Wildlife and Countryside Link response to the Defra consultation on the Implementation of the Nitrates Directive in England

Wildlife and Countryside Link brings together 37 voluntary organisations concerned with the conservation and protection of wildlife and the countryside. Our members practise and advocate environmentally sensitive land management, and encourage respect for and enjoyment of natural landscapes and features, the historic and marine environment and biodiversity. Taken together our members have the support of over 8 million people in the UK and manage over 690,000 hectares of land.

This response is supported by the following 13 organisations:

- Angling Trust
- Buglife – The Invertebrate Conservation Trust
- Butterfly Conservation
- Friends of the Earth England
- The Grasslands Trust
- The Mammal Society
- Ramblers
- Pond Conservation
- The Rivers Trust
- Royal Society for the Protection of Birds
- Salmon & Trout Association
- The Wildlife Trusts
- Wildfowl and Wetlands Trust

1. Introduction

Minimal improvements in nitrate levels, with the exception of some small areas as highlighted in the consultation document, indicates that changes and improvements are needed to make both the Action Programme and overall implementation of the Nitrates Directive more effective. The research suggests that relaxing standards and reducing the regulatory 'burden' would be wholly inappropriate responses.

To date, incomplete implementation of the Nitrates Directive in the UK has created conflict with the European Commission and put the UK's Rural Development Programmes at risk. Given this conflict, the scale of the pollution problem for wildlife and the water industry, and the demands of the Water Framework Directive (WFD), we would argue that the Department for Environment, Food and Rural Affairs (Defra) should take decisive action and ensure that the action programme is implemented effectively.

2. Executive Summary

Link seeks a reduction in diffuse nitrate pollution from agriculture because of the long-term impact that this nutrient poses to natural and semi-natural habitats, including fresh and coastal waters, and the birds and other wildlife that depend on them. RSPB research (*Force-Feeding the Countryside: the impacts of nutrients on birds and other biodiversity, MacDonald M.A., Densham J.M., Davis R. and Armstrong-Brown S. 2006, RSPB*) has identified that increased levels of nutrients, including nitrates,

are adversely affecting natural and semi-natural habitats in the UK, reducing the diversity of plants and invertebrates in our countryside. It further highlighted the impact of eutrophication on habitats and reserves such as the RSPB's Loch of Strathbeg and Ouse Washes, and also found that 'strong causal links exist, in a number of cases, between nutrient pollution and knock-on effects on the food chain of wildlife, including birds'. Declines in the populations of species such as the corncrake, cirl bunting and bittern, are all in part due to nutrient use from agriculture. Higher than natural levels of nutrients (nitrogen as ammonium, nitrate and nitrite) can also lead to algae blooms and eutrophication in freshwater (such as lakes and reservoirs) and coastal zones, which can severely impact aquatic life including fish and invertebrates.

Excessive nitrate levels are a primary cause of eutrophication in estuarine and coastal waters, characterised by algal blooms and causing detrimental effects upon marine life. Such eutrophication threatens the attainment of good ecological status under the WFD. Excessive nitrate levels from diffuse agricultural sources also pollute drinking water, either rendering the source unusable or requiring expensive treatment, including the use of energy and chemicals; water companies will, in the period 2005-15, spend over £370 million on removing nitrates from raw water. Nitrate removal plants are costly to build and maintain, are energy intensive and will add to the water industry's growing carbon footprint.

Link recommends that Defra applies the Action Programme to the whole of England in order to: realise administrative, communication and equity benefits; simplify integration with other diffuse pollution measures and objectives; and comply with other Directives.

Defra should also consider the links between meeting obligations under the Nitrates Directive and opportunities to incentivise sustainable farming practices through CAP reform. Defra should be promoting specific measures to achieve a reduction in nitrate pollution, including a crop rotation requirement to replace the proposals on crop diversity in the greening of Pillar I and ensuring adequate resourcing of Pillar II.[1]

Link supports the option for 'cover crops' on lighter soils and where they are targeted to protect groundwaters. However, we would prefer the use of the term 'green cover' rather than 'cover crop' throughout the Action Plan since it might not be necessary to sow a crop if stubbles and naturally regenerating vegetation can provide the green cover required. We believe, for example, that Entry Level Scheme over-wintered stubble management (i.e. no pre-harvest glyphosate or post-harvest herbicides) should result in sufficient re-growth on the stubble to act as a green cover without the need to establish a sown cover crop. This would prevent any conflict with biodiversity objectives on the same land.

3. Answers to specific questions

Question 1
Do you prefer Option 1 (continuing with discrete NVZ designations) or Option 2 (applying the Action Programme to a 'Whole England' NVZ)?

