Citizen Participation and Public Petitions Committee

2nd Meeting, 2021 (Session 6), Wednesday, 1 September 2021

PE1850: Natural flood prevention on grouse moors

Note by the Clerk

Petitioner	Les Wallace
Petition summary	Calling on the Scottish Parliament to urge the Scottish Government to make the use of natural flood prevention methods a condition for obtaining a grouse moor licence.
Webpage	petitions.parliament.scot/petitions/PE1850

Introduction

1. This is a new petition that was lodged on 4 March 2021.

2. A SPICe briefing has been prepared to inform the Committee's consideration of the petition and can be found at **Annexe A.**

3. While not a formal requirement, petitioners have the option to collect signatures and comments on their petition. On this occasion, the petitioner elected to collect this information. 874 signatures and 94 comments have been received.

4. The Session 5 Public Petitions Committee agreed to seek advanced views from the Scottish Government on all new petitions before they are formally considered. A response has been received from the Scottish Government and is included at **Annexe B** of this paper.

5. A submission has been provided by the petitioner. This is included at **Annexe C**.

Scottish Government submission

6. The Scottish Government submission highlights it commissioned an independent group to look at the environmental impact of grouse moor management. This was prompted by a NatureScot report in May 2017, which found that a third of satellite-tagged golden eagles in Scotland disappeared in suspicious circumstances, on or around grouse moors and was part of a package of measures aimed at tackling the on-going issue of wildlife crime.

7. The submission notes that the Scottish Government published its response on 26 November 2020 and committed to bringing forward the legislation to license grouse moor management during the next parliamentary term.

8. In its submission, the Scottish Government notes that it recognises the importance of working with nature to manage flood risk through natural flood management (NFM).

9. SEPA's role in examining and mapping areas for NFM best use, in conjunction with responsible authorities, is highlighted as an area of importance in relation to the issues raised in the petition. The submission highlights that following the analysis, the flood risk management strategies and local flood risk management plans include a total of 104 actions with an NFM element. The actions are mostly studies which will further develop the contribution NFM can make to reduce flood risk in identified areas.

10. The submission concludes that the Scottish Government does not believe it would be appropriate to make the inclusion of natural flood management methods a condition of obtaining a grouse moor license. It highlights that the review of grouse moor management was aimed at raptor persecution and further licensing regimes would be to implement recommendations from this review. The review group did not consider the risks of flood damage as part of the review.

11. The SPICe briefing advises that while local authorities, SEPA and other responsible authorities hold powers and responsibilities, it is the landowner's responsibility to manage flood risk in relation to their property.

12. In terms of the authorities' responsibilities, SEPA is Scotland's national flood forecasting, flood warning authority and strategic flood risk management authority. Local authorities are responsible for producing Local Flood Risk Management Plans and work in partnership with SEPA, Scottish Water and other responsible authorities to develop these.

13. The issue of grouse moor regulation is summarised in the briefing as a debate around "the extent to which they are fulfilling their potential...to provide 'ecosystem services'. This includes how biodiversity is supported, water quality, carbon storage and flood risk management.

14. Research commissioned by the Scottish Government, published in 2018, sets out that it is difficult to demonstrate the role of grouse moors or their potential role in flood risk mitigation due to a lack of studies assessing these areas.

Petitioner submission

15. In their submission, the petitioner emphasised the importance of flood management from an economic, environmental and human perspective. The issues highlighted include loss of life, damage to homes and businesses, soil washing, chemical polluting and solid waste contamination in rivers.

16. The petitioner’s view is that natural flood management in uplands, such as tree planting and use of natural floodplains, can be more effective and cheaper in reducing floods than traditional hard engineering. The submission notes the petitioner's favorable view of beavers as a route to flood management, potentially preventing loss and damage to homes during flooding.

17. The petitioner points out that it does not seek to single out operators and the process by which they obtain licences for grouse moors but take an opportunity to demonstrate flood prevention measures which could be applied under other areas such as in upland sheep farming and forestry.

