

Effect of Climate Change on Dams

Many nationwide dams have been designed several decades ago based on the probable maximum flood over their life span. Since then, there have been substantial changes in the climate and population. These changes have affected the characteristics of flood events (magnitude, frequency, duration and timing). Effective operation and emergency management of a dam requires considering these changes and incorporating them into the decision making. This project aims to investigate the impact of change in river streamflow on nationwide dams' overtopping risk. You will work on analyzing streamflow datasets and implementing risk and reliability analysis models to estimate the dam overtopping risk over years based on historical and projected streamflow datasets.

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