

Draft National Action Plan on the sustainable use of pesticides

Anglian Water response to Defra consultation, February 2021

Questions

For Goal 1: Ensure continued robust regulation to protect our health and environment.

1. *In the context of maintaining current high levels of protection for human health and the environment, what can we do to make the regulatory system for pesticides simpler and more efficient?*

Given the repeated and widespread challenges posed by pesticides in raw water we would advocate a stricter system which incorporates fate in water and treatability of pesticides as a critical element prior to any authorisation or product reregistration being granted. The current model which focuses on toxicity misses the significant impact of lower toxicity products that are hard to treat or remove from water bodies and the environment.

There is therefore a need to implement a system of provisional registration to ensure modelled impacts correlate with real-world observations. Provisional authorisation would require monitoring the fate and effects of pesticide products in these landscapes and catchments, and the final authorization decision would be made in light of this monitoring. This would also ensure adequate accredited analytical methods are readily available.

2. *What could we do to increase transparency about the way that evidence is used to inform decisions on the regulation of pesticides?*

Greater data capture and analysis to show the fate of pesticides in water, reported on an annual basis, and used to dynamically alter product authorisation should the evidence show existing control measures to be ineffective. There needs to be much better information collected and presented on which pesticides are treatable and which ones cause problems.

3. *How can we best ensure that our regulatory systems keep up with innovation and scientific development including new technologies?*

Mandate compulsory stewardship for all mitigation actions, and greater early engagement and partnership working between pesticide manufacturers and the water industry.

4. *What actions could we take to expand and improve the current Biopesticides Scheme, to increase the availability of approved biopesticide products and better support potential users?*

Support potential users by educating them at grassroots level – ensure the topic is included in syllabuses at relevant colleges and universities. De-mystify their use e.g. by supporting AHDB or independent bodies such as ADAS to test biopesticides and focus on knowledge dissemination. Key stakeholders could be encouraged, including through financial incentives, to test biopesticides and capture evidence and lessons to inform future policy.

Few farmers want to be the first to try something bold and new on their own which could be perceived as 'risky'. But this could be overcome by providing expert agronomist advice in cases where a biopesticide might be a useful alternative.

5. *What are the priorities for research to better understand the impacts of changes in regulation?*

Consult with all interested parties including water companies to ensure management and mitigation are appropriate for the needs of all parties impacted. Further research is needed in cultural (non-chemical) control methods – to help ensure the full range of mitigations are taken up.

There is also a need to understand current use and how different types and sizes of farm could be impacted by the regulatory change. Most farmers would rather be part of the resolution to a problem than end up with stricter rules and enforcement. Hence the suggestion to involve farmers in stewardship trials.

6. What other suggestions do you have for improvements to the regulatory system for pesticides?

Practical regulations and best practice have more of an impact in the real world and are suited to the nature of the industry over paper-based exercises and evidencing of compliance. The NRoSO training and NSTS testing are perhaps two examples that are now well established and accepted and have an impact on training/ knowledge levels of operators and precision respectively. Improving the regulations by moving towards practical application of the principle over paperwork.

Encourage a catchment approach to understand issues and strains which allows for a localised approach to be tailored – even within our operational region (East Anglia) the pressures vary significantly, let alone nationally.

Make sure professional products cannot be purchased online by unqualified members of the general public. Ban use of products other than for agriculture where there are feasible alternatives that are more environmentally safe (in terms of handling/use/disposal) for use by the general public.

For Goal 2: Support the development and uptake of Integrated Pest Management (IPM)

7. How can we best develop and support management and advisory services to deliver an increase in the uptake of IPM?

IPM is not a standard one size fits all and a lot of farmers are doing this at least to some degree but may not realise it. Crop variety/rotations, what crop is being drilled in which field at what rate, cultivations, stewardship options etc can all count and are probably decided based on a number of factors.

Facilitate the recording and monitoring of changes to encourage others to follow suit. Concentrate resources where it will do best on the holding to support the business both financially and in terms of its adherence to regulations. No reason more could not be made of UK farmers' IPM practices to help them sell their produce.

Ensure that reliance is not placed on every advisor to deliver IPM guidance – there is a big need for independent advice here to ensure level playing field and genuine uptake. Many advisors have little interest in delivering genuine environmental outcomes as they are commissioned to deliver financial gain and value to their customer/farmer. Increase training standards given to new advisors, and make sure IPM is studied more at university and college.

