

Abstract:

After the end of hydric recultivation from the monitored source of watering, artificially built-up lakes are fed with the water from their own basin. This water is not so systematically monitored as compared to the water from the new lake and the sources of its filling. This thesis summarizes findings about the development of artificially made basin in the mining area and explains differences between various basins. Further, this work deals with the characteristics of water feeding lake „Chabarovicke jezero (Milada)“, which was built-up during hydric recultivation of the mineshaft in the soft-coal quarry Chabarovice. Monitored basins have different area, slope, vegetation coverage and distribution of dissolved compounds. These factors have significant impact on the character of the water in affluents.

We found out, that affluents from the own basin have high concentration of dissolved compounds resulting in the unwanted enrichment of the lake. Big problem was the high concentration of sulphates and nitrates, which in all affluents, except for one, exceed tolerated limits for surface waters. In the course of time, concentrations of dissolved compounds go down. Particular affluents differ between each other and the main impact on the water characteristic is the slope, exposition and area. In the beginning of the feeding, the lake was mostly influenced by the artificial feeding sources. After that, the affluents of its own basin gained on impact.