Link recommends that Defra applies the Nitrate Vulnerable Zone (NVZ) Action Programme to the whole of England because it will provide the following benefits:

[1] For further information, please see the Link response to the Defra discussion paper on the impact in England of EU Commission regulatory proposals for Common Agricultural Policy reform, post 2013: http://www.wcl.org.uk/docs/Link_response_to_Defra_CAP_discussion_paper_March2012.pdf.

1. Increase ease of administration and enforcement for the Environment Agency.
2. Create a level playing field for all farmers.
3. Avoid any detrimental impact on land prices for farmers within NVZs.
4. Communicate to all farmers and landowners that nitrate pollution is a serious problem and avoid the potential for some to think that as they are not in an NVZ their practices are definitely non-polluting.
5. Create an incentive for all farmers in England to produce a full nutrient management plan and thereby reduce nutrient surpluses, reduce pollution risk and make efficiencies on their farms.
6. It will not prove overly burdensome to many of the farmers who fall outside the proposed 70% area designation as many of these farmers engage in practices which do not have a large impact on water quality.
7. It will support compliance with other related Directives and ensure early action is taken to achieve water quality objectives. For example:
    a. *Water Framework Directive*: Interim European guidance suggests that bodies that fail to meet Good Ecological Status (GES) under the WFD due to enrichment should be considered eutrophic and this, in turn, should trigger NVZ designation where agricultural nitrate is the driver. Therefore, an Action Programme applied to the whole of England would help the UK comply with the WFD.
    b. *New Groundwater Directive*: It sets a 50mg/l threshold value for all groundwater bodies, irrespective of their designation as NVZ.
    c. *OSPAR*: Applying the NVZ Action Programme to the whole of England would take the UK one step closer to fulfilling its OSPAR commitments to achieve a 50% reduction in nutrient input into waters that are likely to be polluted.

Question 2

- *This section is included mainly to provide information as to our current thinking. Do you consider that the Tribunal Procedure First-tier Tribunal (General Regulatory Chamber) Rules 2009 are currently suitable to cover these appeals against designations of Nitrate Vulnerable Zones?*

No comment.

Question 3

- *Do you agree that crop-available nitrogen from all types of organic manures should count towards the Nmax limits?*

Yes.

Question 4

- *Do you agree with the proposed changes to the livestock manure N efficiency standard values used in Nmax?*
- *What concerns or benefits do you think this change may raise?*

Yes, if it shifts use from mineral N and promotes greater efficiency at the right times of the year, but there must be considerable uncertainty as to whether this will happen.

Question 5

- *Do you consider the limit of 500 kg/ha of compost total N in any 2 year period is workable?*
- *Are there any working restrictions we should consider to ensure we are not creating any unintended adverse consequences?*

We do not think there is sufficient information provided about the possible risks to the environment of applying at up to 500kg/ha total N.

Question 6

- *Do you agree that a limit of 1000 kg/ha of compost total N in any 4 year period when used as a mulch for top fruit production is workable?*
- *Do you have concerns or benefits that such a change may raise?*

No comment.

Question 7

- *Derogation from the Livestock Manure N Farm Limit of 170 kg N/ha of nitrogen produced by farm livestock averaged across the agricultural area of the whole farm. Do you consider the Department should seek to renew the Derogation?*

Link does not support the derogation from the 170kg N/ha. The evidence base summary by ADAS states that: *'Losses of nitrate from intensive grassland management, associated with intensive dairying, often exceeds 50 mg/l even if farmers follow best practice and the 2008NVZ measures are adopted (e.g. the Livestock manure N farm limit of 170 kg N/ha).'* The report concludes: *'Losses of pollutants from grassland systems are correlated with numbers of livestock. Intensively stocked farms generate greater losses per ha and per animal kept (Jarvis, 1994). Therefore, a reduction in stock numbers reduces losses of all pollutants.'* We also oppose the proposal to reduce administrative burdens associated with the derogation if renewed.

Question 8

- *Which of the 3 closed spreading period options do you prefer?*
- *Do you have any comments or further evidence on any of the options that you think ministers should be aware of?*

The supporting evidence suggests that option three would maximise benefits for the environment by substantially reducing leaching while still ensuring that existing storage is sufficient. While this may squeeze the period for spraying we believe that is a 'price worth paying'.

Question 9

- *Do you support the above closed spreading period based on rainfall banding? What additional advantages or disadvantages do you see with this proposal?*

No, we do not support this option. The evidence suggests that this would increase the risk of leaching and therefore pose a greater risk to the environment. It would also increase complexity and potentially confusion among land managers.