There is an opportunity to incentivise IPM through ELMs and focus on practical application. Management and advisory services will form a great support network for help, training and knowledge dissemination. However, the support network is only useful if farmers are stimulated to make the change on farm or maximise an existing practice that fits with IPM. IPM should become a need to do, not nice to do. Financial support should be provided through ELMs to assist, focusing on practical and profitable shifts which are sustainable long term. The advisory network could provide help and advice with monitoring and evidencing this adoption of IPM.

On the ground catchment specific trials and case studies and effective information dissemination. Use already established channels of communication such as the AHDB monitor farm set up. Use local farmers that are funded to carry out IPM practices as demo sites for local areas. Link to local colleges and BASIS trainers.

Develop a formal and nationally recognised accreditation for agricultural advisors that gives credibility and assurance to practitioners.

8. What else could we do to ensure that pesticide users are fully informed about the benefits and practicalities of IPM approaches?

Encourage small steps – the world won't wake up the following day supporting IPM. Target small scale users initially (inc. amenity) and support them through the process of transition with knowledge and training.

Make sure that big companies appreciate and are aware of the practicalities involved with IPM so they can talk to their growers about implementing or recording efforts.

Disseminate findings through press and funded trials the specific small steps that growers can take in their own business area.

9. How can the promotion of recognised standards be used to encourage the uptake of IPM, in amenity, agriculture and more widely?

Local demonstration sites come into their own here – farmers need to see this working successfully on farms ‘like theirs’. Recognised thresholds (well tested) from trusted bodies in terms of crop tolerance to pest level would help aid confidence in the adoption of the ‘Monitoring’ stage of the IMP pyramid.

Consider a new LEAF/Red Tractor marque type standard specifically for IPM- many farmers are already doing IPM. Link IPM to monetary benefits either directly via ELMS or government funding for certain actions, or indirectly via promoting research that shows benefits of IPM. Local demo sites also needed of different types - so that farmers see it on their own farm.

10. What suggestions do you have for a communications campaign to encourage more uptake of IPM?

Encourage groups of neighbouring land managers, linked growers, members to change/implement one relevant thing together. Devoting a small area as a trial each year has worked for other companies and may be a good way for individual farm businesses to keep exploring. Starting the conversation is key.

Encourage a new way of working, joining up agriculture and amenity/gardeners to create ‘model’ catchments?

- Create an agricultural land managers’ platform to disseminate research findings to farmers and agri-stakeholders.
- Invest in local demo sites - farmers learn from farmers, articles in Farmers Weekly etc.
- Always link IPM benefits back to gross margin - if they aren’t profitable why would anyone take them up?

Nationally encouraged as the accepted approach from government, regulators, standards agencies all talking from the same page perhaps through the farming press. Locally through agronomists, advisors so that they are going out on farm armed with messages and advice on the topic (can at least signpost where to find out more).

Use the existing channels out there, VI, NFU, CLA, water companies etc etc, the list goes on in terms of stakeholders. Additionally, there is a lot of work with regard to model (what we would call champion farms) – is there a piece of work required to fully understand what is out there and how best practice can best be disseminated?

11. How could we use financial support schemes to offset risks associated with IPM?

Use baseline/budgeting books such as John Nix to understand costings of farms managed as at present, and consider the cost implications stated to make these changes. Incentivise with a baseline payment per IPM measure? Make best use of ELMs and incorporate this from the start, building up slowly until farmers are accustomed to the new ideas. Continue to support when they are.

In every business, you need to show incentives. These can be either a cost reduction, increase in productivity, an increase in price, or a combination of all of these.

Support schemes could be used to encourage farmers to trial new IPM options. These would be farm type specific so that it is easy to see which IPM options would suit a certain farm type/soil type. A small suite of IPM options could be offered at first to all, increasing year on year to get farmers used to getting paid in this way.

Certain farms would lend themselves to more IPM than others, and farmers who find this more difficult due to perhaps being tenant farmers and so take more financial risk on trying new things, shouldn't be penalized.

Make sure the scheme highlights the payback period of any IPM option in terms of Gross margin e.g. if an option decreases yield in first 5 years for example, this yield penalty should be covered and any long term yield increases or stabilization shown, so that farmers can see the longer term benefits of adopting an IPM method.