Action

18. The Committee is invited to consider what action it wishes to take on this petition.

Clerk to the Committee

SPICe The Information Centre
An t-Ionad Fiosrachaidh

Briefing for the Citizen Participation and Public Petitions Committee

Petition Number: PE1850

Main Petitioner: Les Wallace

Subject: Natural flood prevention on grouse moors

Calling on the Scottish Parliament to urge the Scottish Government to make the use of natural flood prevention methods a condition for obtaining a grouse moor licence.

Background

On 26 November 2020, the Scottish Government announced that it will introduce a licensing scheme for grouse moor shooting. This decision was in response to a report by the Grouse Moor Management Group (GMMG), which was established by the Scottish Government in 2017 to examine the environmental impact of grouse moor management practices such as muirburn, the use of medicated grit and mountain hare culls, and advise on the option of licensing grouse shooting businesses.

The GMMG report (also known as the Werritty review) recommended that a licensing scheme be introduced for the shooting of grouse if, within five years of publication of the review, there was no marked improvement in the ecological sustainability of grouse moor management, as evidenced by populations of breeding golden eagles, hen harriers and peregrines on or within the vicinity of grouse moors being in favourable condition.

However, the Scottish Government decided that it would bring forward legislation to license grouse moor management earlier than recommended. This was because wildlife crime on grouse moors was still taking place despite a range of measures introduced to tackle it as well as other "problematical issues" in relation to grouse moor management.

In addition to considering the licensing of grouse moors, the Werritty review also recommended increased regulation of muirburn, in particular due to concerns around the detrimental effects of burning on peatlands. Management of grouse moors tends to include muirburn - the practice of burning old growth on a heather moor to encourage new growth, which is also undertaken as part of other land management. The previous Scottish Government committed that during the next parliamentary term, following a

public consultation, it would bring forward legislation including a ban on muirburn on peatland and refresh the muirburn code of practice.

The petitioner has identified the proposed grouse moor licensing scheme as an opportunity to require land owners to introduce natural flood protection measures in upland areas as a condition for obtaining a grouse moor license.

Natural flood management

The Scottish Environment Protection Agency's Natural Flood Management Handbook provides the following description of natural flood management:

> "Natural flood management involves techniques that aim to work with natural hydrological and morphological processes, features and characteristics to manage the sources and pathways of flood waters. These techniques include the restoration, enhancement and alteration of natural features and characteristics, but exclude traditional flood defence engineering that works against or disrupts these natural processes".

