diploma thesis called "Hydrological regime of Mladotice Lake" deals with the hydrological function of the lake in terms of flood waves transformation and retardation. The author focuses on the influence of causal rainfall on Mladotický Stream water level fluctuation as well as on the ability of the lake to retain or transform peak flows. Relationships between rainfall episodes and corresponding Mladotický Stream peak flows together with flood waves shape and delay presented on hydrograms represent main outcomes and results of this thesis. Furthermore, Mladotický Stream hydrological data, which are used for the purpose of runoff regime analysis, are extrapolated by means of calculated convertible index.