

论文

西藏终碛湖溃决形式研究

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摘要:

西藏终碛湖众多,一旦发生溃决,将造成巨大损失。冰湖溃决机制的研究对冰湖溃决预测和溃后灾害评估是十分必要的。将冰湖终碛堤视为天然堆石坝,用水力学和土力学理论研究冰湖溃决的力学机制。重点研究溢流型溃决形式和管涌型溃决形式,根据野外观测数据和前人的研究,发现溢流型溃决的溃口多呈梯形或圆弧状形,对比真实数据发现溃口顶宽与坝高的关系,并且所有冰川终碛堤都表现为局部溃决。通过实地考察、取样分析,判断光谢措终碛堤的可能渗透破坏形式。

关键词: [西藏](#); [终碛湖](#); [溃决形式](#)

A study of the outburst form of the end moraine lake in Tibet.

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Abstract:

Many end moraine lakes are distributed in Tibet. Once any of these lakes outbursts, this region will undergo a huge loss. So studying the outburst mechanism is essential for forecast and assessment of the disaster. In this paper, the end moraine dam is considered as a natural dam and the outburst of end moraine lake is researched in terms of hydraulics and soil mechanics. According to field observations and previous researches, our study focuses on the overflow and piping break types of outburst. It is found that the dyke breach in the overflow type usually has the shape of an arc or a trapezoid. From the field observations, we have found a relationship between the height and the open width of the breach. Almost all end moraine lakes collapse partially. Based on field surveys and sampling analysis, we have determined the possible ways of collapse of the Guangxieco end moraine lake by infiltration.

Keywords:

[Key words: Tibet; end moraine lake; outburst form](#)

收稿日期 null 修回日期 null 网络版发布日期 null

DOI:

基金项目:

国家自然科学基金项目(40771024);交通部科技项目(200631879284);水利部公益性项目(200801032)

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