

Blueprint for Water response to Water for Life and Livelihoods: England's waters: Challenges and Choices

1. Introduction

The Blueprint for Water coalition is a unique coalition of environmental, water efficiency, fishing and angling organisations which call on the Government and its agencies to set out the necessary steps to achieve "sustainable water" by 2015. The Blueprint for Water is a campaign of Wildlife and Countryside Link. More information is available at <u>www.blueprintforwater.org.uk</u>.

This response is supported by the following nine organisations:

- Angling Trust
- Buglife The Invertebrate Conservation Trust
- Marine Conservation Society
- Royal Society for the Protection of Birds
- Salmon & Trout Association
- The Rivers Trusts
- The Wildlife Trusts
- Wildfowl and Wetlands Trust
- WWF-UK

2. General comments

We welcome the opportunity to respond to the Challenges and Choices consultation and the fact that significant issues and management measures are being considered at a national level in advance of the next round of River Basin Management Plans (RBMPs). We look forward to seeing how the views put forward in the Challenges and Choices consultation impact the content of the RBMPs.

We value the role the Environment Agency (EA) plays and we are concerned with the budget cuts that they will experience next year. We are concerned that these cuts will limit the EA's capacity to deliver an elevated RBMP programme with reduced resources and believe that this programme should be considered a priority.

Although we welcome the content and suggestions made within this consultation, we feel it does not cover a number of important aspects to Water Framework Directive (WFD) delivery. We believe that there are a number of overarching barriers to achieving the social and ecological objectives of the WFD.

a. <u>Ambition</u>

England's rivers, lakes, wetlands and coasts are some of the best-loved parts of our country, and waterbodies often sit at the heart of the local community. Yet barely a quarter of our waterbodies are at good ecological status, well below the EU average of 40%. This is not a record we should be proud of – England has a less ambitious programme to fix this than many other north European countries.

We believe the WFD should drive us to re-evaluate how patterns of development and agriculture, and people's lack of awareness of their impacts on water environment, have damaged our waterbodies. It should also be remembered that the WFD applies out to one nautical mile (nm), but this consultation does not give enough scope to how the EA could play a more significant role in the protection and conservation of coastal and inshore estuarine and marine habitats as well as the protection and monitoring of commercial fisheries, including working with Inshore Fisheries and Conservation Authorities (IFCAs).

The WFD presents an opportunity to re-engage people in the question of what future they want for their rivers, lakes and coasts, who should pay and by when. The Blueprint for Water coalition has worked hard to seize the opportunity represented by the WFD, and has been disappointed that the Government and its agencies have not taken a more enthusiastic role from the outset. We believe that the next round of RBMPs must be ambitious in engaging communities and tackling the long-standing problems our waterbodies face.

b. Economic decision-making

It is vital that the economic decision-making process does not rule out worthwhile improvements to English waterbodies. Nor should the complexity of economic analysis be used to justify and 'hide' widespread derogation due to systemic failings in implementation. For example, through widespread discounting of benefits due to uncertainty or unjustifiable high levels of optimism bias applied without critical analysis of the evidence base. This means that:

- The measures that are examined should be transparently chosen, and the best available;
- Decisions of affordability (a test not mentioned in the WFD) are only used to identify where alternative financing may be useful, and not to reduce the ambition of the RBMPs;
- Improvements to waterbodies are not ruled out simply because costs appear to exceed benefits;
- Unmonetised benefits are fully taken into account;
- The Treasury Green Book should only be applied where it is consistent with the WFD, as EU legislation must take precedence over national policy;
- Any initial screening process must take into account all potential benefits, and have a high degree of sensitivity testing that accounts for local differences in benefits, longer time horizons and removing the optimism bias on costs.

We remain concerned that the proposed economic process does not meet these tests, and will prevent good measures from being implemented.

c. Dealing with uncertainty

England has conducted the most extensive investigations of any Member State into the problems faced by our waterbodies, but is still very uncertain about what those problems are. We are baffled and extremely disappointed that the recent catchment walkovers, in which thousands of kilometres of riverbank were surveyed, have not provided a higher level of certainty, and that NGOs do not seem to have been allowed access to the results of the walkovers.

