

AFTER LIFE COMMUNICATION PLAN

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1. THE LIFE BLUE LAKES PROJECT

The LIFE Blue Lakes project contributes to reducing the contamination of lakes with microplastics. Exemplary project areas are the lakes Garda, Bracciano and Trasimeno in Italy and Lake Constance and Lake Chiemsee in Germany. Moreover, the Piediluco Lake (Umbria region) and the Castreccioni lake (Marche region) were also addressed by the project activities. Further Italian and European lake communities will be involved in the promotion and dissemination of good practices.

The study area includes five Italian lakes and two German lakes as follow:

LAKE GARDA	370 km ² , located between three regions (Trentino Alto Adige, Veneto and Lombardia). Tourism-oriented area
LAKE TRASIMENO	128 km ² , Umbria region. Nature conservation and tourism-oriented area
LAKE BRACCIANO	56,5 km ² , Lazio region. Drinking water reservoir, nature conservation and tourism-oriented area
LAKE PEDILUCO	1,85 km ² , Umbria region. Hydro-electric use and tourism-oriented area.
LAKE CASTRECCIONI	2,4 km ² , Marche region. Artificial reservoir and tourism-oriented area



LAKE CONSTANCE	536 km ² , international border between Germany, Switzerland, and Austria. Drinking water reservoir, high standards for water treatment. Nature conservation and tourism-oriented area
LAKE CHIEMSEE	79.9 km ² Bavaria. Nature conservation and tourism-oriented area

The **beneficiaries** of the LIFE Blue Lakes project are:



PARTNER	DESCRIPTION	ABBREV.
Legambiente	Legambiente is the most widespread environmental association in Italy. It conducts numerous awareness- raising and information campaigns on environmental issues. It is committed to fighting environmental crime, and promotes solidarity and peace. It works at a local, national and European level to foster sustainable development, the green economy and the adaptation to climate change.	LEGAMB
Autorità di Bacino Distrettuale dell'Appennino Centrale	The Central Apennines River basin District Authority is a non-economic public body established pursuant to art. 63 of Legislative Decree 152/2006 and subsequent amendments. The basin Authority, as part of the objectives established by law, aimed at ensuring soil protection, hydrogeological rehabilitation, quantitative and qualitative protection of the water resource.	ABDAC
Agenzia Regionale per la protezione Ambientale - Umbria	 The Environmental Protection Agency of Umbria (ARPA UMBRIA) is a regional structure. Their main activities are: controls of chemical, physical and biological pollution on environmental matrices; monitoring air quality, water and soil; Waste; radiation and noise; management of the monitoring networks; implementation of information systems and environmental databases; technical and scientific support in the environmental assessment and primary prevention; technical and scientific support to the evaluation activities (EIA, SEA, IPPC); large industrial risks; environmental information and education. 	ARPA



Italian National Agency for New Technologies, Energy and Sustainable Economic Development	It is the second major Italian research organization, with around 2700 staff employees distributed in its 9 research centers all over the national territory. The Agency's activities are mainly focused on Energy Efficiency, Renewable Energy Sources, Nuclear Energy, Climate and the Environment, Safety and Health, New Technologies, Electric System Research.	ENEA
Global Nature Fund	Global Nature Fund is a non-profit, private, independent international foundation for the protection of environment and nature. The GNF has full charity status and is located in Germany with the headquarter at Lake Constance. GNF was founded in 1998 with the objective to foster the protection of nature and environment. GNF carries out nature & environment projects and model projects for the promotion of a sustainable economy. In 1998, the global Living Lakes network was initiated by GNF, an environmental partnership for the protection of lakes and wetlands worldwide. In 2022, the European Living Lakes Association (ELLA) was constituted by GNF and received full charitable status.	GNF
Lake Constance Foundation	The Bodensee-Stiftung (Lake Constance Foundation LCF) is an international charitable environmental foundation, created in 1994 by 6 environmental organizations from Switzerland, Austria and Germany. Main fields of activities are sustainable land use planning, water quality, sustainable use of water resources and lake management, environmental friendly tourism development, environmental friendly /organic agriculture, climate mitigation and adaptation to climate change (energy saving, energy efficiency, renewable energy and transport /mobility) and protection of biodiversity and ecosystem services. LCF is a founding member of the international network "Living Lakes", member of the European network ECOTRANS for sustainable tourism development, ELSA (European Network for Soil	LCF



