Decision Support System for Flood Management for Bangkok Metropolitan Administration , Thailand

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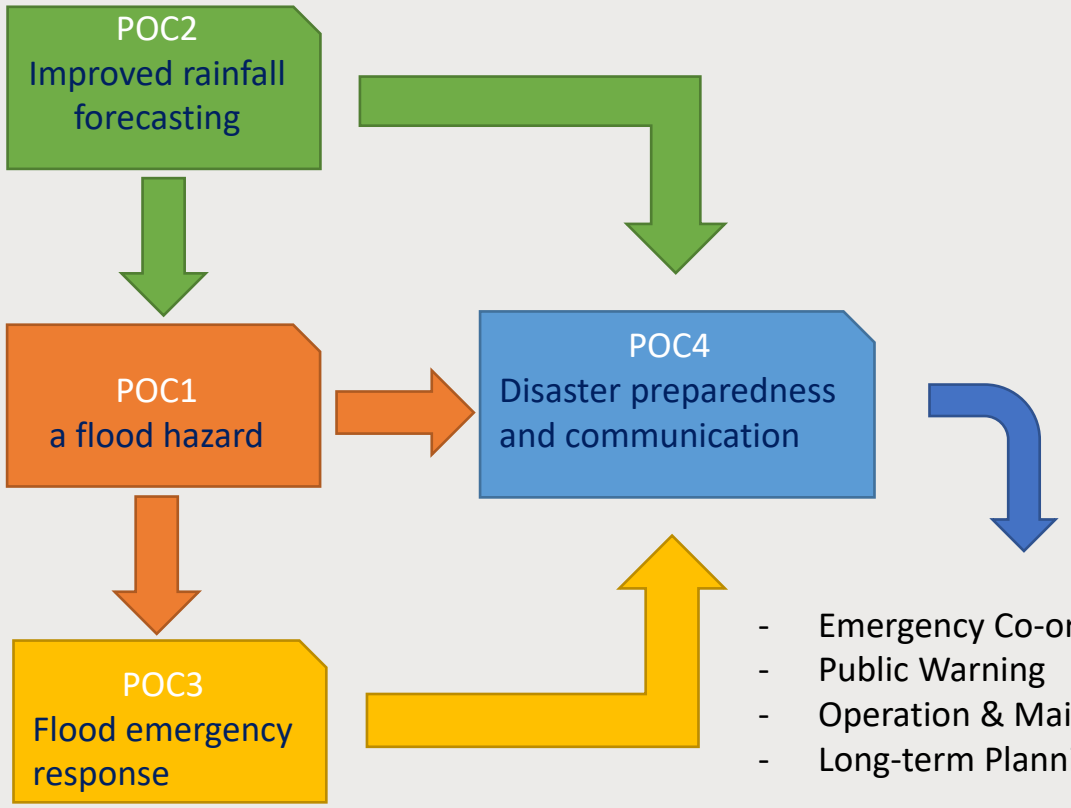
Project Scope and Current Status



Proof of Concept 1

Development of a flood hazard

A Flood Model was developed for Lat Phroa study area to produce spatial flood information that can be presented as web-based, digital or printed maps.

Proof of Concept 2

Improved rainfall forecasting

- **Further enhance the radar-derived Quantitative Precipitation Estimate (QPE) fields with local monitoring using a Vertical Profiling Radar (VPR) system**
- **Delivering operational radar nowcasting (Quantitative Precipitation Forecast – QPF)**

Proof of Concept 3

Flood emergency response

We will use the flood model outputs developed in POC1 to provide recommendations on flood emergency response procedures in the Lat phrao study area.

