

R&D Fund Project

Dam Break Analysis And The Social, Economic And Environmental Impact Assessment For The Perak River Hydro Scheme



Temenggor Dam



Failure of an embankment dam in the United States of America

Project Overview

A dam break study was carried out for the 4 cascading dams located at the Perak River Hydro Scheme. These dams are namely Temenggor, Bersia, Kenering and Chenderoh. The primary objective of this study is to conduct a dam break analysis and to establish an Emergency Action Plan for these 4 dams in event of a dam break scenario.

Benefits

1. Ability of the station to respond effectively and immediately in event of a disaster, hence to minimise and mitigate adverse effects.
2. Evaluation of the impact to areas which are to be inundated based on the produced flood maps.
3. To assist the local authorities in the formulation of warning and evacuation procedures of the EAP.
4. Evaluation of the socio-economic and environmental impact downstream of the dam.

Deliverables

1. Probable Maximum Precipitation and Probable Maximum Flood for the 4 dam catchment areas.
2. Dam Break Analysis & Flood Routing Model.
3. Inundation Maps for all scenarios that were simulated.
4. Emergency Action Plan.
5. Quantification of the impact downstream (socio-economic & environmental).