

YDCP Challenges and Choices response April 2020

1. The way we treat water today will shape all our futures. What changes can you make to improve the water we rely on?

Our catchment partnership implements the 'catchment based approach' to deliver positive changes throughout the catchment. We feel it's important to continue following the CaBA approach into the future, working together with our partners to improve our water environment. Good communication remains key to our partnership working, now and into the future and can be used to promote messages such as reducing water waste and biosecurity.

Climate and biodiversity crisis

2. What more can we do to tackle the impacts of climate change on the water environment and what additional resources (including evidence, targets, tools and additional mechanisms/measures) do we need to do this?

We need to continue to pursue a better understanding of the movement of water through our catchment and therefore understand how to use it more efficiently. We believe a good evidence base is vital to do this and we need to continue building on this into the future. More funding for research would support this. A county/ National database including information from all sources would limit duplication of research and resources (e.g. include data on WFD status, NVZ, geology, heritage etc on one database).

We believe good soil health and management and retaining water on the moorland in the upper catchment is key to water retention and quality in our primarily rural catchment. There are proposals in the new ELMs to look at catchment and NRN's as part of setting targets for the mid-tier (Tier 2) scheme. These proposals are good and should be developed into official targets/ objectives.

The River Derwent has been historically straightened and disconnected to the floodplain; we need a stronger driver from the EA to actively seek to connect more of the river back to its floodplain and to re-naturalise watercourses to help mitigate against the impacts of climate change e.g. flooding and drought.

Our catchment is already engaged in NFM (Defra funded, small scale project) however, we need to begin developing a catchment scale NFM plan based on data/evidence and modelling. Increased availability of funding for research, information and project development would assist.

3. What can we do to address this biodiversity crisis and meet the 25 Year Environment Plan targets for wetlands, freshwater and coastal habitats and wildlife?

We need to create landscape scale Nature Recovery Networks throughout our catchment and source funding to enable effective delivery with realistic targets. These can include a catchment wide 'wish list' for habitat creation and habitat enhancement in anticipation for net gain developer contributions i.e. habitat banking process, and to anticipate impacts of climate change. There are many designated sites throughout our catchment (SSSI, SAC, SPA, Ramsar) too many are in poor condition, we need to ensure these sites are of 'good' status and use them as framework to build our Nature Recovery Networks.

A lot of the reason for poor biodiversity in farming areas is lack of enforcement on polluters/ poor practice farming which can destroy biodiversity. Also cash incentives for farmers to be biodiversity

conscious is too small and very short term. For the consumer, the true cost of products and food is hidden – they do not associate their food consumption to negative biodiversity in the countryside (polluter does not pay).

There needs to be more funding available for 'biodiversity' projects, rather than solely WFD based including species such as White-clawed Crayfish, lamprey, European eel and lowland waders. The majority of our current funding for project delivery is annual and based around improving the WFD status of watercourses but this lacks flexibility to move focus onto biodiversity/species improvements. More flexibility in funding spend and outcomes would help improve biodiversity outcomes.

There needs to be long term support and commitment from EA and their IDB partners towards the biodiversity and restoration projects on the catchment to avoid wasted money and efforts.

We need to keep monitoring our water environment so we have strong baseline data. This requires partnership working, sharing data and using citizen science methods where appropriate to build on our evidence base. Our catchment partnership understands the importance of monitoring, however, we lack clear guidance, resource and capacity to coordinate a catchment wide monitoring programme. We need to know what needs monitoring and how, with what kit. More direction/ a single clear method used nationally, is required.

4. Environmental targets can generate action and provide a strong signal of intent. Could additional statutory targets contribute to improving the water environment? If so, what types of targets should be considered?

We feel that targets for public bodies and public funds would help direct action. These targets need to be both national and local to reflect national and local priorities. If additional statutory targets are set, they would need to be reviewed and monitored regularly by the appropriate organisation i.e. the EA or Natural England. We would like to see these targets tailored to our catchment to reflect our vision and aims for the catchment and should be applicable to the IDBs as well as EA.

