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CHARACTERISTICS OF LAKE WATERS AND SOIL CHEMICAL COMPOSITION OF KAMYSHLOVSKY LOG IN OMSK REGION

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The paper discusses the chemical composition of waters in the mineral lakes of Kamyshlovsky log in the Omsk region. It is shown that the sulphate sodium type of water in the lakes of the region is formed in the centers of continental salinization - in the Kamyshlovsky ravine. The total mineralization in lakes ranged from 20.6 to 30.1 gl^{-1} in 2016 and from 1.66 to 12.54 gl^{-1} in 2018, the reaction of the medium (pH) was changing from 7.03 to 8.8 in different years of the studies with a predominant sodium content. The soil cover of the bottom of the ancient Kamyshlovka river is currently formed by salt marshes, solonetzes, meadow-bog and bog soils. All soils are of heavy loamy and clayey texture. It has been established that the important role in the formation of lakes and their chemical composition was played by the feeding of groundwater (enriched with sodium chloride) and climatic conditions. The climate creates a general background in which most of the processes that affect the formation of the chemical composition of natural waters develop. Salt marshes are formed in soils located next to more saline lakes, and solonetz and solonetzic soils near the less saline lakes. With distance from lakes increasing, the concentration of the salts in the soil profiles is decreasing. According to the ionic composition, all the lakes under study have a sulfate – chloride sodium type of salinity (except for Kamyshnoye lake, in which the type of salinity varies depending on the hydrological regime of the territory).

***Key words*:** Kamyshlovsky ravine, mineralized lakes, soil cover.