



## LIFE Blue Lakes – United against microplastics in European rivers and Lakes

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Plastic is omnipresent. Therefore, in our EU funded project [LIFE Blue Lakes](#), the Global Nature Fund (GNF), Lake Constance Foundation and five Italian partner organisations strive to reduce the input of microplastics into German and Italian lakes on different levels in order to reduce the pressure on our ecosystems and water cycles.

### **A holistic approach to reach the root of the problem**

An important target group for our efforts are the surrounding communities at the project locations Lake Constance and Lake Chiemsee in Germany and the Italian lakes Trasimeno, Bracciano, Castreccioni and Garda. Under the leadership of the Italian environmental association Legambiente we collaborate to jointly identify potential and successful best practice examples so that the amount of plastics and microplastics in lake communities can be significantly reduced. In order to achieve this goal, we have to take a holistic approach to the problem of microplastics. Therefore, we will also involve the tyre, cosmetics and outdoor industries in a participatory process, so that solutions and alternatives can be developed together in order to reduce microplastic and microfibre emissions in the production and use of the products. In addition, we are also trying to improve existing legal frameworks and promote legislative initiatives at national and European level to protect inland water bodies from microplastics.

### **There is a lack of standardisation**

It is not only that no standardised methods for sampling, sample treatment and analysis of water samples exist - neither in Italy nor in Germany. There is also not even a consistent definition of what exactly is meant by "microplastics". For this reason, the development of a standard protocol for monitoring microplastic contamination is another important component of the project. The Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) in collaboration with the Umbria Regional Agency for Environmental Protection (ARPA UMBRIA) are developing such a protocol. It will be tested in two pilot regions (Trasimeno and Bracciano). In addition to this standardisation procedure, the creation of a technical protocol to reduce the release of microplastics from wastewater treatment plants is an important project action. Such a protocol will be developed by scientists from the Polytechnic University of Marche, based on the experience gained from testing the developed methods in two pilot plants at Lake Garda and Lake Castreccioni.



### **Our responsibility as consumers**

Another major part of our project is raising awareness of the public, because as consumers we can also contribute to a plastic free environment by rethinking our consumer behaviour. We are working on this issue by means of an information campaign. Through mechanical processes and UV radiation, microplastics that is already present in the natural cycle turns into even smaller particles, so-called nanoparticles. Since these are suspected of posing even higher health risks to humans and nature than microparticles, measures are urgently needed. All project results and publications will be made available to experts, decision-makers, environmental organisations and the general public in a broad, international dissemination campaign.