

*Biodiversity, protection
and exploration of water
reservoirs*

Physico-chemical properties of tested waters

Site	pH	Temperature [°C]	Sulphate [mg/L]	Hardness [ml]	Alkalinity [ml]
Oleśnica pond	8	19.6	87	1.078	1.550
Odra	7.9	18.3	123	1.294	1.268
Borowa pond				0.698	1.032
Borowina	<u>8.3</u>	18.5	26	0.488	0.598
WZ	8.11	18.6	31	0.380	0.490
OP	6.8	19.2	<20	0.124	0.122
MS	6.94	19	<20	0.114	<u>0.050</u>
PLA	<u>6.7</u>	<u>18</u>	<20	<u>0.044</u>	0.114

The most hard water is water from Odra's river (1.294 mg/L), and PLA only 0.044 mg/L.

The most alkaline water is from Oleśnica pond (1.550 mg/L), so MS has 0.050 mg/L.

The water from Borowina has the most alkaline water from the tested waters (pH = 8.3)

The most sulphate in the water was from Odra's river 123 mg/L and OP, MS, PLA have only 20.

Results

Water from the mountains is not hard, so it is better for cleaning and drinking.

Alkalinity is low in the mountain water too, so is more neutral and better for us to drink than water from cities.

The most polluted water is from Odra (sulphate = 123 mg/L), because around river are a lot of farm, factories and cars.

Other environmental factors affecting water quality

When you burn carbon the ashes goes to local waters and pollutes it. In the results water changes its color, taste, it is not good for fishes.

Use of the water for commercial purposes – fish breeding

When we have a fish breeding we must remember about take care of clarity of water.

Fish breeding and nature protection – Polish solutions

- People create fake ponds for breeding fishes,
- They use only natural feeds for fishes

My proposals for actions to improve water quality

- 1) Protection zone between the field and the river
- 2) Limit the burning carbon
- 3) Filters for the factory's chimney, cars, boats etc.
- 4) Use less fertilizers