Supplement paid to land managers who devote a trial area within the holding for set (agreed) objectives. Money is used to encourage land managers to try new approaches at a reduced risk but with an agreement that they share results (both good and bad).

Financial incentives may only be required as initial pump funding of any initiative. There needs to be a way the initiative can stand on its own two feet rather than rely on continual funding. Additionally, if farmers receive funding, do they truly understand and take ownership of the initiative?

12. What should government do to facilitate research on the availability of effective methods of pest control?

Look at historic methods – don't forget regenerative agriculture and the value it can bring to soil health. Healthy soils mean healthy crops, a better chance of controlling pests/diseases, and healthy waterbodies.

Make sure the best projects that are funded include local demo sites and input from farmers/real life trials, applied not just academic research.

Make it a component of ELMs that trial areas (looking to reduce key national concerns) within registered land parcels has a devoted land use code, from which farmers can claim additional payments on - if working with an approved partner (can have list of approved partners on a website or to be stated in an application). Failing that provide funding opportunities to organisations who work at a catchment scale to apply for projects ranging across multiple holdings or trial areas (min of 5 trials/holdings so gain larger dataset each year which may also encourage communication between trial hosts).

Provide support to (there are established) groups embarked on regenerative/ sustainable farming methods to stimulate wider reach of their learnings or greater monitoring of their established practices. There will be lots of documents, papers etc out there, maybe one piece of work to review what's out there and collate the information – if that has not already been done but probably has.

13. What other suggestions would you make to improve uptake of IPM approaches?

Make gradual transitions – 'new' ideas won't filter through straight away – create a tiered approach to change where those able to/financially fitter/had a better few years are able to experiment more than those who are currently struggling. No one size fits all in agriculture! Create a more open dynamic around pesticide review dates – linking back to highlighting the 'top 5' pesticides and the issue around their presence/time of year/link with abstraction. Emphasise the business benefits from following IPM approaches – a bit like LEAF and Red Tractor.

Should we be setting up IPM programmes, instead of herbicide/fungicide programmes? Or incorporating the two together more?

Bit like the old Nutrient Management Plan and the Soil Management Plans under stewardship – create a template and demonstrate how useful it would be to the business if they made and kept an IPM decision log each year. Soil Management Plans are no longer needed but farmers still have them and keep in case of issues to show they had considered x and y if ever questioned. Would an IPM record of measures/considerations be good to keep alongside your pesticide applications log and reviewed in line with crop rotation changes?

Continue with the champion/monitor farm approach – farmers learn from farmers. Use academic research to underpin, use trials to establish the measure and use the discussion to take farmers on the journey.

For Goal 3: Ensure those that use pesticides do so safely and sustainably.

14. How should we raise awareness of the health, environmental and legal risks of using professional products without having the correct training and certification?

Correct training and certification are essential. Online sales need looking at and loopholes closed. Where alternatives present better environmental protection the government should limit the choice of products available to the amateur market.

Unfortunately, the only effective way is to make people aware of the penalty of serious and intentional breaches of using pesticides without training or certification. It is very undermining for those taking time and paying to keep up to date and fully qualified or paying for a qualified operator, to see others taking shortcuts and exploiting loopholes.

Look at the weak spots - occasional users that are not up to speed on the rules and requirements.

15. What would be the benefits and challenges of introducing a legal requirement for certification of pesticide advisors?

Benefits would include greater (multi-sector) best practice use, storage and disposal of products, thus reducing environmental impacts and increasing the possibility of retaining chemicals on the market. The challenge is how to enforce a legal requirement for certification with the ever-growing shift to online (faceless) sales. Much like credit cards are validated at checkout, vendors should require a qualification number to validate that corresponds to the payment card. No chemicals should be being sold other than through approved retailers taking this approach.

BASIS is an existing scheme so don't reinvent the wheel. If BASIS is not doing the job it needs to, look at adapting it rather than bringing in something new.

16. What more should retailers be doing to inform amateur pesticide users about the actions they can take to control pests more sustainably?

Adverts – they are everywhere now on the internet, social media etc. use of wall space in garden centres/supermarkets where people are purchasing actives. Use of posters/ads to show what others are doing and contributing to the IPM approach. Information on cost to water companies addressed to bill payers? Radio adverts, adverts in popular magazines, adverts on social media, supermarkets taking more responsibility for what they sell and the information they provide at Point of Sale to customers.

