

# An Integrated Flood Warning and Response Model for Effective Flood Disaster Mitigation Management

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Recent flood event in Malaysia especially at the East Coast region of Peninsular Malaysia shows the importance of providing a comprehensive and effective disaster mitigation management which encompasses the involvement of government agencies, private organization and NGOs. The early warning and response model is an important element in the mitigation management where it will reduce the devastating impact to those who are directly or indirectly affected by the flood. An effective warning and response system will ensure all stakeholders get the right information and provide necessary action and response to the information to avoid bigger calamity due to inaction or lack of action. The purpose of this research is to establish an effective flood warning and response model which support the flood mitigation and management system. In order to establish this model, data collection will be done by getting input from those who are affected by the flood disaster focusing on the headwaters area of Pahang River basin to understand the issues they faced specifically on the effectiveness of current flood warning and response system (if there is any). Input from various agencies that are involved in flood warning and response and flood mitigation management will also be sought. The analysis from these data will be done and compared with the current best practices. The outcomes from the analysis will be used as the basis to form a new flood warning and response model. The proposed model can be used to complement the current available flood warning system which effectively assist the flood effected population as well as the flood mitigation management team.

**Keywords:** Flood warning and response model, Flood mitigation management, Disaster Management System