

ARNO RIVER POLLUTION

Pollution also affects the Arno River, which flows through Florence and represents an important ecological and historical element of the city. The Arno has faced several environmental issues related to pollution, caused by industrial and urban discharges as well as other factors.

Sewage and industrial waste discharges: Although wastewater management has improved over time, in the past there were episodes of untreated or insufficiently treated discharges. Urban and industrial wastewater often contains pollutants such as heavy metals, excess nutrients, and hazardous chemicals, which can compromise water quality and the health of aquatic ecosystems.

Microplastic pollution: In recent years, there has been an increase in the presence of microplastics in rivers and seas. The Arno is no exception, and microplastics from plastic waste, detergents, and other products can contaminate the water, with harmful consequences for aquatic flora and fauna.

Agricultural activities and pesticide use: Agricultural practices in the areas surrounding the Arno can contribute to its pollution through runoff of pesticides, fertilizers, and other chemicals. These contaminants can enter the river during rainfall, increasing nutrient levels and the risk of harmful algal blooms.

Heavy metal pollution: The Arno has historically been affected by heavy metals such as lead, mercury, and cadmium, which can originate from industrial activities and improper disposal practices. These heavy metals are dangerous for aquatic life and can accumulate in the food chain, causing harmful effects on organisms.

Impact on the ecosystem and health: Pollution in the Arno directly affects the river's biodiversity. Aquatic species, such as fish and invertebrates, are at risk due to contaminants and the deterioration of water quality. Additionally, pollution can lead to the formation of toxic algae, which can harm the ecosystem and make the water unsuitable for human consumption and contact.