	Protection), Eco Camping for environmental and quality management on camping sites and others. LCF has a long term experience regarding environmental management. industry in Germany. LCF is involved in various projects and working groups on Business and Biodiversity.	
Università Politecnica delle Marche	The Università Politecnica delle Marche (UNIVPM) (www.univpm.it) has a clear scientific and technological focus. UNIVPM is very active and performant in European R&D&I. Sustainable urban water services and wastewater treatment and valorisation is a core expertise of the Lab of Chemical- Environmental and Sanitary Engineering at the Department of Material, Environmental and City Planning Science and Engineering (SIMAU). The WWEELab Research Group, coordinated by Prof. Fatone, manages several research projects funded by the main EU research programmes: HORIZON 2020, PRIMA Initiative, WATER JPI, LIFE, ENI CBC MED, Climate-KIC COSME. The research fields can be divided into the following 5 macro-areas: i) Resource recovery technologies in the urban water cycle; ii) Stormwater treatment and management; iii) Digital solutions for carbon footprinting and environmental/economic assessment; iv) Advanced water and wastewater treatment; v) Organic waste treatment and valorisation.	UNIVPM

2. ACHIEVED RESULTS

Microplastics are everywhere, but it is very difficult to quantify the presence of this growing pollutant, due to human activities and impossible to fully remove. For many years, most research has focused on the impact of plastics on marine ecosystems, overshadowing the role of freshwater ecosystems, especially lakes and reservoirs, as key components of the global plastic flows. Moreover, research on inland waters has been hindered by the lack of standardized sampling



methods which has obstructed a comparison of the different studies and areas investigated. To overcome these problems and to disseminate, as widely as possible, a basic monitoring tool, the LIFE Blue Lakes Project has established a protocol for the sampling of microplastics in the lakes and wastewater treatment plants, starting from the project's pilot areas to be shared with the water quality monitoring entities in Italy, Germany and other European countries, through field activities and training seminars.

A specific focus was on local communities and the production sector, which were involved in participative actions to draw up the Lakes Papers, guidelines for voluntary commitments to combat microplastic pollution at local level and create a heightened public awareness of the problem.

Thanks to the Lakes White Paper, a paper drawn up under the project and agreed on with the ministries, ISPRA - Superior Institute for Environmental Protection and Research, ISS - Superior Institute of Health, the reservoir managers and different production sectors, LIFE Blue Lakes furthermore set underway a public debate with international institutional interlocutors. This was to promote new policies and guidelines in line with the Circular Economy Action Plan and the European Strategy for Plastics in a Circular Economy, to adequately tackle the microplastic problem in inland waters.

For the different stakeholders - students, teachers, associations, researchers, tourist operators and economic actors- **communication, information and awareness-raising actions were developed,** and over the last two years of the project there was also an experimentation in bringing together artistic and scientific language resulting in the issue of microplastics being introduced in the theater, with the ecological performance of "Monday".

All EU "LIFE Blue Lakes" results at a glance

5 Lakes Charters realized through as many participatory pathways – **13 Italian municipalities and 65 other stakeholders** who signed them – **1 Lakes Manifesto** – **27 Italian municipalities** who signed it – **250 stakeholders** involved in the participatory pathway – **50 German and international companies**, reached by the information and awareness activities – **20 European companies** involved in the advocacy campaign – **4 German companies** of the textile and cosmetics industry that signed a Memorandum of Understanding and a Voluntary Commitment – **300 professionals and technicians**: inside, who were trained in the seminars for the application of the monitoring protocols – **1300 teachers and pupils** involved in the educational activities – **1800 participants** in the lake days and conferences – **5 international** events – **5 LIFE Blue Lakes Ambassadors - 8 Italian regions** involved in the roadshow – **20 stages** of artistic, scientific and territorial animation events in Italy -



13 repetitions of the theatre show **Monday** - **1000 spectators** attended the show – **22 projects** involved in networking activities – **700 articles** published in newspapers, magazines and on the Internet highlighting the project - **5 million people** were reached through the media work – **Over 62.000 people** were reached through the project websites and social media.

3. PURPOSE OF THE AFTER LIFE COMMUNICATION PLAN

The Plan describes the actions that will continue beyond the end of the project, identifies the partner(s) responsible for carrying them out, defines the budget needed to carry them out and identifies the source of funding. The activities that will be continued after the end of the project are as follows:

1) promotion of the Lake Paper and the Lake Manifesto in lake basin municipalities in Italy and Germany to increase the number of adhesions (action B.1)

2) promotion of the monitoring protocol for microplastics presence in inland waters at national level (action B.2);

- 3) promotion of the technical protocol for sewage treatment plants (B.3);
- 4) training activities (B.4);
- 5) awareness campaign addressed to German and international companies (B.5);
- 6) promotion of the White Paper (Action B.6);
- 7) promotion of the project topics (Actions D.1 and D.2);
- 8) networking with other LIFE and non-LIFE projects (Action D.3).

