

Response ID ANON-WDST-KWWX-K

Submitted to **Talking "Fracking": A Consultation on Unconventional Oil and Gas**
Submitted on **2017-05-31 09:20:23**

Community Considerations

1 What are your views on the potential social, community and health impacts of an unconventional oil and gas industry in Scotland?

What are your views on the potential social, community and health impacts of an unconventional oil and gas industry in Scotland?:

The overall conclusion of the Health Impact Assessment is that the evidence considered was 'inadequate' as a basis to determine whether development of shale oil and gas or coal bed methane would pose a risk to public health. The consultation document then goes on to discuss 'adopting a precautionary approach' without adequately explaining what might be involved in this. We are none-the-wiser as to what the range of mitigation measures might actually be, and we are concerned that community engagement and community benefits are discussed alongside public health. We believe that community benefit schemes, such as the landfill communities fund, might be appropriate to mitigate loss of amenity etc., but we do not consider that such schemes are an appropriate mitigation for potential health risks (if any).

2 What are your views on the community benefit schemes that could apply, were an unconventional oil and gas industry to be developed in Scotland?

What are your views on the community benefit schemes that could apply, were an unconventional oil and gas industry to be developed in Scotland?:

We do not consider that the benefits of unconventional oil and gas extraction for communities outweigh the potential risks. Funding might bring short term benefits but long term the uncertainties of the effect of proposals for this extraction would we believe outweigh any short-term benefits. Disturbance to the geology (and negative influences on the landscape) could have long term impacts on communities which would not be mitigated by small scale handouts.

The area planned for the main abstraction of the unconventional oil and gas is in an area where due to its geology has already been the subject of mass mining to produce oil shale and its derivatives. The environmental conditions relating to these activities are still affecting communities in the area. This is not only in terms of visible amenity (bings etc.) but also the effect on the water quality of the rivers and lochs in the area. The management of catchments requires a wide range of expertise and whilst community benefit schemes can bring an important resource to local communities to improve conditions, it is often difficult to use these schemes for the benefit of river catchments or landscape improvements which would have long term benefits to the area. We would wish to see a wider ranging funding model developed which allow for landscape and catchment scale funding. This would bring wider benefits to the areas. If part of the commitment is also to restore existing areas of dereliction or instability (Overview of the Current Regulatory Framework, p10) then to see real benefits we believe that a more ambitious funding programme is required with the development of partnerships not just localised small scale funding.

Subject to our comments above in relation to the scope of such schemes, we do consider that, in the event that unconventional oil and gas developments were to proceed in Scotland, significant and ongoing community benefit schemes, independently regulated and audited, should be put in place. We consider that the Landfill Communities fund would be a good model for this, with community benefit operated via a tax credit scheme, linked to a specific tax.

Economic Considerations

3 What are your views on the potential impact of unconventional oil and gas industry on Scotland's economy and manufacturing sector?

What are your views on the potential impact of unconventional oil and gas industry on Scotland's economy and manufacturing sector?:

The consultation document states that even if unconventional oil and gas is found to be economic to extract there would only be 15-20 years' worth of the resource. The use of unconventional oil and gas does not seem to be a long-term solution and is inherently unsustainable. We are very concerned that the impact of the uncertainty for the environment and communities both in the short and long terms is unacceptable for such a limited lifecycle of production.

We also note that the consultation document concludes that the economic viability of unconventional oil and gas are also questionable. This also raises concerns that the producers will not be in a position to undertake decommissioning effectively.

4 What are your views on the potential role of unconventional oil and gas in Scotland's energy mix?

What are your views on the potential role of unconventional oil and gas in Scotland's energy mix?:

We do not consider that there is enough information to comment.

Environmental Considerations

5 What are your views on the potential environmental impacts of an unconventional oil and gas industry in Scotland?

What are your views on the potential environmental impacts of an unconventional oil and gas industry in Scotland?:

It is very difficult to answer this question based on the information set out in the consultation document. The document focusses on a limited number of potential impacts, with an overriding focus on climate change, and then focusses on the current regulatory framework. As managers of fish and fisheries our members have a primary focus on the quality and quantity of water in our aquatic environment, and therefore these aspects represent the main concerns that we might have about unconventional oil and gas development.

As the consultation document recognises, most of Scotland's unconventional oil and gas deposits occur in and around former coalfields and oil shale fields in Scotland's central belt, which are amongst the most densely populated parts of the country. Shale oil mining, mills and other industries in this part of Scotland have left a legacy which continues to affect the health of the rivers and their ecosystems today. Current and ongoing pressures include housing and infrastructure

developments. Significant levels of public and private resources are currently being deployed to improve the aquatic environment in the central belt, and to reconnect wildlife and communities to their local rivers. We are therefore extremely concerned at the prospect on introducing a further potential hazard to fish and fisheries, particularly given the remaining uncertainties regarding the possible impacts.

Information is available on regulation of the system, however there are still currently issues with the regulation of the environment and the ability of SEPA to respond to pollution or other events and satisfactorily obtain an adequate level of compensation to deter polluters. Our experience in dealing with polluters of the water environment is that the cause and effect can be very difficult to prove and that the source-pathway-receptor route may in the case of unconventional oil and gas not be provable and therefore SEPA will not be able to enforce. This then leaves the environment at the mercy of no one taking responsibility – which is what happens in relation to much of the mining inputs into the rivers within the central belt currently.

