SUSTAINABLE SOILS ALLIANCE

24 September 2020

Response to the:
Environment Agency 2021 River Basin Management Plan,
Guide to Challenges and Choices consultation.

The Sustainable Soils Alliance (SSA) was launched in 2017 to address the current crisis in our soils. Its aim is to campaign to restore UK soils to health within one generation by seeing soil health elevated to where it belongs as a priority alongside clean air and clean water. The SSA is a non-profit organisation (CIC number 10802764).

19. What can be done to address pollution from agriculture and rural areas?

1. Investment in both regulatory enforcement and awareness-raising among farmers about the regulations and how to comply
2. Regulatory compliance becoming a prerequisite for the receipt of public funds
3. The development of soil-management specific on-farm guidance
4. The Environment Agency being understood for its work on soil as much as water

To begin, we would draw the Agency's attention to the Salmon and Trout Conservation S&TC's Census Report, published in May 2019, which demonstrates conclusively that the main damage done to our rivers in rural areas was a result of poor land management – especially excess fine sediment, phosphates, and pesticides. Poor soil management that causes erosion, compaction and the leaching of inputs lies at the heart of this.

Resolving the situation, and the systemic failures that lie behind it requires a careful balance of regulation, incentivisation and education, and the Environment Agency (EA) River Axe N2K Catchment Regulatory Project Report 2019 is a case study of what can be achieved if the correct balance is struck.

Soil management is regulated via a) the 8 Farming Rules for Water which were transposed into domestic Diffuse Pollution legislation in 2018, and b) (for the time being), BPS cross-compliance rules (GAEC 4, 5, 6) which include providing minimum soil cover, minimising soil erosion and maintaining the level of organic matter. However these stand to fall away once we leave the CAP.

The 8 Farming Rules were a modest but sensible step forward for protecting soils, however their impact is severely curtailed, because a) awareness of them among farmers is very low and b) the likelihood of inspection (and therefore penalty) is vanishingly small. The Agency's own target is to visit 0.5% of the country's 100,000 farms each year, meaning farms can expect a visit once every 200 years.

There needs to be an honest appraisal of the limited impact that regulations will have if there is not adequate investment in education, awareness raising and enforcement of them. This appraisal should make the case for greatly increased funding, and the creation of a dedicated, soil-specific capability within the Environment Agency.

Regulation should not stand on its own, however, and the Axe example clearly shows how the combination of advice and financial incentives, supported by the threat of tough regulation, was sufficient to encourage farmers to act.

Subsidies will play an important role in driving behaviour change, and we welcome the fact that the Agriculture Bill allows for farmers to be paid for activities that improve their soil through Environmental Land Management. To be effective, targeted and crucially – deliver value for money, however, there needs to be a clear distinction between those farming practices that are required in order to be compliant with existing regulations and those that might be eligible for financial support.

To this point, the Environment Agency needs to work hand in hand with the agency responsible for delivering ELM, to ensure that the balance of incentive and penalty is struck. A clear demonstration of regulatory compliance should be a prerequisite for any funding, as well as a commitment to routinely measure and monitor soil health by all scheme participants.

Advice and guidance - both of the legal framework and the practices that improve soil - is the third, critical pillar for promoting good soil management. Here there is a very striking vacuum of genuinely up-to-date, expert advice. Indeed, a recent analysis by the SSA revealed a plethora of soils guidance developed by NGOs, trade bodies, local catchment schemes etc, but none that carries the stamp of the Environment Agency, and therefore which carries the necessary authority to motivate universal uptake.

Under these circumstances, farmers looking to improve their soils will not know where to turn – increasing their dependence on farming advisors, and the agro-chemicals industry (see Q20).

There is a broader issue at stake here which is about the Environment Agency's role – and the perception of its role in addressing agricultural pollution. To most farming stakeholders, the Agency is understood as a 'water' agency – for obvious reasons. For a generation, water has been the bellwether of environmental harm, largely due to the impact (via penalties and fines) of EU Framework Directives on UK policy making and, critically, investment.