4. TARGET AUDIENCE

The target audience addresses by the project activities that will be carried out after its end will be:

- municipalities and public administrations (actions B.1 and B.6)
- technicians (action B.3)
- companies (action B.5)
- local communities (action B.6)
- students, teachers, associations, researchers, tourist operators and economic actors (actions D.1, D.2, D.3)



5. ACTIONS OF THE LIFE BLUE LAKES PROJECT INCLUDED IN THE AFTER LIFE COMMUNICATION PLAN

5.1 Promotion of the Lake Paper and the Lake Manifesto (Action B.1)

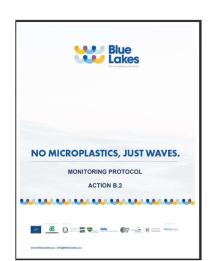
DESCRIPTION The Lake Paper and the Lake Manifesto will be promoted at national (both in Italy and Germany) and at international level (in Europe) on occasion of specific meetings/events that will be organized with municipal representatives, thus increasing the number of adhesions to these two documents.	Adesione al Interfector delleter
RESPONSIBLE PARTNER	LEGAMB, GNF, LCF
EXPECTED RESULTS	At least 20 Italian municipalities, 20 German municipalities and 10 other European municipalities will sign the Lake Paper or the Lake Manifesto.
PERIOD	2024-2029



5.2 Promotion of the Monitoring Protocol (action B.2)

DESCRIPTION

Over the next five years, an increase in shared monitoring activity is expected for improving knowledge on the flow of plastic waste from freshwater ecosystems, whose pathways are complex and transport mechanisms are not well understood. MP pollution dynamics are complex, due to the covariation of the many factors at play as a result of multiple uses, thus further research, including more frequent sampling, should be conducted to improve our understanding of the temporal variation of MP inputs to aquatic systems, in order to better prevent and reduce this global problem. Will be necessary therefore to examine freshwater litter as an additional descriptor for planning of measures under MSFD, but not only, since even WFD also does not include litter



WID also does not include litter.	
RESPONSIBLE PARTNER	ENEA
EXPECTED RESULTS	Applications of the Blue Lakes protocol for integrating monitoring activities considering the specificities of the freshwater system in terms of surface and underground waters for a basin-scale analysis of MPs pollution.
PERIOD	2024-2029



DESCRIPTION In order to apply MP Monitoring Protocol developed in the Blue Lakes, ARPA Umbria will programme to include lake MPs monitoring in the monitoring activities of the Agency.	NO MICROPLASTICS, JUST WAVES. MONITORING PROTOCOL ACTION B.2	
RESPONSIBLE PARTNER	ARPA	
EXPECTED RESULTS	MP monitoring activities on main lakes of Umbria Region, Lake Trasimeno and Piediluco.	
PERIOD	2023-2026	

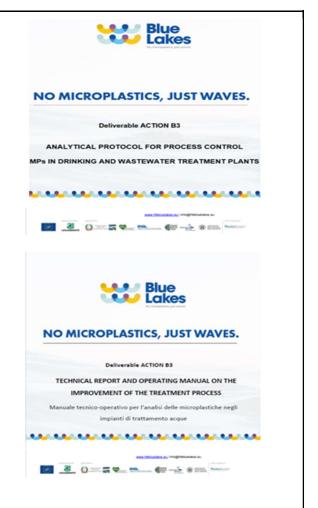


5.3 Promotion of the technical protocol for sewage treatment plants and training activities addressed to STP operators (actions B3 and B4)

DESCRIPTION

Over the next 5 years, the overall applications of the new drinking water directive (EC 2020/2184) and of the regulation on minimum requirements for water reuse (EU 2020/741) with the approval of the new Urban Wastewater and Wastewater Directive are expected. In all these documents, particular attention will be focused on the monitoring and the quantification aspects of the microplastics also to address the understanding of the presence of the emerging compounds, their mitigation and the possible risk analysis. In this context, UNIVPM will support and disseminate the results of Bluelakes Project, as for the sampling and monitoring approach and for the technical removal strategies, especially with the water utilities both in national and in international context.

The public protocols will be shared with the technical references in the water companies and with the environmental agencies to support the continuation of the training phase.