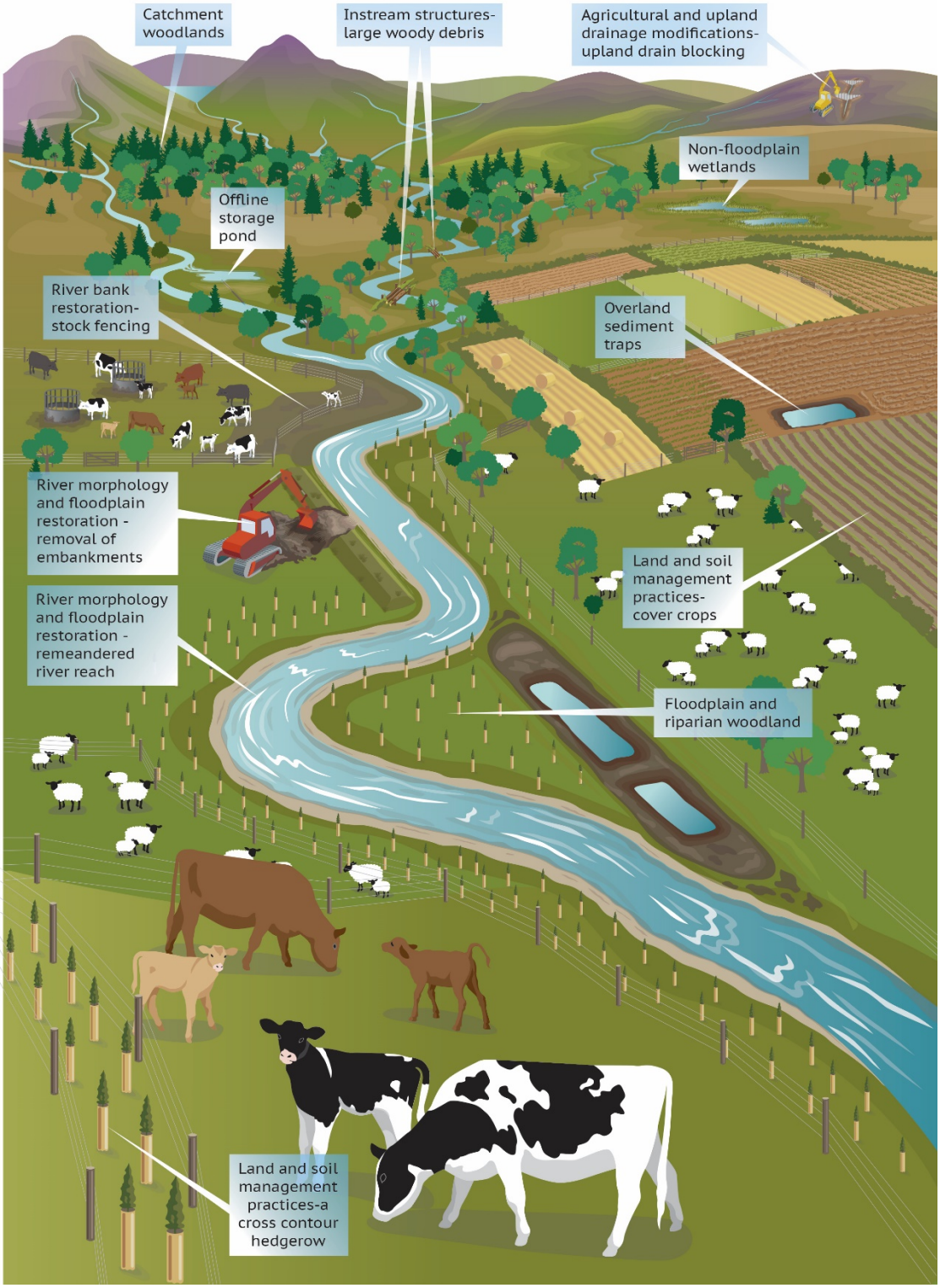
Natural flood management is an 'ecosystem service' i.e. a service or function provided by the environment benefitting people, and it can include measures such as:

- Woodland creation
- River and floodplain restoration
- Land and soil management practices including peatland restoration

Scotland's National Peatland Plan (published 2015) sets out that natural and restored peatlands store water, help to maintain steady flow rates on salmon rivers and provide reduced downstream flood risks compared to damaged peatlands.

These measures can also contribute to improvements in biodiversity, water quality and carbon storage – other ecosystem services.

Figure 1: Examples of Natural Flood Management Measures



Source: SEPA

Flood management in Scotland

It is a landowner's responsibility to manage flood risk in relation to their property. However, there are also powers and responsibilities held by local

authorities and by the Scottish Environment Protection Agency (SEPA) as well as other responsible authorities. The Flood Risk Management (Scotland) Act 2009 is one of the most relevant pieces of legislation.

SEPA is Scotland's national flood forecasting, flood warning authority and strategic flood risk management authority. Local authorities are responsible for producing Local Flood Risk Management Plans and work in partnership with SEPA, Scottish Water and other responsible authorities to develop these.

The desirability of natural flood management is embedded in legislation. The Flood Risk Management (Scotland) Act 2009 requires flood risk management planning to consider the potential contribution of alteration, enhancement or restoration of natural features of a river basin or coastal area in a flood risk management area – such as natural flood plains, woodlands and wetlands, or in slowing the flow of such water through woodlands and other vegetation.

Flood protection schemes can include traditional measures such as flood walls and/or may also use natural habitats across a catchment to reduce flood risk. To do this, land managers can be actively involved, by:

- making voluntary changes in land management in response to advice
- applying for relevant Scottish Rural Development Programme (SRDP) funding if eligible
- negotiating changes in land management with councils, to allow them to work with natural habitats to manage flood risk

Flood risk management in relation to grouse moors

A key aspect of the debate around the regulation of grouse moors is the extent to which they are fulfilling their potential, under current management practices, to provide 'ecosystem services' – in particular, how they support biodiversity, but also in areas including water quality, carbon storage and flood risk management.

The Scottish Government has commissioned research in this area which was published in 2018, in addition to commissioning the Werritty review. This research sets out that demonstrating the role of grouse moors or their potential role in flood risk mitigation is difficult, due to a lack of studies directly assessing areas managed for grouse shooting, or the types of habitat commonly associated with driven grouse shooting.

Moorland areas are thought to be vulnerable to climate change, including flood and wildfire risk. A 2015 report to NatureScot (then SNH) on sustainable moorland management advised that the threat of these impacts "will require an adaptation strategy if moorlands are to support both healthy ecosystems and vibrant rural communities". It also noted that moorlands can play a major role in mitigating climate change through interventions such as peatland restoration, a practice which can also support flood risk management.

Scotland's Climate Change Plan update published in 2021 sets out aims to restore 250,000 ha of degraded peatland by 2030, and to increase new woodland creation from the current target level of 12,000 hectares per year, to 18,000 hectares per year in 2024/25. The Werritty review states that woodland and peatland targets are likely to generate significant changes in moorland use and habitat with effects on grouse moors.

Key Organisations and relevant links

- Scottish Environment Protection Agency – Natural Flood Management handbook - https://www.sepa.org.uk/media/163560/sepa-natural-flood-management-handbook1.pdf
- Natural Flood Management Network Scotland - https://www.nfm.scot/
- NatureScot – Flood Management https://www.nature.scot/professional-advice/land-and-sea-management/managing-freshwater/flood-management

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[05/05/2021]

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Scottish Government submission of 21 July 2021
PE1850/A

In 2017 the Cabinet Secretary for Environment, Climate Change and Land Reform commissioned an independent group to look at the environmental impact of grouse moor management. The Cabinet Secretary's decision to form the review group was prompted by the report from NatureScot in May 2017, which found that around a third of satellite-tagged golden eagles in Scotland disappeared in suspicious circumstances, on or around grouse moors and was part of a package of measures aimed at tackling the on-going issue of wildlife crime – and in particular, raptor persecution.

The Government published its response on 26 November 2020 and committed to bringing forward the legislation to license grouse moor management during the next parliamentary term. This will be preceded by a full public and stakeholder consultation.

The full copy of the response can be found on the Scottish Government website at:

Grouse Moor Management Group recommendations: Scottish Government response - gov.scot (www.gov.scot) [https://www.gov.scot/publications/scottish-government-response-grouse-moor-management-group-recommendations/]

The group had a clear remit: to examine the environmental impact of grouse moor management practices such as muirburn, the use of medicated grit and mountain hare culls, and advise on the option of licensing grouse shooting businesses. The review group did not consider the risks of flood damage occurring on grouse moors or the measures deployed by a grouse moor manager to mitigate flooding on their land.

The Scottish Government does recognise the importance of working with nature to manage flood risk; often referred to as "natural flood management" (NFM). A range of NFM measures and sustainable land management practices can play an essential role by storing or slowing flood water in the catchment. These measures include woodland planting, floodplain reconnections, upstream leaky barriers and wetland creation. Natural solutions can often be best implemented along-side

more traditional engineered solutions. Importantly working with nature to manage flood risk in this way gives multiple benefits for the water environment i.e. biodiversity gains, improved water quality, fish habitat improvement and carbon capture.

SEPA, in conjunction with responsible authorities, have examined and mapped areas where implementing NFM techniques could be most effective. The maps can be found on the SEPA flooding website pages. As a result of this analysis, the flood risk management strategies and local flood risk management plans include a total of 104 actions with an NFM element, most of these being studies. These studies will further develop the contribution NFM can make to reduce flood risk to identified areas.

