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### **PE1386/E**

For delivery via email to: [petitions@scottish.parliament.uk](mailto:petitions@scottish.parliament.uk)  
Public Petitions Committee, TG.01  
The Scottish Parliament  
Edinburgh, EH99 1SP

### **Response from Dr. Andrea Nightingale to PETITION PE 1386: Petition by Richard Munday on behalf of the Torridon Nephrops Management Group**

I am fully supportive of piloting more static gear-only management zones within the Scottish in-shore fishery *and* of creating legally binding and enforceable systems for limiting the overall fishing effort within such zones. I base my analysis on the global evidence for successful management of common pool fisheries resources and my research since 2006 on the social-political issues concerning the in-shore fishery in Scotland. The latter research is further supported by work done on rural development in Skye and Lochalsh for the Arkleton Centre at the University of Aberdeen in 2001-2002.

My response focuses on 4 key issues:

1. The mis-match of the present legal management structure and the ecology of the fishery.
2. Due to the mis-match of management and the fishery, the need for marine spatial planning.
3. The need for better governance mechanisms that can be responsive to fishers and communities in order to sustain not only the fishery but also the west coast economy.
4. The Torridon Nephrops Management Group specifically should be supported in their efforts to retain their Marine Stewardship Council on both economic and sustainability grounds.

#### **1. Mis-match of management and the fishery**

The in-shore fishery cannot be sustainable without *locally*-based management of catch per unit effort. This applies not only to limiting the amount of gear on boats, but also to limiting the total number of boats that can be operating in a given area over a specific time period. The present system of management via licensing and

quotas is based on the premise that the fishing ground is relatively spatially consistent across large areas of the coast—in other words that there are equal amounts of fish in all areas. Yet, clearly this is not empirically substantiated by either scientific research or the knowledge and practices of fishers. As it stands, the in-shore fishery effort-management structure is at too large a scale to take account of the spatial diversity in the fishery and thus to protect specific areas from over-fishing. The concerns of the Marine Stewardship Council in the Torridon case are precisely a result of this mis-match between the scale of fishing effort and the scale of management controls. For a species like *Nephrops* which is not highly mobile, such spatial regulation is critical for sustaining populations in particular areas.

## **2. Need for marine spatial planning**

Thus, there is urgent need to begin the process of spatial planning within the in-shore fishery, and establishing static-gear only zones is an excellent first step that would command wide spread political support from a majority of in-shore boats (65% are creelers) and lay a foundation for other kinds of limitations on the fishery. The Marine Protected Areas initiative that SNH is mandated to implement, would be strongly complimented by marine spatial planning that would include a continuum of no-catch zones to open fishing grounds, with areas of partial closure—whether that be seasonally or through gear restrictions. Such a strategy is also consistent with the Marine National Parks notion. Given the scientific evidence that creeling has far less impact on the sea bed and other species, such planning should be supportive of static gear only zones.

## **3. Need for better governance mechanisms**

The Scottish Government has recognised that governance of fisheries needs to be more localised and they moved to implement the In-shore Fisheries Groups (IFGs) proposed by the previous government. Significant progress has been made over the past year and they are a positive development in that they create a forum for debate that is at a more workable scale than what existed previously. Yet at present, the IFGs are an inadequate response to the need for a spatially sensitive management regime for two key reasons:

- 1) They do not have legal authority to create binding management regulations within their territories.
- 2) They are not yet adequately functioning to ensure that they are accounting for all fishers within their territory and therefore as a mechanism to create consensus (and compliance) over management decisions.

The IFGs are working hard to build their institutional capacity and to reach out to fishers not yet within their network, but this process will take time. The need for limiting the fishery requires more urgent action than the IFGs can realistically achieve. A new legal mechanism is needed to be able to fill the gap.

Global research on fisheries has highlighted that the ability to limit access to the fishery is vital for creating a sense of ownership and commitment to the long-term viability of the catch within a particular fishing ground. The settlement pattern and economy of the Scottish west coast is such that many communities have a strong sense of ownership over their fishery even if legally they cannot exclude anyone. This is referred to as 'gentlemen's agreements' by most fishers using the in-shore fishery and includes local, informal agreements over who will fish where. The

pressure on the *Nephrops* fishery has increased to the point where such 'gentlemen's agreements' need to be formalised and policies in place to allow groups of locally-based fishers to legally determine how to limit their overall fishing effort. Conflicts within fishing grounds can contribute to over exploitation of the fishery as one way to retaliate is to over-fish. Legal mechanisms for limiting effort also significantly reduce conflicts.

Second, global research on common pool resource management has demonstrated that in addition to limiting the users of a resource, those users need to have collective choice rights—or the ability to decide how they want to regulate the resource. Because the IFGs have no legal authority to create binding management decisions—such as excluding mobile gear from a particular area—they effectively do not have collective choice rights. At present, those collective choice rights exist at the Scottish Government scale and therefore the Government needs to create appropriate legislation for limiting effort in particular parts of the fishery.

Finally, the in-shore fishery is a vital part of the west coast economy. More studies are needed to investigate how the creel fishery contributes more to the economy than the trawl fishery, but there is some evidence to support this claim. Creel boats are more likely to be based in one port and fish daily rather than move over larger distances and stay at sea longer. As a result, creel fishers spend more money in their place of residence and have a long-term commitment to ensuring a sustainable livelihood *in that place*. Such commitments to place have multiplier effects throughout the local economy as well as helping to ensure the social capital and thus viability of the community. And, as pointed out in the petition, the creel fishery yields a higher value product.

#### **4. Support for TNMG Marine Stewardship Council certification**

The Torridon Nephrops Management Group has established an exemplary model for limiting the effort within and impact upon their fishing ground – in a political climate that has not been supportive of such efforts. In order to fully realise the success of their model, there must be provisions to limit the overall effort. The Scottish Government has been slow in providing for such legislation due to their long-term goals for having such decisions contained within the IFGs. It would be economically and politically disastrous if Torridon loses their Marine Stewardship Council certification at a time when supermarkets and the government are pushing for more fisheries to be certified. For this reason alone, it is beholden on the Scottish Government to immediately create the legal conditions under which TNMG can ensure their fishery is sufficiently limited in order to retain their certification.

#### **Concluding remarks**

Piloting creel only zones, which can be subject to regular review, will ensure that locally responsive mechanisms are developed for such areas. Providing legal mechanisms to limit overall access to particular parts of the fishery together with piloting new creel-only zones will ensure that the sustainability and economic growth goals for the west coast can be achieved.

Dr. Andrea J. Nightingale  
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