RESPONSIBLE PARTNER	UNIVPM
EXPECTED RESULTS	Increasing the requests of the technical protocols and of the training courses in the next 5 years for operators, water utilities and professionals especially in the Integrated Water System.
PERIOD	2024-2029



5.4 Awareness campaign towards German and international companies (B.5 and B.7)

DESCRIPTION Addressing the problem of micro plastics in selected business sectors: tyre industry, textile and cosmetics. The topic will be addressed via follow up projects and associations of GNF, to improve understanding and continue the discussion about solutions. Tyre Industry: Fair Rubber Association, managed by GNF Textile Industry: GNF Project "Fair Wear Works" Cosmetics: European Living Lakes Association ELLA GNF will also continue to address the topic and create awareness through the international Living Lakes Network. Further dissemination via presentations at	
national chambers of commerce are planned. RESPONSIBLE PARTNER	GNF, LCF
EXPECTED RESULTS About 3.000 people will be informed about sustainable textile purchasing. The automobile clubs such as ADAC and all main tyre manufacturers in Europe will be addressed . About 130 NGOs and other organizations will have an improved knowledge and awareness about micro plastic pollution in lake areas.	FAR FUBBER FAIRTRADE FAIRTRADE EUTSCHLAND Living Lakes European Association
PERIOD	2024-2029



DESCRIPTION LCF has signed a cooperation agreement with AMCOR Global Packaging Solutions (Switzerland Section). The agreement focuses to promote the Lake Paper on the swiss side of the lake and to adapt it especially for a greater contribution from citizens to avoid microplastics.	amcor
RESPONSIBLE PARTNER	LCF
EXPECTED RESULTS	Increased awareness on the project's topics on municipal level and a handout for municipalities on how to motivate a contribution by citizens.
PERIOD	2024-2025



h		
DESCRIPTION Further Cooperation and Exchange with ERDE Recycling. ERDE is the nationwide collection and recycling system for agricultural films (also nets and cords) in Germany, and is also operating in Austria and Switzerland, the countries bordering Lake Constance. LCF proposes to develop best practice documentation that will be distributed to stakeholders.	ERDE	
RESPONSIBLE PARTNER	LCF	
EXPECTED RESULTS	Sensitization of users of Agricultural Films. All parties involved have to take responsibility and ensure that crop plastics are successfully returned to the material cycle through recycling.	
PERIOD	2023-2026	



5.5 Promotion of the Lake White Paper (action B6)

DESCRIPTION

The White Paper will be promoted at national and at international level (in Europe). It was printed in Italian and sent directly to the Italian institutions. An English version can be downloaded directly from the Authority's website to allow it to be disseminated as widely as possible.

The actions proposed and tested in the project will be operationalized in the planning activities and will be implemented in specific projects.



RESPONSIBLE PARTNER	ABDAC
EXPECTED RESULTS	Carry out measures to implement the results of the Life project.
PERIOD	2024-2029



5.6 Promotion of the project topics (actions D.1 and D.2)

DESCRIPTION Each Partner will guarantee the dissemination of communication material drafted within the LIFE Blue Lakes project (e.g. leaflet, brochure, Layman's Report), which will be distributed during events/seminars/conferences or promoted through the websites and social channels (e.g. video and photographic documentation).		
RESPONSIBLE PARTNER	ALL	
EXPECTED RESULTS	Increased awareness on the project's topics and results at local, national and European level. At least 100.000 people reached	
PERIOD	2024-2029	



DESCRIPTION

The LIFE Blue Lakes project has been important in bringing new awareness to the issue of plastic and microplastic pollution in inland waters, which is why it has found its way into the congressional documents of the <u>Piedmont</u> and <u>Lombardy</u> regionals and into the end-ofterm budgets of the national Legambiente and the <u>Umbrian</u> regional where the association policy for the next congressional term, from 2024 to 2027, is outlined.



RESPONSIBLE PARTNER	LEGAMB
EXPECTED RESULTS	Increased awareness on the project's topics and results at local, national and European level. At least 100.000 people reached
PERIOD	2024-2029



DESCRIPTION

Notice boards installed at strategic points in lake areas that will impact as many people as possible. Each notice board is designed to describe the actions that have taken place over the 4 years of the project and displays a QR Code that links to the website: a specific call to action to adopt the Lake Paper and encourage engagement in the fight against microplastics by institutions, associations, tourism and economic operators even after the end of the project.

