might be estimated at around £50k-£100k p.a. on top of the staff costs mentioned above  • over time, there may be pressure to use taxpayers' money to encourage alternative management (to the extent that land managers who are no longer allowed to burn stop managing the land). Difficult to predict costs – could be between many £tens of	None.

Table 5: Option 3 (scrap the Regulations) compared to the baseline

	Costs	Benefits			
Risk to people and property	Considerably increased risk, particularly due to loss of burning season. Main points:  •the large majority would probably continue to burn	None.			
	safely without the Regulations – i.e. they know the risks, and it is not in their interest to do otherwise.				
	<ul> <li>significant risk that some inexperienced people may burn dangerously, particularly in warm, dry conditions in summer. High risk of such fires getting out of control – leading to serious risks to human health, human life, and damage to property.</li> </ul>				
	<ul> <li>difficult to quantify likely monetary costs because of many variables. Some years costs may be relatively low (i.e. in the £tens of thousands or lower). Other years it could potentially cost anywhere up to many £millions.</li> </ul>				
Environmental	Increased risk to the environment, particularly due to loss of burning season. Main points:	None.			
	•much increased chance that some burners would choose to burn later in the Spring than currently, posing increased risk to breeding wild birds and animals (even though this would continue to be illegal under wildlife legislation).				
	<ul> <li>much increased risk of wildfires (e.g. through summer burns which go out of control). Potentially large year- on-year monetary costs for the taxpayer through paying for remediation e.g. of designated sites which are damaged. Difficult to predict costs because of many variables – but potentially £millions p.a. for many years.</li> </ul>				
Economic and Social	Potentially serious new economic consequences for people (probably only a few each year on average) who suffer as a result of fires going out of control – e.g. loss of livelihood through land being damaged, or through being sued for causing damage, and potential loss of jobs if damage is long term.	Possibly minor benefit for burners through reduction in regulatory burdens (but current level of burden is very low, so this benefit is limited).			
	Economic and social costs as described in sections on "risks to people and property" and "environmental factors" above.	No implementation costs for NE, with a saving of around £100k p.a. Having said this, this benefit might easily be outweighed by new need to enforce other laws in the absence of the burning season, and undertake remedial action as a result of accidents.			