In store or online point of contact best practice advice on alternate methods of control – stick a poster up or put some leaflets out.

If purchasing online why can't there be a checklist that you first have to click - yes I know the target weed, yes the weed burden is high and can't be managed by hand, yes I am aware to use the product as per the label guidance to maximise its effect and keep me and the environment safe.

17. How can we best target inspection and enforcement to prevent unsafe and environmentally damaging pest management practices?

Take a catchment approach – needs to be undertaken by people who understand the catchment and where hotspots may be, focussing around monitoring and necessary enforcement if the incident is linked to drinking waters/SSSIs/other designations.

Link to local water monitoring data to target hotspot areas, rather than broad brush approach. Need to have legal backing if the issue is coming from a public garden, golf course, livery yard, local council etc so that there is more transparency and accountability for amateur users.

Catchment approach is good but need to ensure you do not detrimentally affect positive relationships being made on the ground by other organisations. Talk to EA and use Water Quality data to help focus and don't always go to agriculture in order to hit the easy wins – most farmers follow best practice and have audits and advisory visits plus formal CPD training. If you know what the issues are then talk to advisors and retailers to help, see what the local situation is and then take a holistic look at the land management within that area. Prevention is better than cure so concentrate on Q16 strongly and maybe think about some legal text regards inspection if product not used properly and picked up in the environment.

Using a collaborative joined up catchment-based approach which includes discussion, conversation and solutions.

18. What kinds of challenges need to be addressed in order to ensure safe disposal of unused pesticides and pesticide containers?

Cost is seen as a key limitation to effective disposal – thus national centrally-funded schemes are needed to offset risk rather the targeted schemes focused on individual product groups. On an agricultural front it costs a lot to get chemical disposal companies to come out (travel to farm and fill in paperwork etc) so farmers wait until they have a greater quantity of unwanted chemical prior to organizing disposal.

Councils could focus on disposal of amateur use products, we have not seen this being done. For smaller scale users, there are different rules at different council recycling centres so maybe it would be better to get this standardised so labels can read 'dispose like this' rather than 'as per your local council recommendations'. This places too much onus on users finding out the right thing to do and following the guidance.

A national campaign which is ongoing to remind everyone to review their product stores. There may be a role for pesticide amnesties in some circumstances.

19. How can we best make sure that members of the public know what to do when pesticide products are withdrawn from sale?

Adverts as above – social media. Garden centres/supermarkets/places of purchase. Village magazines and local networks e.g. local Council, village magazine, BBC news.

Ensure the label has disposal guidance and a link to manufacturer website for advice. Only sell small quantities and one or two products per customer at a time. If larger volumes are required, should be directed toward retailers for professional use.

When metaldehyde was initially banned many garden centres promoted sales of metaldehyde pellets in the bargain bins at reduced prices to sell the rest of their stock. This shows the government needs to get the messaging right and act to avoid unintended consequences, with the retailers told to pull products from shelves and not allow discounted sales.

20. What further actions are needed to ensure that equipment used for application of pesticides complies with safety requirements?

For agricultural users the current schemes are appropriate - NSTS testing and grants for precision agriculture etc. For amenity users, education would be the way forward and/or targeting specific groups e.g. equine, councils with having to have a set test before they can legally apply a pesticide and a requirement for their pesticide applicators to be tested by an independent testing body yearly. It could be a requirement for anyone who buys a new knapsack sprayer to have it tested every three years. This would involve each knapsack having a code that could be linked back to a person's address.

21. What else should we do to ensure that pesticides are used safely and responsibly?

Draw learnings from agriculture/amenity/horticulture and vice versa – lots of learning there and shared ideas. Take the professionalism of agriculture and promote that to the other pesticide user groups. Take feedback from assurance schemes, stakeholders and create case studies possible for VI to facilitate this or BASIS or CRD

For Goal 4: Support in the reduction of the risks associated with pesticides by setting clear targets by the end of 2022 and improving metrics and indicators.

22. What are the priorities for data collection and research on pesticide usage?

Broaden the approach of 'what is used when/why/how', which is demonstrated well by Anglian Water in our catchments. Are the levels detected increasing or decreasing – how does this link to recent weather patterns/yields etc.

