

GRABIA CATCHMENT

General characteristics

Grabia is a typical lowland river of middle-size. It is a tertiary inflow of Odra river. The area of the catchment is 819,5 km². It is situated in the region of Łódz Highland and embraces fragments of three regions of Poland: Piotrkowska High Plain, Łaska High Plain and Szczercowska Valley.

It originates at 229 m above sea level and the entire length of the river amounts 81,1 km.

Structure of farms:	
- Average farm area [ha]	6,2
- Farms > 15 ha [%]	16,1
Population density [n km ⁻²]	145
Number of towns and cities	2
Number of villages	223
Human population in the cities [%]	46
Average daily load of source pollution:	
- Sewage [m ³ d ⁻¹]	3680
- Total nitrogen [kg d ⁻¹]	116,8
- Total phosphorus [kg d ⁻¹]	50,6

Land use:

Grabia catchment has a typical agricultural character, i.e. 63,2% of surface is used for agriculture, 24,7% forestry and marshy grounds, and the rest 21,1% are urbanized areas.

The contribution in farmland:

- arable land – 47,4%
- meadows and pastures – 15,3%
- orchards – 0,5%.

Main sources of pollutants of upper and the midcourse of the Grabia river are non-point sources from farmlands and point sources from rural settlements. Water in the lower course of the river undergoes gradual degradation, as a result of permanent introduction of municipal and industrial sewages, mainly from Łask and Karsznice region.

The foreseen quantity of nitrogen, which gets to the underground water, is considerable mostly in farm areas.