

Floods

Aside from bringing many benefits, such as access to water that was not only rich in fish but could also be used to transport goods, the location in the valley of the Odra river entailed the inevitable risk of flood. The inhabitants of the Odra Valley knew for centuries that from time to time, the water level of the river would rapidly increase and take possessions, entire buildings, or even lives. However, the benefits arising from the vicinity of the river outweighed the dangers.

The first Polish mention of the flood comes from 988. Jan Długosz cited the following description: "During that time, numerous extensive floods took place and were followed by a scorching summer, harmful for many crops," and then, in 1118, he stated: "These constant downpours and floods, not only in Poland, but also in the neighboring countries, caused many damages by engulfing almost the entire land, and thus hindering the sowing and reaping. Shortly after, such immense downpours and storms fell, and the waters flowed out of the rivers so violently, that some people dreaded another flood."

Heavy rains and thawing snow in spring are the main reason for the occurrence of floods on the Odra river. Even during the Middle Ages, earth embankments were sporadically built to protect the places that were at particular risk of flooding; however, systemic protection against floods was designed in Silesia during the 19th-century rebuilding of the Odra riverbed. Nevertheless, at the same time, the riverbed was significantly shortened and straightened, many forests were cut, and land improvement processes were conducted on the wetlands. Therefore, the local retention, that is, the capacity to hold water, decreased drastically, whereas the speed of the flow on the way to the sea increased. In consequence, the floods got even more violent and started to achieve maximum levels not witnessed before.

The floods with the highest water levels took place in 1880 and 1903 when the maximum value - 818 cm - was recorded on the stream gauges on the Odra river. The flood in the spring of 1939 was also printed in the memory of the inhabitants of the Odra Valley for a long time. However, the Odra river reached the highest water level in 1997, when the level of 947 cm was recorded on 10 July in Koźle. What constituted the direct cause of the flood was extensive rainfall caused by the collision of two air masses - maritime polar air and hot tropical air. The cataclysm of 1997 was named "the Millennium Flood." Within the territory of Poland, 56 people were killed, and the damages were estimated at circa 3.5 billion USD. In our region, the cataclysm affected about 2100 families, whereas the damages were estimated at 23 million PLN.