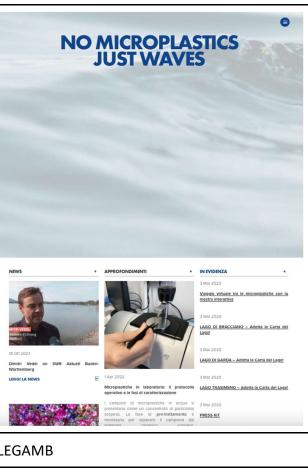


RESPONSIBLE PARTNER	LEGAMB
EXPECTED RESULTS	Increased awareness on the project's topics and results at local, national and European level. At least 100.000 people reached
PERIOD	2024-2029



DESCRIPTION

Legambiente will guarantee the maintenance and updating of the project website for at least 5 years after the end of the project. Thus, it will be possible to view the videos and download the technical documents produced as part of the LIFE Blue Lakes project. The news section will be periodically updated and the activities carried out by the partnership to promote the project and its results will be reported. Social channels will also be periodically updated. Legambiente will also ensure the correct functioning of the project email account (info@lifebluelakes.eu) and will use this address to provide information on the events and activities promoted by the project.



RESPONSIBLE PARTNER	LEGAMB
EXPECTED RESULTS	Increased awareness on the project's topics and results at local, national and European level. At least 500.000 people reached through the media relations activities and social media.
PERIOD	2024-2029



DESCRIPTION LCF will propose several classes in adult education centres in the Lake Constance region and beyond. For the winter semester 2023/2024 10 classes are planned and confirmed.	<image/>	
RESPONSIBLE PARTNER	LCF	
EXPECTED RESULTS	Increased awareness on the project's topics on municipal level and connects initiatives and NGOs in the region, that are working on the topic	
PERIOD	2024-2029	



DESCRIPTION

During the 5 years following the end of the project, the LIFE Blue Lakes project will "travel" across *Goletta dei Laghi* (recurrent Legambiente's campaign) to address the issue of microplastics through the implementation of citizen science actions and awareness-raising events. Local offices and volunteers throughout Italy will promote beach litter initiatives as useful occasions to inform and raise awareness of citizens about water pollution due to plastics and microplastics.



RESPONSIBLE PARTNER	LEGAMB	
EXPECTED RESULTS	Increased awareness on the project's topics and results at local and national level. At least 4.000 people reached.	
PERIOD	2024-2029	



DESCRIPTION

Ecomondo 2023 was still an important "showcase" for the LIFE Blue Lakes project. The representatives of Legambiente and UNIVPM will continue the collaboration with the Technical Scientific Committee of *Ecomondo*, the *Istituto Superiore di Sanità* and *Utilitalia* to discuss the phenomenon of microplastics in lakes and urban water infrastructures.



RESPONSIBLE PARTNER	UNIVPM
EXPECTED RESULTS	Increased awareness on the project's topics and results at local and national level.
PERIOD	2024-2029



5.7 Networking with other LIFE and non LIFE projects (action D.3)

DESCRIPTION The partnership will continue to maintain and enforce relationships with other LIFE and non LIFE projects addressing the same topics of the LIFE Blue Lakes project.	
RESPONSIBLE PARTNER	ALL
EXPECTED RESULTS	Increased awareness about the LIFE Blue Lakes project at local, national and European level.
PERIOD	2024-2029



6. EXPECTED COSTS

It is estimated that around 287.000 euros are needed for the implementation of the After LIFE Communication Plan. See the table below for further details:

ACTIVITIES	BUDGET (in euro)	FINANCIAL SOURCES	RESPONSIBLE PARTNER (S)
New adhesions to the Lake Paper and to the	50.000	Internal resources	LEGAMB
Lake Manifesto	50.000	Internal resources	GNF and LCF
Dissemination of the monitoring protocol	Budget will be considered and evaluated according to the development of activities of the project proposals	Internal resources	ENEA
	40.000	PNRR Complementary Fund	ARPA
Promotion of the technical protocol for sewage treatment plants	Budget will be considered and evaluated according to the development of activities of the project proposals	Internal resources	UNIVPM
Training activities	2.000 per training course (around €1000/2000 per course to be paid by the applicant)	Internal resources	UNIVPM
Awareness campaign addressed to German	10.000	Internal resources	GNF and LCF



and international companies			
Promotion of the White Paper	100.000	National Found FSC- POA; National Found Law 17 maggio 2022, n.60; internal resources	ABDAC
Promotion of the project topics	15.000	Internal resources	ALL
Maintenance of the website and social media	5.000	Internal resources	LEGAMB
Networking with other LIFE and non-LIFE projects	15.000	Internal resources	ALL
TOTAL AMOUNT	287		