Table 6: The chosen "partnership approach" compared with baseline

Risk to people and property  Reduced risk for people and property.  The 2007 Regs will keep all the safety provisions of the 19. The scope for decreasing the level of risk is limited because best of our knowledge, burning is already being conducte (i.e. we are not aware of any serious injury to people being by burns which go out of control, and serious damage to prare). Having said this, there is likely to be extra safety beneather of the opportunity, in re-launching the Code and Regulations awareness generally among burners of safe practice and the increasing the expertise of burners generally via the Code practice guidance, or from training we will encourage by undertake;  Increased environmental by the new agency, Natural may help persuade potentially unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material points:  the Code (by spreading the expertise of experienced by		Benef	Costs		
The 2007 Regs will keep all the safety provisions of the 19. The scope for decreasing the level of risk is limited because best of our knowledge, burning is already being conducte (i.e. we are not aware of any serious injury to people being by burns which go out of control, and serious damage to prare). Having said this, there is likely to be extra safety ben ethe opportunity, in re-launching the Code and Regulations awareness generally among burners of safe practice and the increasing the expertise of burners generally via the Code practice guidance, or from training we will encourage by undertake;  Increased environmentally unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material. points:  the Code (by spreading the expertise of experienced by				to people	Risk to r
The 2007 Regs will keep all the safety provisions of the 19. The scope for decreasing the level of risk is limited because best of our knowledge, burning is already being conducte (i.e. we are not aware of any serious injury to people being by burns which go out of control, and serious damage to prare). Having said this, there is likely to be extra safety benethe opportunity, in re-launching the Code and Regulations awareness generally among burners of safe practice and the increasing the expertise of burners generally via the Code practice guidance, or from training we will encourage burnerative enforcement (by the new agency, Natural may help persuade potentially unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material. points:  the Code (by spreading the expertise of experienced by	reduced not for people and property.		110.10	• •	•
awareness generally among burners of safe practice and the increasing the expertise of burners generally via the Code practice guidance, or from training we will encourage burnerake;  •more effective enforcement (by the new agency, Natural may help persuade potentially unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material. points:  • the Code (by spreading the expertise of experienced but the code).	The 2007 Regs will keep all the safety provisions of the 1986 Regs. The scope for decreasing the level of risk is limited because, to the best of our knowledge, burning is already being conducted safely (i.e. we are not aware of any serious injury to people being caused by burns which go out of control, and serious damage to property is rare). Having said this, there is likely to be extra safety benefit from:			property	and proj
practice guidance, or from training we will encourage by undertake;  •more effective enforcement (by the new agency, Natural may help persuade potentially unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material points:  • the Code (by spreading the expertise of experienced by					
may help persuade potentially unsafe burners to follow the the Code.  Environmental  None  Increased environmental benefits.  The main added environmental benefits are expected to conthe new voluntary Code and associated voluntary material points:  • the Code (by spreading the expertise of experienced by		practic			
The main added environmental benefits are expected to conthe <b>new voluntary Code</b> and associated voluntary material. points:  the Code (by spreading the expertise of experienced by		may he			
the <b>new voluntary Code</b> and associated voluntary material. points:  • the Code (by spreading the expertise of experienced by		Increase	None	ronmental	Environ
		the <b>new</b>			
and environmental specialists) promises to equip many burners to burn considerably more sensitively than prev	current /	and			
the launch of the 2007 Code gives the opportunity to ra awareness very significantly (given that most burners h probably not read the previous Code for many years, if	nave	aw			
we expect considerable extra benefit because the new has the strong backing of key representatives of burner are keen to help spread the message among their memberships (e.g. of moorland owners, gamekeepers, etc);	rs, who	has are me			
we expect that best practice guidance and voluntary tra     the extent it is read and taken-up) offer further gains the     greater awareness and expertise.		the			
We also expect the <b>2007 Regulations</b> to bring environments. For instance:	onmental				
they introduce new bans on burning-related soil exporence erosion, which will help stop these environmentally days of burning;		eros			
we expect the improved enforcement policy (e.g. NE rule Regulations and a refreshed enforcement strategy) convince potential poor performers that it makes a embrace the partnership approach.	will help	Reg con			
the new provision for requiring higher-risk burners to ir before they burn – allowing NE to target inspections burners, which among other things we expect to imprenvironmental performance.	at these	befo buri			

It is difficult to quantify the likely environmental benefits in monetary terms because (i) it is often not possible to separate the benefits of improved burning from the wider land management of which it is a part; and (ii) even if we could do this, it would be difficult to place hard money values on the benefits. However, we expect environmental benefits to be significant because (to the extent that the new Code is followed) it will contribute to the responsible management of many hundreds of thousands of hectares of English moorland and heathland. **Economic** Costs **Benefits** Economic costs depend largely on whether burners embrace the Responsible and Social partnership approach or not. burning can continue - similar For burners who embrace the partnership approach: to the "baseline" situation. Thus no new mandatory compliance burdens: responsible burning low chance of inspection by Natural England to check they can be used as a are obeying the law; management tool to reap economic no new mandatory administrative burdens, with the reward (e.g. from exception of burners who apply to Natural England for increased grouse permission to burn out of season or contrary to the new numbers and better bans on burning related soil exposure and erosion (in limited grazing), and may circumstances, it might be reasonable to do this if the have economic environmental pros outweigh the cons). We expect each benefits in lowering application to cost c.£50 and take up to 4 weeks for a the risks posed by decision. We expect few applications p.a. (under the 1986 wildfires. Regs there were about 20 p.a.). possibly some new (voluntary) compliance burdens for Reduced red tape those who come fully into line with the Code. For instance, via changes to they might choose to stop burning close to sensitive notification habitats. We do not expect economic costs (e.g. in terms of procedures. fewer grouse per hectare) to be significant, largely because sensitive areas tend not to be well suited to such purposes anyway. new (voluntary) administrative burden from reading the Code. We estimate the number of burners to be perhaps 2,000, and it might take 1-4 hours to read the new Code and initial best practice guidance leaflets. Estimating these people's time at £10/hour this might cost £20k-£80k in the first year – and considerably less in following years. new (voluntary) administrative burden from producing a burning plan. It might take say 8-24 hours to produce a plan of reasonable quality. Estimating there may be a need for c.1,000 plans, and people's time at £10/hour, there may be a cost of £80k-£240k. Each plan would last, say, 10 years before it needed substantial review. For people who do not embrace the partnership approach the potential new costs will be greater. For instance: there is a high chance that burners in this group will face mandatory inspections by Natural England to check they are obeving the law: burners who breach the Regulations and other laws applying