How we, as a society, choose act when faced with uncertainty is a political and legal issue, not a technical one. It is vital that the Government and statutory bodies choose and implement measures that are resilient and respect the precautionary principle that lies at the heart of domestic and European environmental policy and law rather than repeating the mistakes of the first round which saw measures discounted simply because the monitoring/investigation programme was unable to meet certainty criteria set by EA and Government.

d. Undervaluing nature and water

As detailed in the Natural Environment White Paper, general society, business interests and individuals have become more disconnected from the natural world and any understanding of how it

functions. This means that the majority of society has little insight into, or understanding of, the benefits that healthy and more natural systems deliver to them on an individual or societal basis. The consequences of this situation permeate every decision that is made about land management, business investment and individual decision making such as what to – or not to – put down the sink.

Solutions to help reverse this trend include promoting the polluter pays principle and using different business and economic models to internalise the costs of actions and choices that affect the environment. These costs are currently – often inadvertently – picked up by others. Other solutions include strategic awareness and engagement campaigns, which are sustained over long-term until they have delivered. Small fixes which could significantly contribute include the universal roll-out of water meters.

We also have specific concerns around the under-valuation of benefits in the second round of RBMPs. The National Water Environment Benefit Survey (NWEBS)¹ values being fed into the economic analysis are an improvement on previous figures, but are still cautiously low; together with the careful approach taken at other stages of the process, this may lead to worthwhile measures not being taken. This is particularly true for lakes, estuaries and coastal waters and Sites of Special Scientific Interest, where NWEBS appears to give very low values.

e. Cultural attitudes

There are deeply held and often unfounded assumptions about the causes of ecosystem decline in England. Deterioration has occurred over so many decades, and often in such an interlinked way that it can be difficult for some land mangers to understand their role in the bigger picture of ecosystem decline. Moreover, land managers and individuals have become detached from the cultural knowledge of just how spectacular our wetlands and rivers once were, and the wellbeing that could be derived from them, because the baseline reference point has been lost. This hinders people's willingness to engage in community based restoration projects, for example.

These issues are harder to address, but solutions could include support for initiatives that bring communities into close contact with local waterbodies, and awareness raising and support within the land owning community. There is a need for a positive and proactive approach to barriers such as health and safety, to enable safe enjoyment of our valuable natural assets.

f. Clear use of regulation

Regulation of potentially damaging activities is crucial to limiting any damage to waterbodies, and to providing a level playing field for regulated businesses. We believe that current enforcement is not sufficient to act as a deterrent to polluters, and that it does not follow the polluter pays principle. It is vital that existing regulations to protect our freshwaters and coasts, and the conditions for government grants, are soundly enforced.

This is particularly true of cross-compliance, where the Rural Payments Agency finds on average only 72 failures a year to meet all watercourse and hedgerow standards,² in contrast to catchment walkover results that suggest at least one watercourse failure for every kilometre of riverbank. Where members of the Blueprint for Water have held focus groups on this issue, members of the public are shocked that cross-compliance checking and penalties are so rare.

We also support clear new regulatory measures wherever they would be the most fair and effective way to prevent damage or pollution to waterbodies.

The benefits of regulation are frequently underestimated, while the 'burden' of regulation is often overstated: Defra have shown that wildlife regulations have a benefit-cost ratio of almost 9:1, with

¹ Metcalfe P (2012) Update of CRP WFD Benefit Values – Economic Component. Report to the Environment Agency.

² Rural Payments Agency (2013) Online Cross Compliance Inspection Statistics, http://tinyurl.com/rpastats.

direct costs that are only a small fraction of any sector's turnover.³ Voluntary and certified approaches have a far worse track record. For example, research from the Food and Environment Research Agency shows that members of the 'Red Tractor' scheme are less likely than non-members to meet cross-compliance requirements for watercourses and hedgerows⁴, while the Catchment Sensitive Farming programme has only shown ecological benefits in one of England's 93 catchments.⁵

g. Catchment based approach

We welcome the Catchment Based Approach (CaBA) initiative as a mechanism that has the potential to deliver elevated WFD delivery and, eventually, true integrated catchment management. However, we are concerned that our vision for a catchment approach does not align with the CaBA; we do not believe that the CaBA will be successful without clear strong objectives and clear strong governance. Our own research has indicated that local groups also feel this is essential, and learning from Europe (catchment 'Water Contracts' in France and Italy, for example) has also indicated that strong governance is an essential pre-requisite to over-come local disagreements or other implementation barriers. We do not believe that this conflicts with the Localism agenda, but would support it as it would facilitate local decisions being made by local groups.

