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Assessment of oil pollution of surface waters in Belarus

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Petroleum products in the form of oil, fuel oil, kerosene, oils and impurities are among the most dangerous environmental pollutants and they negatively affect surface waters in Belarus. The article presents the results of a comprehensive study of oil pollution of surface waters in Belarus according to the National system of environmental monitoring for the period from 1994 to 2014 at 107 sites. A detailed description of the current state of waterways and water bodies for oil pollution is given.

The dynamics of oil pollution and the trends of their development are presented in detail. With the use of statistical models the predictive estimates of water pollution with oil products are carried out. The greatest anthropogenic load from pollution by oil products is experienced for the rivers of the Dnieper basin, and the least amount of oil products falls into the watercourses of the Western Bug basin. In the context of the regions the Brest region receives the greatest load, and the smallest – the Grodno region. It is also necessary to note a significant contribution to the pollution of Minsk.

The dynamics of oil pollution of the surface waters in Belarus indicates its decreasing. The basins of the Pripyat, Western Dvina and Neman rivers are particularly prominent, minor changes affect the Dnieper basin. Predictive estimates of the concentration of petroleum products in the surface waters of the rivers in Belarus have shown that the tendency towards a slight decreasing in the level of pollution by petroleum products will continue, although there will be a slight increasing in pollution at some sites