to burning will risk enforcement action. Depending on the outcome of enforcement, this may result in burners being fined (up to £1,000) and getting a criminal record (see section

on enforcement below);

- burners who NE consider to have breached laws relating to burning may be required to notify NE before they conduct each burn in future. This will probably apply to few burners (perhaps some tens of burners), although this will depend on how many people NE consider to pose a high-risk. The administrative burden on these people would be minimal, but it would increase their chances of facing enforcement action e.g. if they fail to notify or if they continue to break the law.
- burners who breach the Regulations, and who also receive Single Payment farm subsidies, will also risk deductions from those subsidies.

#### For the taxpayer

 Relatively low new cost to Natural England. The partnership approach has been designed to be relatively low cost and targeted only on high-risk burners. Promotion of the 2007 Code and implementation of the 2007 Regs will probably largely be absorbed into the roles of existing staff (e.g. those working on SSSIs where burning is an issue). Perhaps a need for around 3 staff years p.a.

### 8. Equity and Fairness

- 64. The Regulations and Code operate at the interface between (i) the rights of land managers to go about their business on land they own and/or manage; (ii) the need to promote safe burning; and (iii) the wider public interest of protecting the natural environment.
- 65. The RIA process requires that all legislation is subject to certain checks, as covered below:
  - in terms of "rural proofing" (i.e. ensuring that laws are not unduly burdensome on people who live, work or conduct business in rural areas, compared to their urban counterparts), the Regulations and Code are of relevance to the extent that they apply exclusively to areas of the rural landscape and not to urban areas. Their burden falls entirely on rural businesses – and because of this we cannot compare their effect relative to urban counterparts;
  - the proposals have no undue effect on particular racial groups, income groups, gender groups, age groups, people with disabilities, or people with particular religious views;
  - the proposals raise few health issues (other than that they promote responsible burning, one aim of which is to limit or prevent potential health problems such as safety of people conducting burning, and possible negative effects on the public e.g. respiratory problems caused by smoke inhalation);
  - the Regulations raise some (relatively minor) public service issues because the main cost of running the Regulations is likely to be administration costs to Natural England, which is funded via the exchequer and the taxpayer.

# 9. Consultation with small businesses: the Small Firms Impact Test

- 66. Almost all the businesses likely to be affected by the Regulations and Code will be small businesses particularly managers of game shooting estates and farmers who use moorland and heathland for rough grazing of livestock. Representatives of such businesses were consulted in the 2005 public consultation. Following the consultation, we have closely involved representative of the businesses likely to be affected in working out the details of our chosen approach and the approach is framed with small businesses, their operations and capacity, in mind.
- 67. The Moorland Association, National Gamekeepers Organisation, National Farmers Union and Country Land and Business Association approve of the broad approach and they will joint-brand the revised Code.

### 10. Competition assessment

68. The Regulations and Code are unlikely to have any major implications for competition within UK markets. They will operate locally on a relatively small scale and they are expected to affect relatively few businesses.