However we feel there is not enough capacity or resource to monitor and review the current statutory targets (e.g. WFD) in our catchment. New targets are only of use if you create a properly funded and regulated system to monitor them.

We need outcome based targets, i.e. the Natural Capital Approach, rather than reporting numbers/figures, with consequences for failure, to avoid historical repetition of relatively unsuccessful LEAPS and BAPs.

Challenge 1: Changes to water levels and flows

5. What can be done to address the challenge of changing water levels and flows?

We need to ensure our catchment becomes a more naturally functioning catchment and implement improvement works on a catchment/landscape scale. As well as providing natural climate solutions such as the storage of carbon in peatlands, natural habitats have the potential to restore natural processes which would have a buffering effect on peaks of high and low flows.

We need to integrate more NFM measures into the catchment to maintain water levels in drought and assist in flood limitation- developing a catchment scale NFM plan would be beneficial for our catchment. Retaining water on the uplands/moorland in the upper catchment and improved soil

health and land management throughout our catchment could contribute significantly to managing water during both high and low flows. This needs to be a key focus moving forward and implemented through project delivery, agri-environment schemes and partners strategic plans.

We would like to see a change/relaxing in licensing nationally for NFM measures and to permit beavers to become native again. Forestry England are currently part way through a beaver re-introduction trial in the upper Derwent catchment, which has so far shown very positive results.

6. The abstraction plan, referenced in the changes to water levels and flows narrative, explains our current and future approach for managing water abstraction. What else do we need to do to meet the challenges of climate change and growth while balancing the needs of abstractors and the environment?

We need to support research into new ways of managing and using water, for example contour buffer strips and water storage reservoirs on agricultural land to reduce abstraction need and the need to get water off in winter which are actively used in other countries. We need funding for pilot projects to deliver in our catchment with longer term funding to deliver what works.

We need much better public education around water saving and the carbon footprint of water production (treatment, pumping etc.) and future developments should install SuDs and grey water reclamation.

7. What kind of a water flow environment do we want? Should we maintain statutory minimum water flow and level standards universally across England as we do now, or go further in some places based on environmental risk?

The Environment Agency should go further than minimum levels and the flow environment should be based on local experience, value and risk. This should especially be the case where there are species at risk including White-clawed crayfish, important breeding fish populations and other priority species. This should extend to protecting in channel features such as spawning gravels and to neighbouring land where water flow levels impact on adjoining wetland habitats.

Water flow levels should be set to enable rivers to function more naturally despite the numerous artificial structures damaging their natural flow levels and speeds.

Equally human water quality for abstraction and navigation, should not be the overriding concerns in the functioning of rivers and more natural interaction should be enabled at river confluences such as Barmby Barrage which impacts a long length of the Derwent. There should be more flexibility and support from the EA/ Government to adapt 'abstraction structures' so they are more biodiversity/ fish migration friendly. Any new build features should be required to include biodiversity/ fish movement easements.

Challenge 2: Chemicals in the water environment

8. What can be done to address the challenge of chemicals in the water environment?

In our rural catchment, we would like to see an increase in promotion and awareness of the importance of good soil health. Soil testing needs to be promoted so land managers can understand what inputs are necessary or not so avoiding unnecessary application of chemicals onto the land. Improved soil health would also reduce sediment loss and hence transport of agri-chemicals

(including nitrates, phosphates and metaldehyde) into the water environment. We would like to see better integrated pest management (IPM) which would reduce the use of chemicals.

There needs to be stronger regulation and enforcement (under the polluter pays principles) to reduce chemicals entering the water environment. Until this happens, the true cost of production is passed to the water customers paying for the soil and chemical removal from water and not to the producer. The Environment Agency needs to staff and resource pollution issues and breaches more effectively, even if they are relatively small scale. Farming Rules for Water need to be promoted, monitored, reviewed and properly enforced if they are not adhered to.

This needs to form part of the HSE/Chemical Regulation Division checks.

9. Do you support the Environment Agency's proposed strategic approach to managing chemicals as referenced in the Chemicals in the Water Environment challenge document? If not, what changes would you make?