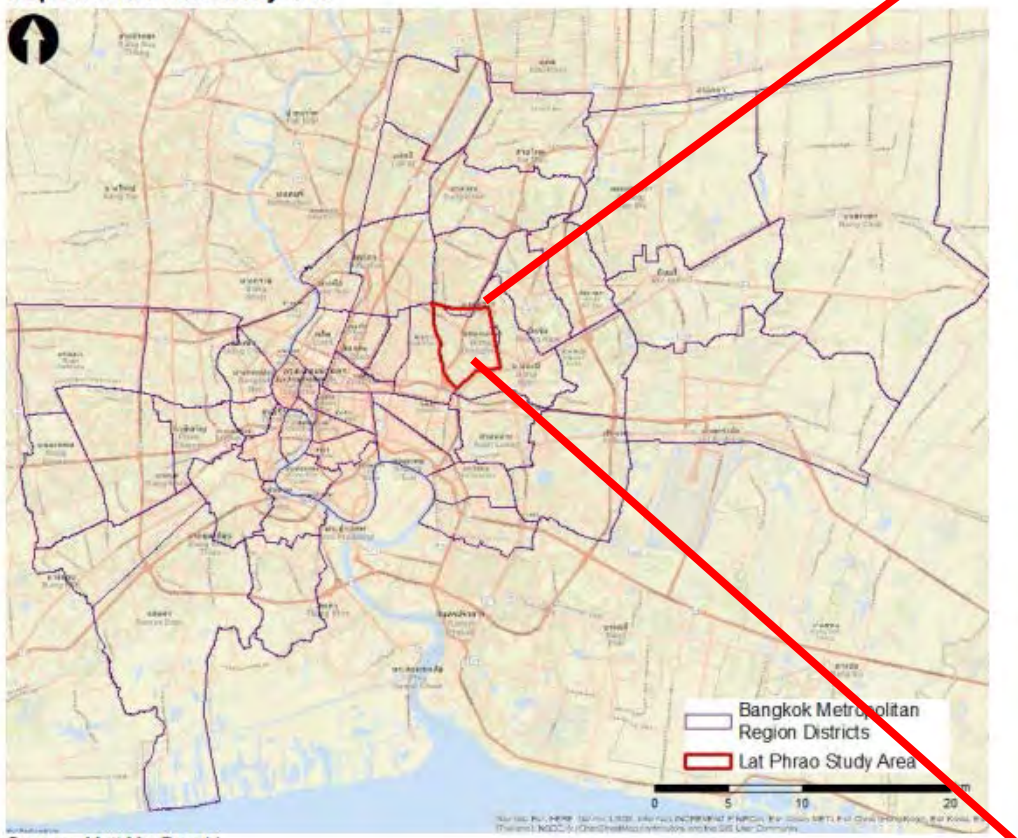
Proof of Concept 4

Disaster preparedness and communication

The results from POC 1 and 2 will be integrates into a web-based DSS application on the Moata platform.