### 11. Enforcement and Sanctions

- 69. Enforcement of the Heather and Grass Burning Regulations will be conducted by Natural England.
- 70. Our primary aim on burning is that all burners should proactively follow the voluntary Code. The aim of enforcement should be to reinforce adherence to the Code by directly or indirectly discouraging irresponsible burning and to avoid damage to the environment. The main strands of Natural England's enforcement policy should be:
  - to ensure that enforcement is proportionate, fair and cost-effective and in the public interest;
  - to stay outcome focussed. The aim should be (i) to rectify environmental damage; (ii) to ensure people who breach the rules abide by them in future; and (iii) if practical, to use the breach to re-emphasise to others that they should abide by the Code;
  - to use proportionate enforcement mechanisms and work with land managers wherever possible; and
  - to publicise convictions with the aim of encouraging other potential lawbreakers to adhere to the law and the Code.

- 71. These principles of enforcement are in line with the draft Government. Regulators' Code and the recommendations of the Hampton Report.
- 72. Enforcement of the new Regulations (and other existing rules relating to burning) poses challenges because:
  - (i) it is possible that responsible burners may inadvertently breach the rules (e.g. weather conditions may change beyond the person's control).
  - (ii) despite the fact that fires produce a lot of smoke, breaches of the rules can be difficult to detect because the land concerned tends to be remote. Also, the land tends to be very sparsely populated which reduces the chance of a tipoff from the public. And, once a fire stops producing smoke its location can be very difficult to spot e.g. the relief of the land may make it invisible from roads.
- 73. The Regulations will continue to be a requirement of "cross compliance" under the Single Payment Scheme. Thus breaches of the rules may result in *payment reductions* (in addition to sanctions under the HGB Regulations). Cross compliance is likely to increase the chance that people in receipt of farm subsidies (i.e. particularly farmers) will choose to abide by the rules. It is unlikely to have any effect where the person conducting the burning is not in receipt of farm subsidies.]
- 74. We have slightly reduced the application of cross compliance to the Regulations. The 2007 Regulations will be part of cross compliance in-so-far as they require (i) adherence to the burning season; and (ii) burning safely and taking reasonable precautions. Cross compliance will no longer apply to (a) not starting burning between sunset and sunrise; and (b) notifying neighbours prior to burning.

## 12. Implementation and Delivery Plan

- 75. The 2007 Regulations will be laid in Parliament in mid-July 2007 and come into force at the start of the 2007/8 burning season on 1 October 2007. It is intended that the revised Code will be published when the Regulations are laid. In both cases, the aim is to give burners time to get used to the new Regulations and Code before the 2007/8 burning season.
- 76. The new rules will be very similar to the previous Heather and Grass Burning Regulations, aspects of which were run by the Rural Development Service (RDS), which has been absorbed into Natural England. Thus, NE already is familiar with the old rules and it was closely involved in developing the new rules.
- 77. Burners are probably broadly familiar with the law relating to burning and aware of the existence of the previous Code although there is anecdotal evidence that most burners have not read the Code for many years, if at all. Thus, a key part of the "partnership approach" will be to get burners to read the Code and to abide by it thereafter.

- 78. Defra and Natural England will share responsibility for publicising the launch of the Regulations and Code, with NE conducting ongoing awareness raising thereafter. Initial work will include:
  - Defra and NE will encourage coverage of the launch of the new Regulations and Code in specialist publications read by burners – e.g. via a Defra press notice brought to the attention of relevant farming and game management publications:
  - Defra and NE will work closely with representatives of burners. The new Code was developed in close consultation with, and will be joint-branded with the Moorland Association, National Gamekeepers Organisation, National Farmers Union and Country Land and Business Association. We will work in partnership with these organisations to get the message to burners on the ground – e.g. through their websites, newsletters etc;
  - NE will conduct ongoing awareness raising through its field staff (e.g. who
    often meet relevant land managers in the course of their business). We will
    also consider using Defra/NE stands at relevant country shows to raise
    awareness and distribute the Code.
  - Defra will issue updated guidance on Single Farm Payment "cross compliance" in early 2008. This guidance goes to all farmers in receipt of subsidy payments (i.e. the very large majority of farmers).