In addition to strong governance and clear objectives, for partnership working with civil society to work, all partners must be treated fairly, which requires roles, responsibilities and expectations being set and the process by which decisions are made being transparent. For example, it should be clear where civil society groups can make joint decisions and where they may not.

Despite these concerns not yet being resolved, we are still keen to engage with the EA on the CaBA because we see a lot of potential if we can get the CaBA working fairly for all. Many Blueprint members are engaging at local level, and nationally via the National Catchment Steering Group. However, the CaBA is moving forward and swift action is needed to fully embrace stakeholder groups within the process of identifying measures and CBA. We would like to know how the measures that we have identified during the 'pilot phase' will be considered for cost benefit analysis. There should also be a clear mechanism by which the CaBA can feed into pre-CaBA decisions made about water body identification, classification and reasons for failure.

In conclusion, we support a catchment scale approach and the aspirations of the CaBA, but we seek urgent confirmation about how the CaBA will be governed, its objectives and the framework by which the CaBA will feed into River Basin Management Planning.

h. Protected areas

Improving and maintaining the health of protected areas is vital for looking after some of our most important water habitats and wildlife, and is a key plank of the WFD.

Four years ago, the current RBMPs identified 124 Natura 2000 sites that required improvement – and committed to fixing 110 of these by 2015. Many of these have still not recovered⁶. We do not believe that the European protected area network properly represents and protects our freshwater wildlife, so are extremely concerned that measures for even our limited suite of Natura 2000 sites are inadequate.

In 2012, 29 of the 407 coastal bathing waters in England failed to comply with the mandatory water quality standard and only 240 of these met the higher guideline standard. From the end of 2015

³ Defra (2011) The Costs and Benefits of Defra's Regulatory Stock: Emerging Findings from Defra's Regulation Assessment.

⁴ Fera (2013) Project BR0114: Study on farm assurance scheme membership and compliance with regulation under cross compliance. Report to Defra.

⁵ Natural England (2011) *Catchment Sensitive Farming ECSFDI phase 1 & 2 Evaluation.*

⁶ RSPB figures show that approximately 80% of Natura 2000 sites that overlap with their reserves are failing.

bathing waters will need to achieve the 'sufficient' standard of the revised Bathing Water Directive and the latest projected results show that 12% of coastal bathing waters in England would fail to achieve this. More effort is urgently needed to protect these important recreational waters to ensure that the 'sufficient' standard is achieved at all sites.

We believe it is urgently important that more effort, resources and political will are given to restoring these sites.

3. Issues

We believe that the significant water management issues laid out within this consultation are the correct ones. However, we believe this consultation underplays many of their impacts.

For example, invasive non-native species (INNS) have a much larger impact than indicated. A 2010 report estimated that the impact of invasive non-native species on the British economy was a minimum of £1.7billion per annum, and so the Blueprint for Water believes that the impact on 'economic development and security' is under-estimated. This is especially true as costs to manage INNS rise disproportionately over time.⁷

As another example, nitrate pollution has clear risks to the health of future generations; the European Environment Agency costs this risk to the UK at €2.6bn annually.⁸

4. Measures

If co-ordinated and implemented effectively, there are many management and policy tools that can address the problems facing our waterbodies, and enable more of them to achieve their objectives, including good status (GS) or good potential (GP), Protected Area etc. Many of these measures are described through the consultation document, but it would be useful to have a more detailed insight into the actual or likely effectiveness of each of these tools; there seems to be an assumption that because a management option exists it *has* or *will* deliver a solution.

To date, measures to achieve WFD objectives have been unambitious and that much more could be done to achieve improvements in the status of our water bodies, especially regarding the control of diffuse pollution and mitigation of impacts on heavily modified waters. The measures and mechanisms mentioned in this consultation tend to focus on smaller, less aspirational opportunities. More effective, larger-scale measures are available.

a. Abstraction and flow

The population of England is projected to increase, and when also coupled with the effects of climate change, this means that we fundamentally need to change attitudes across all parts of society in order to successfully address issues around abstraction and flow. Unnaturally low flows and artificial flow regimes caused by water abstraction can have damaging impacts on river systems, and their associated biota, including economically important migratory fish. Overabstraction and reductions in flow can also impact estuaries and potentially the viability of the commercial fisheries that depend on them. Many industry sectors, including the agricultural sector, remain inflexible in their long term outlook. Businesses are closely focused on the need to expand operations, and they assume they have a right to water that will enable this; instead, they need to place a much greater emphasis on water efficiency.

