**SMILE** – Strategies for Marine Litter and Environmental prevention of sea pollution in coastal areas – is a project made possible with the contribution of the European program LIFE + aimed at marine litter reduction on coastal areas.

SMILE involves the entire area of the Maremola River Basin with the municipalities of Pietra Ligure, Magliolo, Giustenice and Tovo San Giacomo.

First of all, the presence of marine litter in coastal and marine areas is an environmental problem. Marine litter can represent a serious danger for the ecosystem's equilibrium and for marine species.

SMILE's actions are developed on several levels:

### PILOT ACTION

An innovative system for waste catch, composed of two nets placed at the mouth of the river, capturing litter before it is transported to the sea. This system will be used to monitor the litter transported by the river during times of flooding.

### PREVENTION AND RAISING AWARENESS CAMPAIGN

Thanks to a system signalling waste through an APP for smartphones, the activation of Smile Phone Number, and the direct commitment of the youth taking part in the summer SMILE CAMPUS, citizens will be kept informed and can actively take part in the project.

### **WASTE MANAGEMENT**

Through the activation of a permanent working group including all the municipalities of the Maremola river basin, an efficient system for waste collection and disposal will be designed. The group will also publish specific guidelines in order to help other public administrations undertake the same process.

### KNOWLEDGE

SMILE applies international monitoring provisions and standards to define the local monitoring protocol and to classify the main materials and items on Ligurian beaches and shallow waters: the protocol is implemented during two marine litter monitoring campaigns in the sample area of Pietra Ligure.

### LIFE 12 ENV/IT/000289 LIFE SMILE

project realized with the financial contribution of the European Union LIFE + program

### **Lead Partner:**



### Partnership:









Pietra Ligure



### Informazioni:

lifesmile@regione.liguria.it www.life-smile.eu





### Strategies for MarIne Litter and Environmental prevention of sea pollution in coastal areas









ost of marine litter is land based: it is produced and abandoned while it is often transported to the sea by water (rain or streams) is by human beings, and winds.

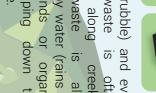
n order to solve this problem, it is especially important to prevent it at the coastal and inland level, and not only with collection at sea level.

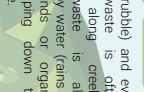
## IN THE CREEK





Bulky, inert (rubble) and even hazardous waste is often abandoned along creeks. Municipal waste is also transported by water (rains or streams), winds or organic material slipping down the mountain side.

















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We can find items transported by marine streams, waves, and floods or abandoned by people: cigarettes butts, plastic bottles, cans, scrap metals, but also tree trunks and branches. These different items can damage the coastal environment and can even represent a danger for beachgoers.

# LITTER CATCHING TRAPS

mouth. hanks to fishermen and divers, a system of nets monitoring the fluvial input of litter be installed in front of Maremola River









Scrap metals, tyres, fishing equipment and furniture are only some of the items we find laying along the seabed, and can damage the marine species inhabiting the area.





On average plastic represents 80% of all dispersed material in the sea. While some plastic items float on the sea surface, others - like shopping bags or plastic fragments of various sizes - stay suspended in the water column. These items are dangerous for marine species since they can ingest or become entrapped in them.





## INTEGRATED TERRITORY AND MARINE LITTER MANAGEMENT