### 11. Post Implementation Review and monitoring

- 79. Defra will ask Natural England to monitor the administration and effectiveness of the new rules. Among other things, we will ask Natural England to measure:
  - environmental gains (i.e. what benefit are the rules and Code producing);
  - cost to the tax payer of regulating and enforcing the regime and publicising the Code:
  - costs to businesses, covering both the compliance burden and the administrative burden;
  - details of enforcement activities:
  - land managers' perceptions of the new Regulations.
- 80. The Regulations and Code will be successful if:
  - (a) they are perceived as being fair and constructive by the responsible majority of the burning community;
  - (b) the large majority of burners abide by the rules and follow the Code;
  - (c) the new bans on burning related soil exposure and erosion, together with existing rules protecting wildlife and habitats, convince the minority of current poor performers to embrace the partnership approach and burn in line with the voluntary Code;
  - (d) enforcement is conducted in line with the principles set out above (and with any future government good practice which may emerge);

- (e) the rules are cost effective in that (i) the net environmental benefits of running the Regulations justify the amount of NE resource allocated to them; and (ii) the NE resource could not reasonably be used in a different way to produce considerably superior results more efficiently.
- 81. Defra will review the Regulations within three years of their entry into force (or sooner if appropriate), and report to Ministers on their effectiveness and performance against principles of good regulatory practice. The review will check whether the Regulations are delivering value for money, look at whether changes need to be made in light of new scientific evidence, and propose improvements where necessary.

### 12. Summary and Recommendation

- 82. We recommend approval of the Heather and Grass etc. Burning (England) Regulations 2007, which should be viewed alongside the new Heather and Grass Burning Code 2007 as twin aspects of updated Government policy on the use of fire in land management.
- 83. We feel we have struck a fair balance between regulatory and voluntary policy levers to pursue the Government's objective of ensuring (i) that burning takes place safely; (ii) that environmental benefits are maximised, and environmental impacts minimised; and (iii) that land managers are free to use fire sustainably for the good of their businesses, which contribute to rural economies and employment.
- 84. The Regulations and Code are in line with principles of modern policy making and better regulation. For instance:
  - we are maintaining light-touch regulation for the responsible majority of burners, trusting them to burn in line with the new Code.
  - we have maintained the key safety provisions of the 1986 Regulations i.e. the burning seasons and the requirements to control burns and take all due precautions;
  - we have reduced red-tape (and what was arguably an unfair criminal offence) by removing an unsatisfactory mandatory requirement to notify neighbouring land owners/occupiers prior to burning, and instead covering notification by voluntary recommendation in the Code;
  - the new Code sets a new industry standard in tune with the most up-to-date expert advice on how to burn in ways which benefit (and do not harm) wildlife and the wider environment:
  - we have introduced new legal protection for soil, in the form of bans (crafted to ensure they only catch an irresponsible minority) to protect soils from burning-related exposure and erosion. The aim is to reduce the risk that such

burning will harm wildlife, pollute water-courses, and cause carbon to be released from peat soils.

85. Defra worked closely on the details of this policy with Natural England, representatives of land managers and others to produce an outcome which is good for business and good for the environment. All key stakeholders are broadly content with the Regulations, although some environmental interests (including Natural England) would ideally have preferred us to be more restrictive, while some burners would have preferred us to be less restrictive. All key stakeholders strongly support the Code, and many will take an active role in joint-branding and promoting it.