We believe that abstraction reform is absolutely vital to solving issues with abstraction and flow, and that the Government needs to recognise and address this.

⁷ Williams, F. et al. (2010) The Economic Cost of Invasive Non-Native Species on Great Britain, CABI

⁸ European Environment Agency (2013) *Late lessons from early warnings: science, precaution, innovation.* EEA Report No 1/2013.

b. <u>Chemicals, faecal and sanitary pollutants, fine sediment, nitrates, phosphorus and eutrophication</u>

i. Sewerage

We agree with recommendations to tackle misconnections. The water industry estimates that misconnections cause daily discharge of sewage to streams and rivers comparable to all the foul waste produced by a town the size of Swindon.⁹ However, we believe that management measures should include efforts to reduce the need to use combined sewer overflows (CSOs), for example by using sustainable drainage systems (SUDS). Overflow from sewers results in untreated sewage, including faecal and sanitary pollutants, discharging straight into rivers. These excess volumes are predominantly caused by significant amounts of surface water runoff generated by extreme weather events, for example intense storms or the extensive rain seen in 2012. Some progress has been made with introduction of remote monitoring of CSOs, but more action is needed to this area.

ii. Sustainable drainage systems (SuDS)

SuDS are a low impact, natural way of reducing surface water run-off. They can also provide a wealth of additional benefits, such as silting out fine sediment and treating low levels of pollution. SuDS can therefore be used to help reduce levels of chemicals, faecal pollutants, phosphorus, nitrates and fine sediments in our rivers and other waterbodies, in a similar way to treatment wetlands (see below). Urban SuDS can reduce the amount of surface water entering the sewers, and thereby help to reduce the number of CSOs and CSO events, thereby reducing the quantity of sewerage being dumped untreated into our waters.

The Government must enact Schedule 3 of the Flooding and Water Management Act, which requires all new developments to include SuDS in their plans, as soon as possible. We would also like to see clarity provided on the role of SuDS retrofitting to deal with surface water overflows, which affects both urban and rural environments.

iii. Improved land management

Land management has lagged behind other sectors in reducing its pollution of watercourses. This must be urgently addressed, using the most effective and fair measures available. We believe this requires a careful combination of incentives and regulation, as the current approach has reached its limits.

The measures proposed in this consultation, in particular for phosphate and nitrate pollution, overlook the potential for improved regulation to protect waterways and designated sites. Incentives have failed to significantly reduce diffuse pollution, which is damaging dozens of designated wetlands and hundreds of waterbodies. New incentives and funding must therefore be underpinned by a requirement to change polluting practices. This would allow statutory bodies to achieve much more effective and targeted use of specific measures, including changes to land management, enhanced use of precision application technology and well-placed treatment wetlands. As such, regulatory requirements should form a key part of any successor to the Catchment Sensitive Farming programme.

iv. Wetland treatment systems

There is evidence that wetland treatment systems can be used to significantly reduce a number of chemicals^{10,11}, nitrates¹², phosphates¹³, fine sediment¹⁴ and faecal pollutants¹⁵ from entering

⁹ Sewer Network Action Programme (2013) 'The problem of misconnections', <u>http://www.water.org.uk/home/resources-and-links/snap/misconnects</u>.

¹⁰ Di Luca, G. A. et al. (2011), 'Metal retention and distribution in the sediment of a constructed wetland for industrial wastewater treatment'. *Ecological Engineering*, *37*(9), 1267-1275.

waterbodies. If well designed, there are also tangible benefits to biodiversity and the delivery of government objectives, including *Biodiversity 2020*. In addition, there are other associated benefits to carefully designed systems such as amenity, education, well-being and recreational value.