We feel it is a good document and ambitious. It addresses issues which are manageable on a geographical scale (ie point source from mines or waste water) well. However, those difficult to address – human/social behaviour- are not considered in the document to any point of solving the issue. E.g household use of detergents and bleach, endocrine disrupters from contraception pills, fat and oil waste, garden fertilizer use – all have a negative impact on the water systems and biodiversity and would require extreme social change to reduce use and limit impacts – this needs to be addressed in more detail by the document and society if we want to see a real change to chemicals in our environment.

10. What balance do you think is needed between current chemical use, investing in end-of-pipe wastewater treatment options and modifying consumer use and behaviour?

The end-of-pipe waste water treatment needs to address more of the chemical issues encountered in our water environment e.g. phosphates. Septic tanks discharging direct to watercourses will remain a significant issue as the 2020 deadline is almost completely unknown due to lack of publicity.

Challenge 3: Invasive non-native species

11. What can be done to address invasive non-native species?

We need expanded funding to include above the SSSI section of the River Derwent, building on, and implementing our catchment scale INNS control programme each year. We need longer term, multi-year, funding to continue to increase our collaboration with stakeholders to create a catchment wide strategy of INNS eradication and ensure it is a 'top down' and joined up approach. We need a real focus on surveying and monitoring INNS to inform where our actions are best placed with limited staff/volunteers and resources – support from the EA, Analysis and Reporting team to lead/deliver this work would be useful. We have a great resource of volunteers and need to ensure they are well coordinated and well placed for greatest effect.

Promotion/awareness raising/education throughout the catchment is crucial to enable everyone to identify, report and potentially treat INNS, not just conservation/environmental organisations. We believe catchment partnerships are well placed to coordinate and deliver these activities.

We need to encourage landowners to carry out treatment independently to promote longevity of INNS control in the Derwent catchment, especially where funding is not available to implement a catchment scale INNS programme. For example, this could be done by providing workshops on the benefits to land management and the environment by controlling and eradicating INNS. This also means we need to ensure enforcement is carried out on landowners who do not control INNS on their land as it is a legal obligation. A national approach to workshops for land managers to ensure consistency across the country and River Basin Management Districts would be useful. More legislation, funding/ resource to ensure enforcement on bad practice needs to be implemented by EA/ a national governing body.

There needs to be an easier way for smaller contractors to clean off machinery and organisations such as IDBs should have clear and implemented INNS and biosecurity plans carried out by their staff and contractors.

12. How would you promote Check, Clean, Dry to all recreational users of water, including those who are not in clubs or attend events?

We would like to see informative signs near sensitive/fragile areas, native crayfish areas, water recreation centres, designated sites etc. We need to raise awareness of the impacts on our country and wildlife and increase our communication with ALL throughout the catchment, including members of the public who are not 'regular' visitors to the river/ water facilities e.g. water sports, angling, diving. A National, socially obvious campaign about Check, Clean, Dry would increase public awareness.

We need to promote good biosecurity practice within our own organisations too to enable staff to 'lead by example' when out in public areas.

Smaller contractors and organisations such as IDBs should have and be provided with clear and INNS and biosecurity plans which are carried out by their staff and sub-contractors. This should be written into legal work contracts, with opportunity to challenge, fine or withhold payment to the contractors if INNS biosecurity agreement is not fulfilled.

13. Are there any barriers stopping you adopting good biosecurity when you are in or near water?

There are often no facilities to clean equipment on site, meaning equipment has to be transported without good biosecurity measures being adapted. This is more problematic when larger items need to be cleaned e.g. vehicle tyres, and when swapping between pool vehicles which don't have dedicated kits in them.

We need to increase awareness of the problem of INNS and provide clear biosecurity guidance to everyone in the catchment. There appears to be a lack of understanding of the gravity of the problem and how invasive species can spread and the impact it can have to sensitive habitats and cost to the landowners people spread it to.

There is a lack of knowledge of what invasive species are present on each site- we need more sharing of knowledge and data and a central coordinator to do this, currently mostly only have good GIS data for YDCP treated and surveyed sites.

There can be a lack of consistency or knowledge of safe chemicals to use or their own impact on the environment, especially on sensitive wetland sites etc.

Challenge 4: Physical modifications

14. What can be done to address the physical modification of our rivers and coasts?

Much of our catchment has been historically straightened and drained to make way for agriculture and development- we need to start reversing this as one of our top priorities. To do this, we need a presumption in favour of more natural recovery of watercourses, rather than reinstating past modifications as they fail, or further modifying, including on non-main river. We need larger well-funded restoration projects with multi-year funding, rather than annual allocations and these project need to be working on a joined up landscape scale where possible.

The consenting process to undertake such work is lengthy, costly and off-putting for us, our partners/stakeholders and landowners. We need to provide sufficient incentives to land managers to consider change, the consenting process will do the opposite and is often more expensive than the activity. All funding mechanisms need to be able to cover fees/costs/time associated with addressing these physical modifications and to their continued maintenance.

ALL redundant structures need to be mapped, assessed and removed if possible or allowed to naturally fail if small enough. There are six major obstacles to migratory species in our catchment which need removing or easing to enable the River Derwent and tributaries to become a more natural system. The management of flood banks needs to be addressed; instead of mowing the banks we would like to see them left for rough vegetation to establish and grazed if possible.

There are some locations where historical/redundant flood banks could be removed or part removed to reconnect the river to the floodplain, but maintenance of valuable features including wader scrapes and ponds is expensive and onerous under the consenting process even though elsewhere the spoil from dredged channels are left in the same floodplain without gaining consent.

We would like to raise awareness of some of the negative impacts of dredging, many still believe dredging is good for our water environment and water level management, and there is little understanding of the soil run off and erosion causing much of it. Regular dredging of the full channel reduces the biodiversity in channels by removing the plant communities, and associated invertebrates that form the keystones for the other aquatic species including fish, White-clawed crayfish and water voles and leads to uniform engineered channels.

The frequent dredging raises the risk of spreading crayfish plague and other aquatic and bankside INNS. The spoil also leads to dominance of rank, nutrient preferring weeds such as nettles. The use of inappropriate sized machinery and timing of works has also led to damage of fencing and bank collapse resulting in revetment being put in leading to even more physical modification of our watercourses. Channel dredging and maintenance should only be carried out when absolutely necessary, not routinely, and should have input from ecologists and follow best practice guidance which is widely available but rarely followed.

We would like to see a legal requirement to retrofit all existing sea defences (especially hard walls) with environmental enhancements and to fit all new sea defences with environmental enhancements.

15. Giving more space for rivers and coasts to move and adjust naturally will regenerate habitat, improve wildlife and help us adapt to climate change. What can you and others do to support these changes?

We need to share examples/case studies and good practice where changes benefit both land managers and the environment, land managers may not fully understand the potential benefits. Could a central, EA or online database store these case studies for ease of access for any land manager?

The lower Derwent catchment has areas of flood plain meadow which are of international importance, these areas need to be extended to increase our resilience to climate change and see those much needed benefits for habitats and species. Our catchment partnership is well placed to get out on the ground and provide advice to farmers and land managers on possible options and funding and also potentially deliver grants for landowners for income forgone.

There needs to be a presumption in favour of maintenance of valuable floodplain features including scrapes, ponds and reed bed/marsh when the impact on the flood storage is of minimal impact and the benefit for the priority wildlife is clear. Currently presumption in consent is against any material being left in the floodplain (despite it receiving annual deposition from the river) no matter how insignificant, due to possible public perception of flood risk. In many instances, leaving material in the floodplain is beneficial for the environment and ecosystem services. If the current approach to removing all spoil is not changed, the Defra 25 Year Plan has no chance of being fulfilled.

Opportunities for land purchase of sites where meanders were cut off on the Derwent should be sought to enable reconnection of meanders and the river to then continue natural movement. Government agencies should help with such initiatives in order to keep the prohibitive modelling costs and consents costs down.

We need to provide guidance in relation to development in coastal locations where sea level rise/cliff erosion is a concern coastal squeeze e.g. soft cliff habitats along North Yorkshire coast by holiday park expansion etc. We need to develop a coastal adaptation strategy and forward look to resource/ enable these to evolve.

Challenge 5: Plastics pollution

16. What can be done to address plastics pollution in the water environment?

All discharges/waste disposal need to adhere to license conditions, these need renewing to add emphasis on plastics.

We need raise awareness of micro-plastics in everyday products and to research and find alternatives to plastics and to find ways of removing micro-plastics from the water environment. UK Investment in UK Science and micro-plastic research will support this.

Catchment partnerships are in a good position to deliver educational events for various groups e.g. recreational users of the water environment, the public, school etc. to raise awareness and how they can help address this challenge. They often have access to a volunteer pool and can create volunteering opportunities for local communities such as river clean up days and removing redundant tree guards, but the staff would require funding. This is a valuable resource which should be supported and utilised more to help deliver plastic education.

17. What actions should the Environment Agency take to reduce plastic pollution?

The Environment Agency needs to recommend legislation to enable return of packaging to producers and better promotion of the biodegradable alternatives that already exist for alternatives to plastic. Creation of new plastic should have a surcharge in order to promote value of recycled plastics in more products.

The EA needs to be resourced properly and have the driver to enforce environment pollution laws proactively, even if it is on a small scale incidents.

We would like the EA support and promote new large county recycling facilities and smaller, local, recycling drop off locations for large scale, commercial recycling (such as plastic tree covers, silage wrapping etc) which are free to use for environmental organisations. Currently too much plastic is landfilled or incinerated because it is the cheaper option.

There is a need for more effective recycling measures for domestic plastic waste and it needs to be easy to do and easy to understand; the general public will be more invested if they know how/where their plastic is recycled. For example most plastic packaging in York cannot be recycled. The government needs to lead or legislate on this to ensure consistency across the country and councils.

Challenge 6: Pollution from abandoned mines

18. What can be done to address pollution from abandoned mines?

We need more research and development to understand methodologies of approach particularly on diffuse source (spoil). There needs to be key requirements on historic metal mines via the Coal Authority to manage metal waste. There should be a higher uptake wherever possible of bioremediation through willow planting and reed beds to trap and take up pollutants.

We need more research and development on how to tackle pollution from metal mine; there is a good knowledge about coal mines but for metal mines it is limited.

Challenge 7: Pollution from agriculture and rural areas

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

The incentives and penalties need to be sufficient to encourage a change of land management practices in the agricultural sector. For our catchment, solutions should involve upland and lowland areas of the catchment working closely together and there needs to be funding incentives to make this happen. ELMS will only provide an opportunity to address pollution, if Tier 1 has sufficient robust standards on water quality and soil management and it needs to be accessible to all landowners. Tier 1 it needs to be easier to apply to with less paperwork/additional evidence than that required for Countryside Stewardship, but requires proper resourcing of EA enforcement officers to target problem farms, issue fines as well as reclaim payments.

There needs to be a stronger connection with the polluter pays principle so the cost is not passed on to consumers at the water treatment end of the line, and the stronger enforcement should be linked to stronger education and key messaging. There needs to be better understanding of the localised economic impacts of soil loss and chemical inputs vs better soil management and health.

There needs to be better information sharing of improvements and techniques that benefit both the land manager's business and the environment so it is an easy choice to make, including farm events and training in language the land managers will understand in practical terms rather than academic.

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?

We need to hold events that fit in with the farming calendar e.g. best time for farmers to attend. These need to include good examples from other farmers in the catchment or country to demonstrate the benefits. We need to encourage land managers who have good ideas to come forward and provide opportunities to get involved with solutions through landscape scale projects, ELMS Tier 2 and 3, and local land manager hubs. The EA should share and celebrate good examples and success stories of land managers showing good practice from around the country with organisations including the catchment partnerships.

The sector also needs to be encouraged to think long term, not just one or two generations, and therefore making investment worthwhile.

Challenge 8: Pollution from towns, cities and transport

21. What can be done to address pollution from towns, cities and transport?

There needs to be adequate resourcing, staffing and a will to carry out enforcement against those who cause pollution, including addressing wrongly connected domestic sewage and water pipes.

Legal obligation to install proper SuDS for new developments and more imaginative and varied habitat creation for taking road run off.

Install, clean and maintain screens on CSO's in cities to reduce rubbish pollution.

Better education and regulation of consumer products and the impacts they have on the environment such as pheromone chemicals, metals and micro-plastics.

22. How can sustainable drainage systems and green infrastructure be most effectively used to tackle pollution from urban areas? What challenges are there to using them?

Problems with current drainage include a high volume run off from hard developed surfaces with high flow rate which could potentially lead to flooding, pollutants can easily be picked up from urban hardstanding, and current drainage systems offer little aesthetically or any benefit to wildlife. By mimicking natural drainage regimes, SuDS have the potential to reduce surface water flooding, improve water quality and enhance the amenity and biodiversity value of the environment. SuDS achieve this by lowering flow rates, increasing water storage capacity and reducing the transport of pollution to the water environment.

In Hull a network of SUDS are being implemented across the city, ranging from pocket sized solutions that may only capture a few hundred gallons, through to the design of a managed wetland complex aimed to work as a large scale SUDS. Not only does this add a practical solution to tackle pollution in urban areas, it also creates areas of habitat for wildlife that can be enjoyed by the public for health and recreational use.

Some urban SuDS schemes require not only installation costs but also maintenance costs which can be difficult to source and assign. If new schemes are adopted by councils with realistic targets for upgrading or replacing targeted areas it could be spread out over multiple years.

As for larger scale SuDS such as reed beds and wet woodland, challenges include establishing areas for maximum efficiency and sourcing the ongoing management of these areas. Reed bed requires regular cutting and removal of cut material whereas wet woodland wood need coppicing on rotation to have a more complex age structure, which will also assist with capture of pollutants and ensure habitat variability too.

Challenge 9: Pollution from water industry wastewater

23. What can be done to address pollution from water industry wastewater?

The WINEP needs to be enforced and not allow categories 1/2/3. We would like to see better screening and obligatory regular cleaning of grills and screens from CSOs and waste-water cleaning sites, to reduce the pollution and waste deposited both in urban and rural settings.

24. What opportunities exist for water companies to collaborate with other sectors and organisations on measures to improve the water environment?

We need to encourage water companies to engage with catchment partnerships and that they are taking a 'catchment based approach' in their day to day work.

The WINEP/AMP and our water company's Biodiversity Enhancement Scheme are current opportunities for our catchment partnership to collaborate with our water company. Currently EA provides the funding for many of the type of projects they could be investing in. They have worked on similar initiatives as we currently do, but they work across catchments and there may be opportunities in linking up with other catchment partnerships to draw that funding and collaboration from Yorkshire Water. We hope there will be future opportunities for joined up working which can deliver more improvements on the ground as we have the boots on the ground and local relationships and they have the commercial interest in reducing sediment and chemical inputs to the water. Good communication and a sharing of knowledge and data is key for a good working relationship with water companies.

Catchment partnership working

25. How can local partnerships become more inclusive and representative of all of the stakeholders within their catchments?

We need to ensure the right stakeholders are involved and that they can all bring something different to the partnership to help it move forward. Good communication is key and objectives for each catchment partnership need to be clear to all stakeholders to ensure that those who are involved, know what is being asked of them and why. All stakeholders need to bring something to

the catchment partnership that will help it grow and work more efficiently. Partnerships should not be afraid of reviewing the membership of the different stakeholders and changing this if it would enable to partnership working to become more efficient or work better.

We have a very extensive range of partners in our partnership, but realistically very few take an active part in the running or delivery of the partnerships aims, and sometimes we find high level engagement does not translate into ground level engagement or co-operation.

More resources are required to enable effective and joined up media/comms out to stakeholders to increase the significance of the catchment partnership. Partnerships need committed long term funding to give confidence in keeping the education and engagement work going. Constant flux in staff (a side effect of short-term funding) is not conducive to building loyalty/trust/relationships with the public/communities/stakeholders. We are also working on tightening up our aims and objectives into SMART objectives which may make it easier for partners to pick aspects of our work to engage with or for them to deliver.

