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ECOLOGICAL ASSESSMENT OF RIVER QUALITY IN ZHYTOMYR REGION (WITHIN THE PRIPYAT RIVER BASIN)

Purpose – perform an ecological assessment of the quality of the rivers of Zhytomyr region (within the pool of the Pripyat river).

Method. The study was conducted according to systematic observations based on the ecological classification of the quality of surface water and estuaries in Ukraine, which includes a set of hydrophysical, hydrochemical, hydrobiological and other indicators reflecting the peculiarities of components of aqueous ecosystems. On the basis of common environmental criteria, the methodology makes it possible to compare the quality of water at different sites of water bodies, in water bodies of different regions. The calculation of the ecological assessment of water quality was carried out within three blocks: block of salt composition (I1), block of trophic-saprobiological (ecological-sanitary) indicators (I2) and block of indicators of content of specific substances of toxic action (I3). The results are presented in the form of a combined environmental assessment based on the final conclusions of the three blocks and based on the calculation of the integrated environmental index (IE).

Results. An analysis of the modern ecological state of the rivers of the Zhytomyr region was carried out (within the Pripjat River Basin) and an assessment of the quality of their water according to the relevant categories. The results of observations on the qualitative state of surface water of the rivers of the rivers, uz, yarn, norin (within the Zhytomyr region) indicate their satisfactory condition. Water rivers, uz, norin correspond to the III class of water quality ("satisfactory" by class, "weakly polluted" by degree of purity). The best quality of surface water is observed in the river the river (II quality class, "good" by class, "fairly clean" by degree of purity). The greatest influence on the formation of water quality in rivers studied have indicators of a trophy-saprobological block. This is due to a high anthropogenic load in river basins, in the first place discharges of insufficient sewage.

Scientific novelty. For the first time on the basis of analytical studies and stock materials, an ecological evaluation of the surface water of the rivers of the rivers, shoving, UZ, Norin within the Zhytomyr region in three blocks of indicators: saline composition, trophoprobological parameters and specific substances of toxic action. The integral ecological index is determined. The tendencies of accumulation of pollutants in the surface waters of rivers studied are established.

Practical significance. The studies have allowed to analyze and evaluate the environmental state of the rivers of the rivers of the Zhytomyr region within the pool of the Pripjat River, which will establish the environmental standards of water quality and to determine the basic directions to improve the state of water resources and substantiate the system of recommendations aimed at improving the environmental status of the studied. pools within the area.

Key words: surface waters, river, water quality, integrated index, ecological assessment.

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