### 13. Declaration and Publication

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed...Jonathan Shaw. 11 July 2007

#### Jonathan Shaw MP

Parliamentary Under Secretary of State Department for Environment, Food and Rural Affairs

More information:
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#### **Annex A: Summary of Public consultation responses**

- 1. From September to December 2005, Defra held a public consultation on the review of the Heather and Grass Burning Code and Regulations (as they apply to England). This paper summarises the 121 responses received the full report on responses can be found at [web-address].
- 2. The consultation proposed various improvements to the voluntary Code. It also sought views on three options for the Regulations:
  - Option 1: minor changes. Very similar to the current light touch Regulations;
  - Option 2: tough new blanket rules. All current requirements <u>plus</u>: a ban on burning on blanket bog and shallow soils; mandatory burning plans for SSSIs, which would need to be approved by Natural England ("NE"); and notification to the Fire Service of intention to burn. Also (possibly) a shorter burning season, and mandatory training for all burners;
  - Option 3: scrap the Regulations. Rely on an improved voluntary Code, new best practice guidance, and other existing measures.

#### Main points from the consultation

- 3. The main points arising from the consultation were:
  - Widespread approval for the suggested improvements to the Code.
  - Widespread support for new best practice guidance (to support the Code).
  - Widespread support for clear, unambiguous language in both Regulations and Code, with clear definitions.
  - Opinion split between the three options for the HGB Regulations:
    - o 30 responses preferred Option 1 (minor changes). They included the National Gamekeepers Organisation, some agricultural interests, county Fire Services, National Park Authorities, some conservation bodies, water companies and the Ministry of Defence.
    - 28 responses preferred Option 2 (tough new blanket rules). They included English Nature, the Rural Development Service, the Countryside Agency, the Royal Society for the Protection of Birds, the National Trust, some water companies, and some conservation groups.
    - o 43 responses preferred Option 3 (scrap the Regulations), although many said they would be content with Option 1. They included the Moorland Association, the National Farmers Union, the British Association for Shooting and Conservation, and most land owners.
  - Widespread support for improved education and training in good burning practice. Differences of view over whether training should be made a mandatory requirement before someone is allowed to burn, or whether it

- should remain voluntary (and encouraged by the Code). Some recognition that adequate training did not yet exist to support a mandatory requirement.
- Some conservation interests including English Nature wanted the burning season to close earlier to help protect nesting birds, which may nest earlier as a result of climate change. This idea was strongly resisted by the burning community – e.g. because:
  - (i) the Science Panel which advised the review had found there was insufficient evidence to support reducing the burning season;
  - (ii) the large majority of burners burned responsibly, and they needed flexibility to choose the right conditions in which to burn; and
  - (iii) restricting burning would lead to a build-up of woody heather which would raise the risk of damaging wildfires.
- Widespread agreement that burning plans were good practice and should be advocated by the Code and included in any training programme. There was disagreement on whether plans should be mandatory or voluntary:
  - o some environmental interests including English Nature wanted compulsory plans which would have to be approved by a regulator before burning could proceed. They argued this would ensure higher environmental standards;
  - o others (including most of the burning community) strongly opposed this idea, arguing that such a burdensome and bureaucratic requirement would be unjustified because (i) most burners burn responsibly; (ii) it would duplicate existing legislation; (iii) it would have the effect of stopping a lot of traditional burning management, which would harm local businesses and jobs, and raise the risk of wildfires.
- There was wide agreement that communication between burners and the Fire Service was important and should be advocated by the Code. Ideas were raised on how this should be done effectively (e.g. making best use of technology such as mobile phones).
- The burning community highlighted practical difficulties with the current requirement (under the HGB Regulations) to notify neighbours of intention to burn. In some cases this could be very difficult to do, and/or there may be no good reason to do it (e.g. an estate may adjoin many properties, with many different owners/tenants, some of whom may not be contactable, and in many cases the burning will be very unlikely to affect them).
- Many thought that enforcement of the HGB Regulations had been ineffective (i.e. to the best of anyone's knowledge they had never been enforced even though it was likely that breaches had occurred), and it needed to be strengthened.