One aspect the process on which there is no information is the amount and source of water. Our rivers are already hugely impacted by abstraction and impoundments. Even if the water is tanked to the production area, it has to be sourced from somewhere. This water is then lost to the ecosystem.

Salmonid species, and in particular Atlantic salmon, lay their eggs in gravels within the freshwater system and are reliant on good quality and quantity of water. The rivers of the central belt are already extremely vulnerable to quality and quantity issues with demands on them for abstraction and for use as discharges by operators (including Waste Water Treatment Works). This makes the river less resilient to change and unable to repair themselves when further demands are placed upon them. Water temperature rises, spates and flooding are factors resulting from climate change. Most of the rivers within the central belt have Atlantic salmon, of which many populations are only just recovering from the impact of the last 200 years. In addition, most of the rivers have lamprey (both brook and sea). These species support other protected species such as otters and water vole.

The lifecycle of the salmonids also raises an issue not brought out in the reports, soon after they are laid salmonid eggs become sensitive to mechanical shock (impact or vibration). They are readily killed by this means. Increased seismic activity could bring about the mortality of a year class of fish populations in some parts of some river systems. The recovering nature and fragility of the existing habitats means that this loss could lead to substantial reduction of populations and possibility extinction (again) in some rivers. Further information is required to establish if this is a potential risk.

Should any such developments be taken forward, we consider that it is absolutely fundamental that our member DSFBs and Fisheries Trusts are fully and proactively consulted on all elements of the regulatory process and any monitoring of the aquatic environment should be undertaken in full partnership with our members.

Finally, we are somewhat sceptical about the statement that 'Improved engagement with the local community could be required, including release of data to enable communities to scrutinise operational standards, and increased transparency of chemicals used.' Unfortunately, this has not been our experience with the way that the Scottish Government regulates salmon farming. It is accepted internationally that sea lice, arising from salmon farms, present a hazard to wild fish, and yet data on sea lice levels on individual farms is not publicly available in Scotland for reasons of commercial confidentiality.

6 What are your views on the potential climate change impacts of unconventional oil and gas industry in Scotland?

What are your views on the potential climate change impacts of unconventional oil and gas industry in Scotland?:

As climate change is the most fundamental and long-term implication on the water environment we are concerned that the option to extract unconventional oil and gas would make meeting the climate change emission levels extremely difficult. There is no information on what Scottish Government or the operators proposes would be done to mitigate this. Significant inroads would be required in carbon sequestration (peatland, tree planting, etc.) – there does not appear to be any proposed plan to deliver this.

There has been a steady decline in the abundance of Atlantic salmon in Scottish rivers in recent years. Some of this decline can be explained by changes in the fishing methods, particularly a reduction in coastal netting, but there is a real and worrying decline in the numbers returning to our rivers. In fresh waters the decline in the quality of juvenile and spawning habitat is thought to be having the greatest effect with changing land-use and water pollution often to blame. Such impacts will also have negative impacts on our other freshwater fish species. In the sea, the greatest cause for concern is the poor survival rate and the resulting low numbers of returning adults. Climate change may be affecting salmon through changes in sea surface temperatures which in turn reduce suitable feeding areas around Greenland and the Faroes.

On that basis, we would be concerned if there were climate change impacts arising from unconventional oil and gas developments. However, even if unconventional oil and gas was to have a net benefit in terms of climate change we would still be concerned. We recognise that climate change cannot be addressed in Scotland alone and it is vital that developments designed to mitigate climate change, are adequately regulated and managed, in order to ensure that they do not further impact on species (such as Atlantic salmon) which are already impacted by climate change.

7 What are your views on the regulatory framework that would apply to an unconventional oil and gas industry in Scotland?

What are your views on the regulatory framework that would apply to an unconventional oil and gas industry in Scotland?:

We recognise that SEPA has powers to regulate pollution and abstraction of water, and we recognise the positive impact that the Water Environment and Water Services (Scotland) Act and Controlled Activities Regulations have had, but we also have concerns that the current regulatory framework does not always adequately protect fish and fisheries. Fisheries Management is not just about managing fish, but rather it is predominantly about managing impacts, pressures and people to ensure that the environment on which the fish depend is optimal.

Concluding Remarks

8 Overall, and in light of the available evidence, what do you think would be the main benefits, if any, of an unconventional oil and gas industry in Scotland?

Overall, and in light of the available evidence, what do you think would be the main benefits, if any, of an unconventional oil and gas industry in Scotland?:

We do not consider that any substantial benefits have been demonstrated in the consultation document which would outweigh the potential short and long-term risks to Scotland's natural and aquatic environment.

9 Overall, and in light of the available evidence, what do you think would be the main risks or challenges, if any, of an unconventional oil and gas industry in Scotland?

Overall, and in light of the available evidence, what do you think would be the main risks or challenges, if any, of an unconventional oil and gas industry in Scotland?:

As stated above, we believe that the benefits of an unconventional oil and gas industry in Scotland are marginal in relation to the uncertainties in relation to health and the environment. We do not consider it advisable to introduce a further environmental pressure to a part of Scotland which is just beginning to recover from a historic legacy of damaging industrial development. On that basis, we do not support the lifting on the current moratorium, and indeed we note with interest the current proposed members bill – Prohibition of Fracking etc. (Scotland) Bill.

10 If you have any other comments on the issues discussed in this consultation, please provide them here.

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About You

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If you are responding on behalf of an organisation, please select a type/sector that best describes your organisation:

Third sector / NGO

If other, please specify::

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference (we will not publish your email or address details):

Publish response only (without name)

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes