

Cynulliad Cenedlaethol Cymru | National Assembly for Wales
Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig |
Climate Change, Environment and Rural Affairs Committee
Ymchwiliad Microblastigau | Microplastic Inquiry
PL 05

Ymateb gan : Cyfoeth Naturiol Cymru
Evidence from : Natural Resources Wales

The statutory purpose of Natural Resources Wales (NRW) is set out under the Environment (Wales) Act 2016. In the exercise of its functions under the Environment (Wales) Act 2016, NRW must pursue sustainable management of natural resources in relation to all of its work in Wales and apply the principles of sustainable management of natural resources in so far as that is consistent with the proper exercise of its functions. NRW's duty (in common with the other public bodies covered by the Well-Being of Future Generation (Wales) Act 2015) is to carry out sustainable development as defined. NRW are also advisors to the Welsh Government on the natural heritage and resources of Wales. Our comments are therefore provided in the context of NRW's statutory purpose, functions, powers and duties.

Natural Resources Wales does not currently conduct research or synthesise the existing research that could significantly contribute towards answering questions 1-3. However, given the knowledge and evidence provided by 3rd parties we believe that microplastics are impacting on ecological and chemical dynamics in the aquatic environment. Our priorities would be to better understand the level of impact and if those impacts could result in risks to our duties under the existing legislation such as the Water Framework Directive and Habitats and Species Directive. This is where NRW's requirement for future evidence would be required.

In response to Question 4, NRW are working with the Water Companies in Wales on a number of innovative research projects to investigate the load and risk of microplastics throughout the water cycle. In 2019, a specialist working group of the water company and regulator representatives will start a programme of investigations into wastewater discharges. Using the most suitable existing method, the overall aims are to generate a mass balance of microplastics entering and leaving the largest wastewater treatment works (WWTW) using different treatment processes operated by each of the ten Water and Sewerage Companies (WaSCs) in the UK, and therefore estimate mass balances and input sources of microplastics for all those WWTWs as a group, and for all WWTWs in the UK. Please also be aware of the UK Water Industry Research project EQ01A231 'Sink to River – River to Tap, A review of potential risks from nanoparticles and microplastics' that will look at risks to the water cycle and in particular those risks most important to the water companies.

NRW believes that 'source control' options should be sought first to remove the entry of microplastics into the aquatic environment before resorting to 'end of pipe' treatment solutions. Microplastics are generated from the breakdown of macroplastics and focus should be provided on the removal of plastic litter from, and entry to, the aquatic environment. Other options could include the removal of microplastics from domestic products to prevent entry into the wastewater system, and innovative design to replace the products that result in microfibre entry into the environment.

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