Wetland treatment systems can be designed to treat an extremely wide range of effluent types, and have been designed to treat effluent from a number of industrial processes such as equine clinics, landfill, metallurgic plants and breweries. Wetland treatment systems can be used by water companies to treat waste water before it is released back into the rivers. If well sited, wetland treatment systems can be used on farms and farmland to treat diffuse water pollution from agriculture. Both water companies and agricultural processes are highlighted as major contributors preventing waters from reaching good status under the WFD.

c. Invasive non-native species (INNS)

There is a real need for improved legislation in relation to INNS, and the harmonisation of allied legislation right across the UK. For example, Scottish law has made provisions for 'species orders' which allow allocated authorities to enter private land to deal with problem organisms, and then recover those costs. There is no such provision in England. In addition, although there is provision in English law to ban the sale of problem species (via Section 41 of the Natural Environment and Rural Communities Act), this has to date not been utilised in a timely or preventative fashion.

Although the GB Non Native Species Secretariat has achieved a great deal, the current array of measures and tools available to tackle INNS will not be sufficient to address the problem of INNS. There has been some success with awareness campaigns such as 'Be Plantwise' and 'Check, Clean, Dry', but there are significant improvements that could be made including the inclusion of other species, and a reporting mechanism that can demonstrate its success. There are many other stakeholders who are not currently being reached, suggesting that a wider, better funded campaign is needed, which would also attract resources and commitments from other organisations.

We believe there is a need for a strategic approach to tackling the issue of INNS which is currently lacking. This should include the development of Action Plans for species of highest priority/risk, which are causing the most environmental damage rather than the current ad hoc approach to selecting problem species. The Government needs to develop pathway action plans, to identify how species are arriving and develop measures to address the points of entry.

Currently, Local Action Groups deliver and coordinate significant work to address INNS; however, there is a need to co-ordinate local action towards more strategic, landscape scale goals, using catchments as the geographical framework.

d. Physical modification

Physical modification is the most common cause of damage to waterbodies. As such, we welcome the effort that is being put into removing in-stream obstructions to fish passage, but we believe that much more must be done to reconnect rivers with their banks and floodplains, lakes with their shores, and all waterbodies with the wildlife around them. Projects to improve riverbank and coastal habitat, and to return fish to rivers, are often the most important ones to the people that live near

¹¹ Gregoire, C., et al. (2009) 'Mitigation of Agricultural Nonpoint-Source Pesticide Pollution in Artificial Wetland Ecosystems – A Review.' *Climate Change, Intercropping, Pest Control and Beneficial Microorganisms*, 293-338.

¹² Dunne, E. J. et al. (2005) 'An integrated constructed wetland to treat contaminants and nutrients from dairy farmyard dirty water.' *Ecological Engineering*, *24*(3), 219-232.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Tanner, C. C., Clayton, J. S., & Upsdell, M. P. (1995) 'Effect of loading rate and planting on treatment of dairy farm wastewaters in constructed wetlands—I. Removal of oxygen demand, suspended solids and faecal coliforms.' *Water Research*, *29*(1), 17-26.

rivers, lakes and coasts. A well-designed and ambitious scheme can make a world of difference to a community.

We support the consultation's proposal of a long list of new options, including finance, regulation and guidance to support the necessary work. It is important that these are followed through.

Nonetheless, efforts to deal with physical modification must be substantially bolstered. Statutory bodies have been too complacent, believing that meeting the poorly defined mitigation measures set out in the current RBMPs is 'enough'; they have often overlooked better environmental options and visionary projects. This must be addressed in the new plans, and in the guidance and requirements for each body, including changes to the Environment Agency's appraisal guidance and process, and duties on all flood management authorities to act in a way that secures the goals of the Directive. Private and commercial activities that could physically damage rivers must be carefully checked and controlled – in clear contrast to the proposed regulatory position statement on the dredging of main river.

5. Summary

Restoring our rivers, lakes and coasts requires and deserves an effective package of incentives and regulation. With the right measures, huge progress can be made over the next fifteen years to return our waterways to health, and engage people with the wildlife they hold.

The Blueprint for Water coalition is keen to work together with Government to improve the status of England's water bodies. However, we cannot do it alone and require leadership, commitment and resources from Government to enable significant improvements to occur. We would be happy to cover any of the points raised in this response in more detail and look forward to further dialogue throughout the development of RBMPs.

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