Question 10

- *Do you think that reducing the quantity of slurry that can be spread during and immediately after the closed period is a better mechanism for managing nitrate leaching than extending the closed periods?*
- *If the application rate during this period were reduced, do you agree with the suggested reductions in the rate of application?*
- *What further points should the Government take into account when considering this issue?*

No, the evidence suggests that extending the closure period offers better protection to the environment and must therefore be the preferred option. The report offers no scientific evidence that the reduction from 50 to 30 m^3/ha offers any environmental benefit – and we do not think that it would eliminate the phenomena of 'spreading day'.

Question 11

- *Do you agree with the proposals to reduce the minimum distance for spreading slurry near watercourses if a precision slurry spreader is used?*
- *Is the proposed minimum distance from watercourses (6 metres) correct, or does it pose an unacceptable risk of pollution?*
- *Do you have any comments on how this proposal could work or be improved?*

No, this proposal would increase the risk of pollution to watercourses and is therefore totally unacceptable.

Question 12

- *Do you agree with this proposed change to the SSAFO calculation? What other factors should ministers consider?*

Yes, we agree with this proposal which seems fair to farmers while still protecting the environment.

Question 13

- *Do you agree that the Action Programme does not require any amendments with respect to the storage of solid livestock manures?*

Yes, we agree that the evidence indicates that no amendments are necessary.

Question 14

- *Do you have ideas that will reduce the burden of record keeping while maintaining environmental protection? Are there any situations where we should not reduce record-keeping?*

We believe that the desire to deregulate (including the application of a threshold) must be resisted if it increases risk to the environment. While generally small farms may not be responsible for high N leaching, if they are located within an aquifer or next to a protected area it may mean that their N losses are locally significant and should be regulated. For example, water companies are beginning to understand that even small, poorly managed horse paddocks can be substantial sources of N with potentially large localised risk to sources, particularly near where there are sink-holes and cracks in the chalk.

Question 15

- *What low intensity farming systems do you consider should not have to keep Nitrates Regulations records? We would be interested to discuss suggestions with those responsible for running such schemes.*
- *Should "low intensity" be defined in terms of the Nmax limit, manure nitrogen loadings, or both?*
- *Or should other factors be part of the definition (and if so, what are they)?*
- *For your preferred way of defining "low intensity", what level(s) of the relevant measures would be appropriate?*

While we are, in principle, sympathetic to the aim of avoiding unnecessary duplication of paperwork, and recognise the lower risk posed by extensive livestock production, it is imperative that any reduction in record keeping is evidence-based. The necessary information must be readily available to determine (and the farmer must have gone through the process of ascertaining) that N loading is low enough to be certain there is no significant risk of environmental damage. It is crucial that any simplification of record keeping is based on this premise and not unsubstantiated assumptions – for example, that any type of hill farming is low intensity. Both Nmax limit (to ensure crop available N from organic manure and manufactured fertiliser is not excessive) and livestock manure N farm loadings are important in reducing the risk of nitrate leaching and need to be considered. It should also be noted that if 'intensity' is determined over the year and total amount of available land, there could be increased risk if livestock are restricted to smaller areas for considerable parts of the year, when stocking rates would then be higher in practical terms.

Question 16

- *Do you think cover crops should be included in the Action Programme?*
- *If so, have we identified the correct circumstances (sandy soils over groundwater) for their use?*
- *Are the suggested dates appropriate?*
- *If not, what dates would you suggest?*
- *What actions do you consider should be defined to show compliance?*

Yes, we support this additional option in the Action Programme. However, we would prefer the use of the term 'green cover' rather than 'cover crop' to make it clear that it might not be necessary to sow a crop if stubbles can provide the green cover required. In our opinion, ELS over-wintered stubble management (i.e. no pre-harvest glyphosate or post-harvest herbicides) should result in sufficient re-growth on stubbles to act as a green cover without the need to establish a sown cover crop.

We support targeting this measure at sandy soils but would also recommend it be considered as an option in heavily fractured chalk land, where rapid leaching to the aquifer is possible. Due to the natural regeneration and rough surface of over-winter stubbles they can also, in the majority of cases, have a positive impact on reducing other forms of diffuse pollution like sediments from erosion and run-off.

Question 17

- *Do you agree that the exemption in Regulation 6 should be repealed?*
- *Do you think the deadline for doing so (22 December 2015) is the right one?*

Yes, we support the repealing of this exemption. In our opinion enough notice period has been provided and stores at their end of their useful lives provide an unacceptable risk to the environment.

Question 18

- *Do you agree that a person constructing a store should notify the EA of his/her intention to do so before firmly committing to the project?*
- *How might we improve this provision?*

Yes we support this point, it seems like a sensible 'easy-win' amendment which will also reduce regulatory burden and uncertainty.

Question 19

- *Do you consider all the measures should be implemented from 1 January 2013?*

Yes.

Wildlife and Countryside Link
March 2012

Wildlife and Countryside Link
89 Albert Embankment, London, SE1 7TP
W: www.wcl.org.uk