As we have looked to explain here, however, water and soil health are inextricably linked, and the critical interventions that influence water health take place through the soil. To reflect this, the Environment Agency needs to be understood as the 'soil' agency, as much as the 'water' agency. Not only does this reflect chemical, physical and biological realities, but it will send a message to farmers and other stakeholders that its remit extends that far, and that their activities need to comply accordingly.

Our recent Freedom of Information Request revealed that in England, soil monitoring has received only 0.4% of the total spending on the monitoring of water, air and soil. We would urge the Environment Agency to rebalance this situation and make it a priority to address water issues by addressing soil issues 'in the headwater', by properly investing in the technical capacity needed to monitor our soils in relation to water.

20. How can we support the farming sector to excel at innovative solutions which benefit both productivity and the environment? What should these solutions look like?

Feedback from our Advisory Board is that there are three key sets of barriers that prevent farmers from taking the real or perceived risks of changing their farming practices: (i) economic, (ii) knowledge and (iii) social.

We would like to focus on the second of these, and the importance of farm guidance and advice in informing and influencing a farmer's decision-making. Up-to-date, authoritative farming advice and guidance is critical to driving behaviour change, overcoming barriers to change and demonstrating the long-term return on investment of innovative new approaches.

No-where is the need for such guidance more critical than in the area of soil management. As outlined above, despite a plethora of available (but often outdated) guidance resources, there is a demonstrable need for a definitive, Defra-driven guidance about how to assess soil health and how to identify and remedy soil degradation problems.

Above all, such guidance needs to:

- Be up-to-date and authoritative (i.e. government sponsored)
- Consider soil in the round, reflecting all the productivity and ecosystem services it delivers
- Be consistently and proactively communicated to farmers
- Propose consistent targets, metrics (soil quality indicators) or standard operating procedures
- Be universal – can be understood by all farmers but reflect geographical variations
- Be tied into and reflect regulations and enforcement
- Receive adequate investment to achieve widespread take-up

Environmental Land Management represents a once in a generation opportunity to put soils at the heart of farming policy, and the Environment Agency should develop guidance in accordance with these principles and push for it to be embedded throughout ELM architecture – land management practices, measurement and monitoring and reporting.

Over and above ELM though, the development of such guidance by the Agency would demonstrate a tangible engagement with soil health, a new era of soil appreciation and a commitment to achieve the government's aim, outlined in the 25 Year Plan for the Environment, to achieve sustainably managed soils by 2030.

Alongside Guidance, clear and independent soil-centric advice for farmers is critical for achieving environmental and productivity outcomes. Until now, available advice has been dramatically skewed towards achieving the latter at the expense of the former.

- More than 50% of agronomic advisors supporting arable farmers in the UK work for suppliers of agrochemicals and other inputs[1] and it is understood that an over-application of pesticides by an average of 30%[2] can result.
- The annual Rural Business Survey[3] in 2018 found that every one of the top 25% of the most profitable farms in England were advised by independent agronomists.
- Of the 6,000 agronomic advisors registered with BASIS (an organisation that manages a number of industry qualifications for the pesticide and fertiliser industries), only 20% have undertaken the Soil and Water Management Certificate over the last 10 years[4].

There is clearly a policy need to balance the influence of these advisors, and while the Agency does not have a responsibility for policy making, it can use its knowledge and experience to inform government decision-making on this point, and specifically the availability of farmer advice that (i) is free of conflict of interest with the sale of inputs, (ii) has a minimum standard of knowledge on farming practices that deliver public goods, and (iii) is as easy to access as possible.

The Agency understands better than anyone the demand for independent advice, the current disconnect between productivity and environmental results – and critically the fact that the two outcomes need not necessarily be at odds. The health of our soil is the critical demonstrator of this.

1 Source: data from the Association of Independent Crop Consultants (AICC) 2 Experience of Belgian farmers joining farmer association, Regenacterre
3 Carried out by Gary Markham of Land Family Business
4 Source: data direct from BASIS