

# DEPARTMENT OF INFRASTRUCTURE ENGINEERING UNIVERSITY OF MELBOURNE



## **Real-time Ensemble Flood Inundation Forecasting**

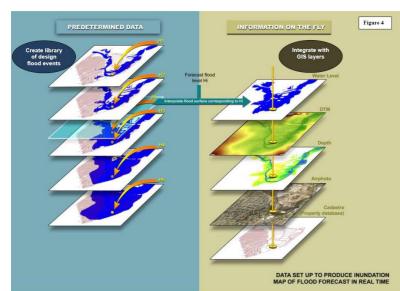
### **Research Problem:**

Lack of capability for real-time flood inundation forecasting without scarified accuracy for flood operations.

The aim of this study is to provide timely and accurate ensemble flood inundation forecasting in real-time.

## **Research Objectives:**

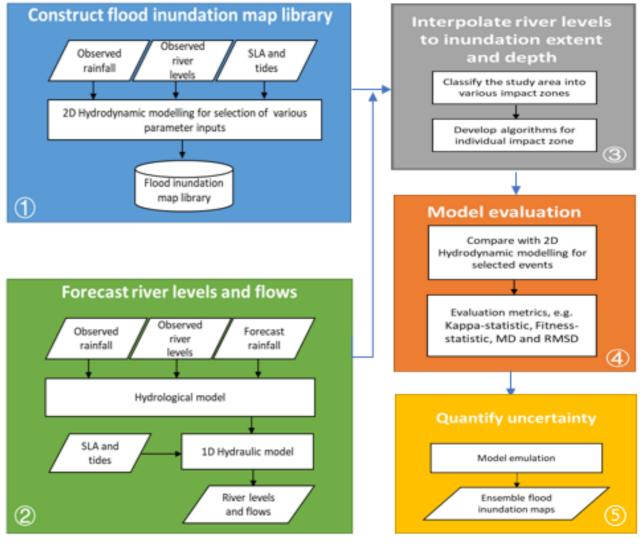
- What does a state-of-the-art operational flood inundation modelling component within the flood forecasting system look like? Building on existing approaches, how well does the inundation modelling component function?
- What are the critical parts in the operational flood inundation modelling component that need the most improvements? How to improve them? How well will this improve the operational flood inundation modelling?
- How to quantify uncertainty arising from the flood inundation modelling?



Flood inundation map library (Druery, 2007)



Study area: Port Fairy, Moyne River Catchment, Victoria, Australia



Improvements on flood inundation modelling component in operational flood forecasting system

Druery, C., McConnell, D., & Adair, L. (2007). Real-time flood risk management - putting certainty into the uncertain. Paper presented at the 5th Flood Management Conference, Warrnambool.

### **More Information**

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