Partnerships need committed, multiyear funding. This ensures longevity and continuity of staff, projects and momentum. Partnerships thrive on strong relationships and continuity, at present, single year funding does not provide the necessary security for this to occur.

26. How can local partnerships achieve a better balance of public and private funding to support and sustain their environmental work?

The lack of multi-year funding means it is difficult to make those connections and relationships that might draw a better input from the private sector, as instead there is a constant scramble for annually funded projects to keep staff in post. At least one pot of multi year funding would help reduce pressure and free up time, assisting the partnership officer to investigate different public/private funding sources.

The officer spends most of their time delivering project work and most project development is done on an 'in kind' basis by very few of the partners which limits options for scoping, costing and developing projects. The Derwent is a large catchment but with relatively small urban areas and most private buy in is very specific such as paying for INNS treatment, providing start up core money and not much else. The obvious private partner would be the water company as we are delivering a number of their benefits through our projects.

Having case studies of the next two projects working on sediment reduction on farmland and upland restoration may provide a good example and impetus to attract investment from the company.

Multi-year core funding would also help with maintaining the continuity of staff and projects within the catchment rather than a year on year approach which does not allow for any strategic thinking or development. The majority of our catchment partnership funding comes from the Environment Agency, which is awarded annually. Again, this is not conducive with being able to plan ahead, build relationships with stakeholders and work more strategically. The Catchment Based Approach is still a relatively new concept in many catchments; the catchment partnerships need to communicate their objectives as widely as possible through different outlets i.e. social media, local events, farm groups, through LNP and LEPs to ensure they are a visible body in the environmental/ conservation sector. By increasing their visibility and reputation, funding opportunities may be easier to access.

Who pays?

27. How should the step change in protecting and improving the water environment be funded and who should pay? Are there any barriers to doing this?

The EA should help pay for much of the restoration work especially as a lot of the modification was also done with public money through the NRAs, British Waterways etc.

LEPs and LNPs should also be a source of funding which could help build better connections and deliver some of their aims. Natural England should have funding available to support designated sites and key species.

We should also follow the 'polluter pays principal'- there needs to be stronger penalties/action against those that damage the water environment which does require sufficient staffing and will to carry out enforcement. This can be achieved with the incentive penalty model whereby schemes such as ELMS or water company schemes could pay for good water and land management alongside EA enforcing strong penalties for bad water and soil management to give a proper business incentive for doing the right thing, as well as not losing your soil into the river.

For the agricultural sector, Tier 1 ELMS needs to be robust enough to begin to offer some of this protection to the water environment, with Tier 2 and 3 offering opportunities for larger scale targeted benefits and natural capital.

Potentially introduce an environmental tax on packaging (fast food etc.) or damaging products containing micro plastics, pheromones etc., i.e. people pay x pence towards an environment fund which is then spent either in the local area on environmental projects or on research to remove the pollutants.

Private investment through the water company and other water intensive industries including turf and agri-environment businesses should contribute either voluntarily or through higher abstraction costs which would also encourage them to store and retain water on their land.

Are there any barriers to doing this?

The EA does not have the staffing to carry out enforcement and often works reactively and most water users do not pay the true cost and value of the water they use, nor for the clean-up of the chemicals and sediment that they allow into the water to be removed before it is useable for human consumption.

DEFRA/EA funding should be based on multi-year funding and allow for short carry over between financial years and not have such a long lag between theoretical approval and contracts. The delay between outline approval and final agreement means partners often have to go ahead on trust that they will get paid much later in the year (INNS treatment for example), which limits smaller organisations and is a constant risk for larger ones.

At other times the annual approval and final money available is awarded so late, it's not possible to then get consent from the EA, or planning authority within the financial year and it's then not possible to carry the money forward into the next financial year. The EA should also have a more flexible approach to carrying out work with more scope for using NGOs and partnerships rather than consultants and huge national contractors, and have more streamlined paperwork to reflect this.