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CHARACTERISTIC OF OCCURRENCE OF FLOODS AND STREAMFLOW DROUGHTS IN A SMALL MAZOVIAN LOWLAND CATCHMENT

**Summary**

The aim of the study was to characterise the occurrence of floods and streamflow droughts in the catchment of the Zagoźdżonka River in two gauging stations: Plachty Stare and Czarna, based on the daily flow hydrographs. The study catchment is monitored by the Department of Water Engineering, Warsaw University of Life Sciences since 1962 and is one of the few small catchments in Poland with such a long data set. To define floods and low waters, the cut-off limit on the daily hydrographs has been used. The research covered the period of 50 years (1963–2012) for the Plachty Stare gauging station and 22 years (1991–2012) for Czarna one.

The frequency of occurrence, the duration of analysed phenomena and their quantitative parameters were determined and compared for both stations. Floods and droughts in the Zagoźdżonka River during analysed period of time were calculated as 10% of all observed daily flows. Floods dominate in the winter half of hydrological year, streamflow droughts occur in the first half of summer season. Along with increasing catchment area, increased frequency, duration and water deficit of droughts were noted. The frequency of flood occurrence decreased with the increasing catchment area.

*Key words:* floods, low waters, lowland catchment