

ABSTRACT

This thesis is concerned with detailed analysis of glacial hydrological regime and its influencing factors. Knowledges published in the domestic and foreign scientific literature were applied on data acquired in the area of Adygine Lake (Tien – Shan, Kyrgyzstan). The lake is a part of a lake system recently developed in the surroundings of a retreating glacier. There is a potential risk of dam failure in terms of its stability. Lake level fluctuations depending upon climatic conditions, melt water inflow and capacity of subsurface outflow channels were observed.

Key words: glacial regime, glacial lake, melt water, glacier melt, diurnal variations, seasonal variations, delay of runoff