Make the EA Water quality monitoring and Anglian Water monitoring data available per catchment to better understand pesticide use in each catchment. Ensure multiple years of data is available. Ensure there is knowledge of the context e.g. why a particular pesticide is chosen, using industry consultation if needed.

Make it a requirement that all agronomy companies need to engage with their local water company catchment departments (if issuing advice to growers within drinking water protected areas/safe guard zones and source protection zones) in order to be aware of catchment pressures, so they can take local circumstances into account when considering different plant protection product strategies. The same should be said for any councils with amenity and allotment interests. At the moment it is left to water companies having to react and seek engagement due to an issue which has arisen rather than proactive engagement by product users and advisors.

Ensure everyone knows where to go to access the information. AIC have a water quality page – can this be accessed by all – is it fit for purpose? There is a lot of information out there, so it's more about facilitating the collation and dissemination of it.

23. What are the priorities for research on the environmental impact of pesticides?

Farmers need to see/visualise their impact more than they currently do (hence hand-held monitoring kits). It is hard to explain there is an issue when often the farmer is 20+ miles from a sampling site or environmental site that is being impacted.

The more that can be done to build appreciation of the water environment and the disbenefits of poor water quality the greater the protection. One way to increase people's interest is to work at a local level for a local watercourse. Evidence how it does not matter how big or small a user of pesticides you are you can still have an impact. Connectivity is always key, but it may be good to research into sales per sector targeted (garden centre, country stores, ag distributors/buyer groups etc) to be able to engage/advise in each case appropriately.

When a product goes through the approval process, the manufacturer has to have the dossier complete with the environmental impact, so the information is already there for each active. As it differs for each active, collate the information to make it simpler – this would feed into the LERAP information.

24. What are the priorities for research on the health impacts of pesticides?

Quantify how different types of PPE can reduce the health impacts of pesticides when they are applied, e.g when different face masks, gloves etc are used. Encourage farmers to change the pesticide filters in the sprayer more frequently- perhaps a financial scheme to incentive this, as this could help reduce human health risk in the sprayer cab. Make sure any research is independently carried out and verified. Research by pesticide companies or lobbyists is not trusted.

25. *What suggestions do you have for ways of measuring our progress against the goals set out in this NAP?*

Survey farmers on their uptake of IPM. A simple 3 question survey at CSF/NE/EA/local events in catchment with signposting of information and follow up visits available to those interested. Ticking off 'low hanging fruit' farmers mean more are likely to follow suit.

Need to get a baseline of current use of IPM and then put in place yearly surveys to monitor change- could be done at Red Tractor Audit which is yearly or as part of NSTS test?

For Goal 5: Ensure that DEFRA work effectively with others to deliver the NAP goals.

26. How can we best bring together stakeholders with diverse interests to support delivery of the NAP, working towards a common goal of sustainable pest management?

Set clear progress points and 'ideal' situation goals and stick to them – no moving goal posts as people become put off and demotivated.

Provide a variety of ways for people to contribute e.g. online, face to face consultation, webinar. Have open access/broad invitation from the start, so it's not just those that shout the loudest or have another agenda that join. Ensure regular feedback to stakeholders with progress. Define clear aims of the group and goals so that the focus is on effective action to achieve them.

Create local leaders/groups or work with local Facilitation Funds or CABA groups to work up local projects about IPM priorities.

It is crucial that as well as interest groups, that the parties needed to deliver and advise on the goals of the NAP are engaged. This means the agri-chemical industry and network of farm advisors who are independent and within government led organisations. This could be achieved by highlighting the steer towards support with schemes and requirements for the implementation of approaches like IPM more heavily in the future funding model (ELM).

Develop a MAP (Multi Actor Platform) for each catchment/region. This would highlight the stakeholders required in that area and look at how to best work together.

27. Considering the NAP as a whole, what other comments and suggestions would you like to make in addition to those covered by previous questions?

We need productive agriculture, more now than ever in this country. Without active farming and land management many habitats/areas and management plans would be unfulfilled. Farm businesses must be profitable to enable change, such as IPM uptake to be completed. There needs to be a clear path ahead with fair incentives, to encourage investment and uptake from the farming community.

The wider market, especially buyers and grain merchants must not be forgotten in this conversation. There are farmers out there who are trying to implement IPM methods already, but with pushback from buyers/grain merchants.