However, whilst we acknowledge the potential for working with natural processes to help mitigate flood risk on grouse moors, we do not believe that it would be appropriate to make the inclusion of NFM methods a condition of obtaining a grouse moor licence. As we have set out the primary driver behind the review of grouse moor management was raptor persecution and the purpose of any further licensing regime will be to implement the recommendations of the Grouse Moor Management Group.

Furthermore the issues the petitioner is seeking to address are not confined to grouse moors. The Flood Risk Management (Scotland) Act 2009, Scottish Government guidance, and the national flooding strategy clearly set out the importance of working with natural processes. SEPA and the responsible authorities will continue to set out where NFM forms part of the optimal suite of actions to mitigate flood risk in each cycle of regional Flood Risk Management Strategies and Local Flood Risk Management Plans.

Petitioner submission of 25 August 2021

PE1850/B – Natural Flood Prevention on Grouse Moors

The economic, environmental and human cost of flooding are astronomical. The 2007 Gloucestershire flood cost more than two billion pounds in damages to homes and businesses. The 2005 Carlisle flood likewise cost more than four hundred million pounds – part of the watershed which caused this happens to lie in Scotland. These are just two of the more prominent incidents, in Scotland we could point to Perth as one of many areas that has been hit heavily by flooding. The human cost, up to and including loss of life, is similarly enormous – homes and businesses seriously damaged or totally lost along with personal possessions. The disruption and emotional hardship involved is nearly unimaginable.

The environmental cost is usually overlooked, flood waters washing soil, chemical pollutants and solid waste into our rivers and ultimately estuaries and seas. Whether or not projected climate change leads to an increase in rainfall, increasing urbanisation will ensure future flood events will affect more and more people.

What is new is the realisation that natural flood management which involves targeted tree planting, use of natural floodplains etc rather than traditional hard engineering work can be a more effective and cheaper way of reducing the severity of floods by retaining water for longer periods. In addition, they provide additional benefits such as restoring biodiversity and the creation of recreational opportunities. Although much progress is being made in this field, a glaring and disastrous omission is what I believe to be a lack of either a national Scottish or UK plan to implement natural flood prevention methods across our uplands as policy.

Our uplands make a disproportionately large contribution towards flooding. Their altitude tends to induce the highest rainfall levels and their topography means water can flow from them very quickly. The nature of our uplands also means there is far more scope to implement effective, large scale natural flood prevention without compromising genuinely economic activity, in fact much of the ‘economic’ activity that takes place there only does so because of public subsidy. This means that as long as the various activities in our uplands are not required to incorporate natural flood prevention – such as the sheep farmers of Pontbren have pioneered – then members of the public can be paying for subsidies to upland businesses that increase the flood risk to their own homes. It is my view that this is not only an economic insanity it is a moral obscenity.

Similarly, the presence of the beaver in Scotland should be leading to wonderful opportunities to complement targeted tree planting in the uplands to not only create much needed firebreaks, but significantly reduce the speed with which water pours from them to flood houses, businesses, and better-quality farmland downhill. Instead

of highlighting possibilities for beavers to significantly reduce the number of homes that might need to be mopped out and emptied after heavy rain, their damage to farmland real, imagined or exaggerated has been stressed. The beaver's potential role in the former in terms of avoided damage and human misery should far outweigh the costs for compensation and mitigation caused where there is genuine conflict. I believe that it has not been the potential for the beaver to prevent families from losing their homes to floodwaters that's been recognised, it is possible damage to the corners of fields which is failing the public.

Making the inclusion of comprehensive natural flood prevention on grouse moors a requirement of their obtaining an operator's licence is not singling them out. The proposed licencing of grouse moors has created an opportunity to establish what should also become a consideration for upland sheep farming, forestry and deer stalking among others. It should not be regarded as an anomaly, but a first step, an example for changing the way our uplands are managed that is currently placing many of those that live below them under unnecessarily high flood risk. NOT adding natural flood prevention to the stipulations for running a grouse moor would be the real anomaly, continuing to ignore the greater public interest.