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WATER POLLUTION



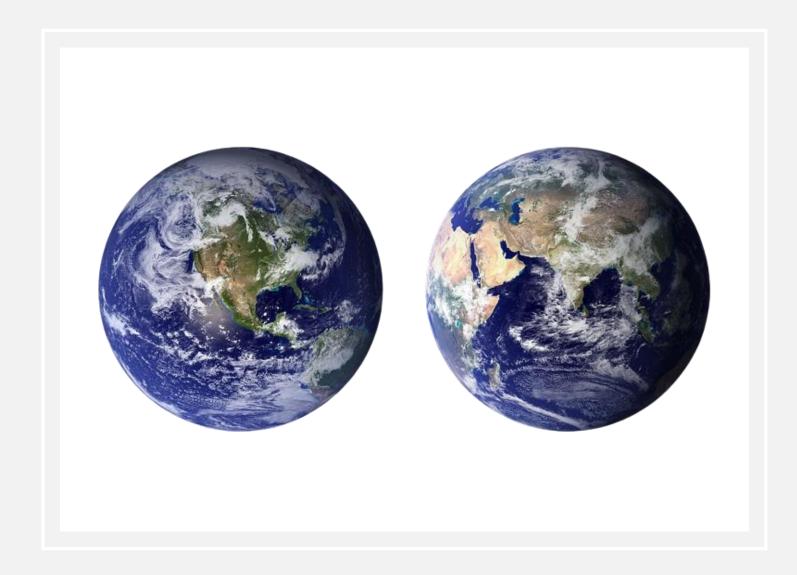
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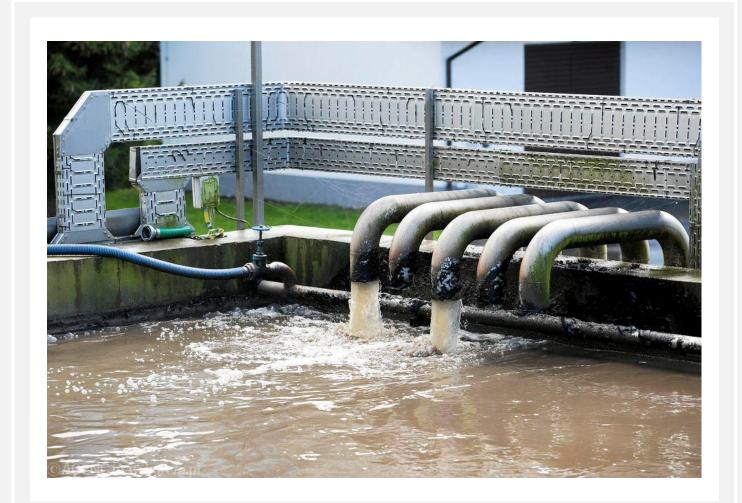
WATER

- Water is one of the factors, thanks to which life on Earth is possible.
- It covers 3/4 of our planet's surface.



WATER POLLUTION

 We speak of water pollution then, it contains an increased amount of chemical substances, bacteria and microorganisms, which are not its natural ingredients.



SOURCES

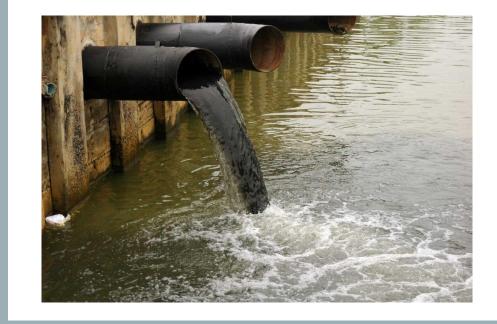
- Sources of water pollution can be divided into three categories
- point sources
- area sources
- linear sources



POINT SOURCES

 Point source of water pollution refers to contaminants that enter a waterway from a single, identifiable source, such as a pipe or a ditch.





AREA SOURCES

Pollutants washed away by precipitation from urbanized areas without sewage systems and from agricultural and forest areas.





LINEAR SOURCES

 linear sources of pollution of communication origin, produced by means of transport and rinsed off the road surface

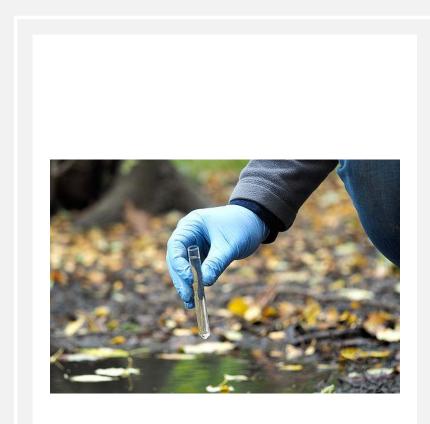






DIVISION OF WATER CLASSES

- Class I clean, drinkable waters, for use by the food industry and pharmaceutical.
- Class 2 waters suitable for breeding livestock and for recreational needs.
- Class 3 water suitable for irrigation of agricultural and horticultural land.
- Out-of-class waters that is, excessively polluted water that does not meet the standards



WATER QUALITY IN POLAND

 In Poland, water quality assessment is carried out on the basis of river cleanliness monitoring. According to the report, the poor condition of Polish waters affects
91.5% of river resources, about 88% of lakes and nearly 100% of transitional waters



WATER POLLUTION IN WIELKOPOLSKA

The Warta is the third longest river in Poland. It flows through Poznań. The water class in this river is 3.



biological

class

class II

class III

class IV

lass

class II

100

90

80

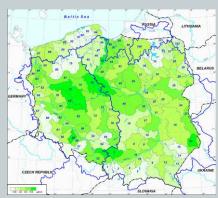
70 60

% 50

40

30 20

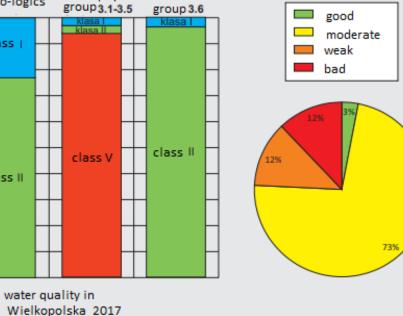
10



ecological state

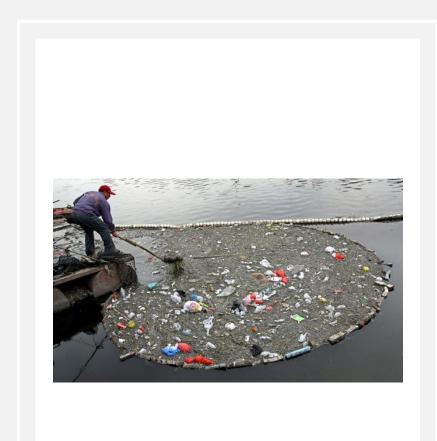
physicochemical hydro-logics group3.1-3.5 group 3.6 class I

element classification



CONSEQUENCES

• Water pollution has a detrimental effect on human health, cause a change in taste, odour, colour and pH of the water and its turbidity. The most important contaminants are: nitrates, chlorides, sulphates, phosphates, heavy metal ions, phenols, aromatic amines, dyes, detergents and pesticides.



PREVENTION

- Water pollution can be reduced by:
- construction of new sewage treatment plants and modernization of old ones.
- the use of waterproof technologies or technologies with closed water circuits.
- reducing the amount of pollutants discharged into these waters.
- rational water management.



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