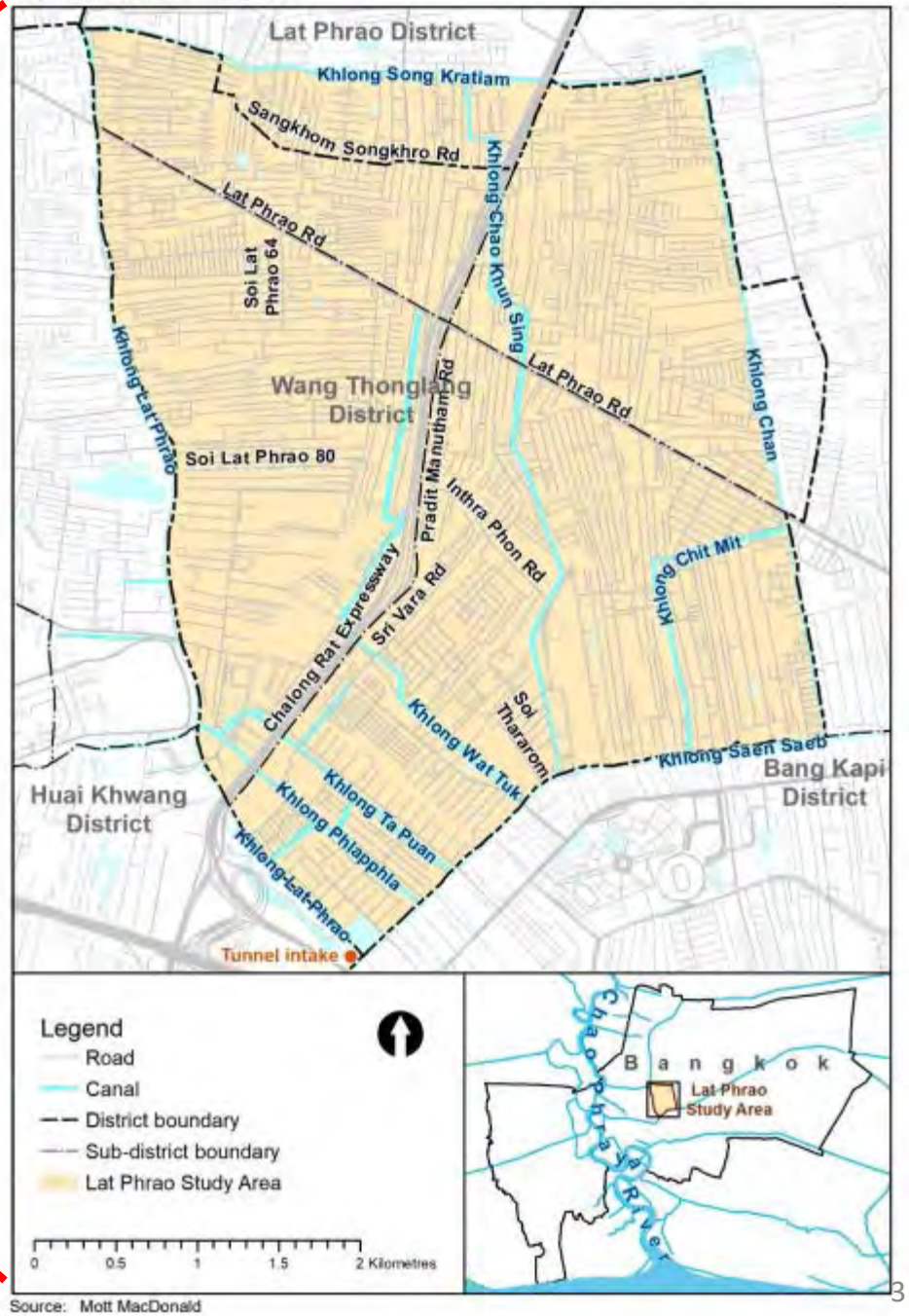
Project Scope and Current Status

Map 1.1: Lat Phrao study area



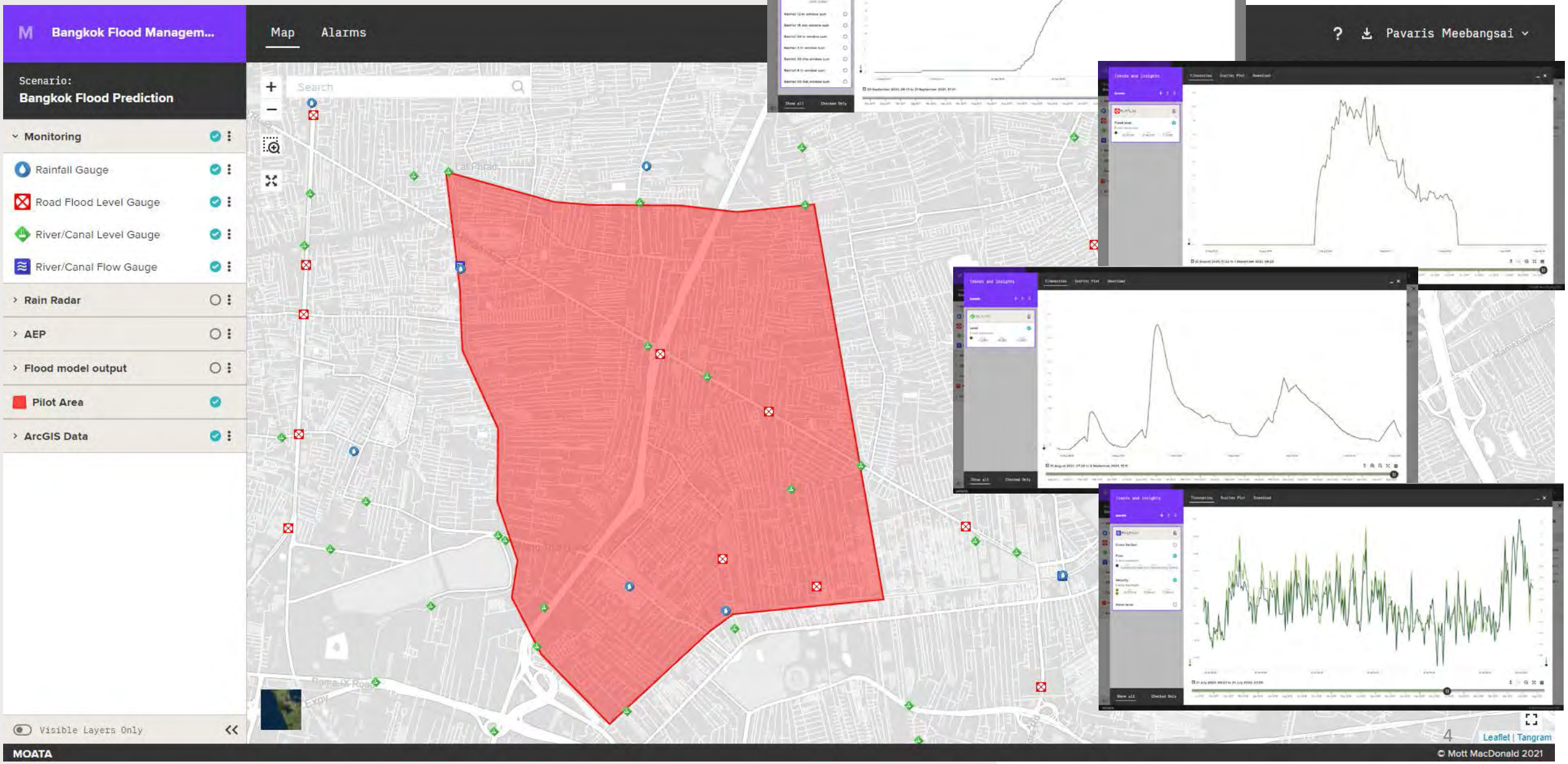
Source: Mott MacDonald

Map 2.1: Lat Phrao study area



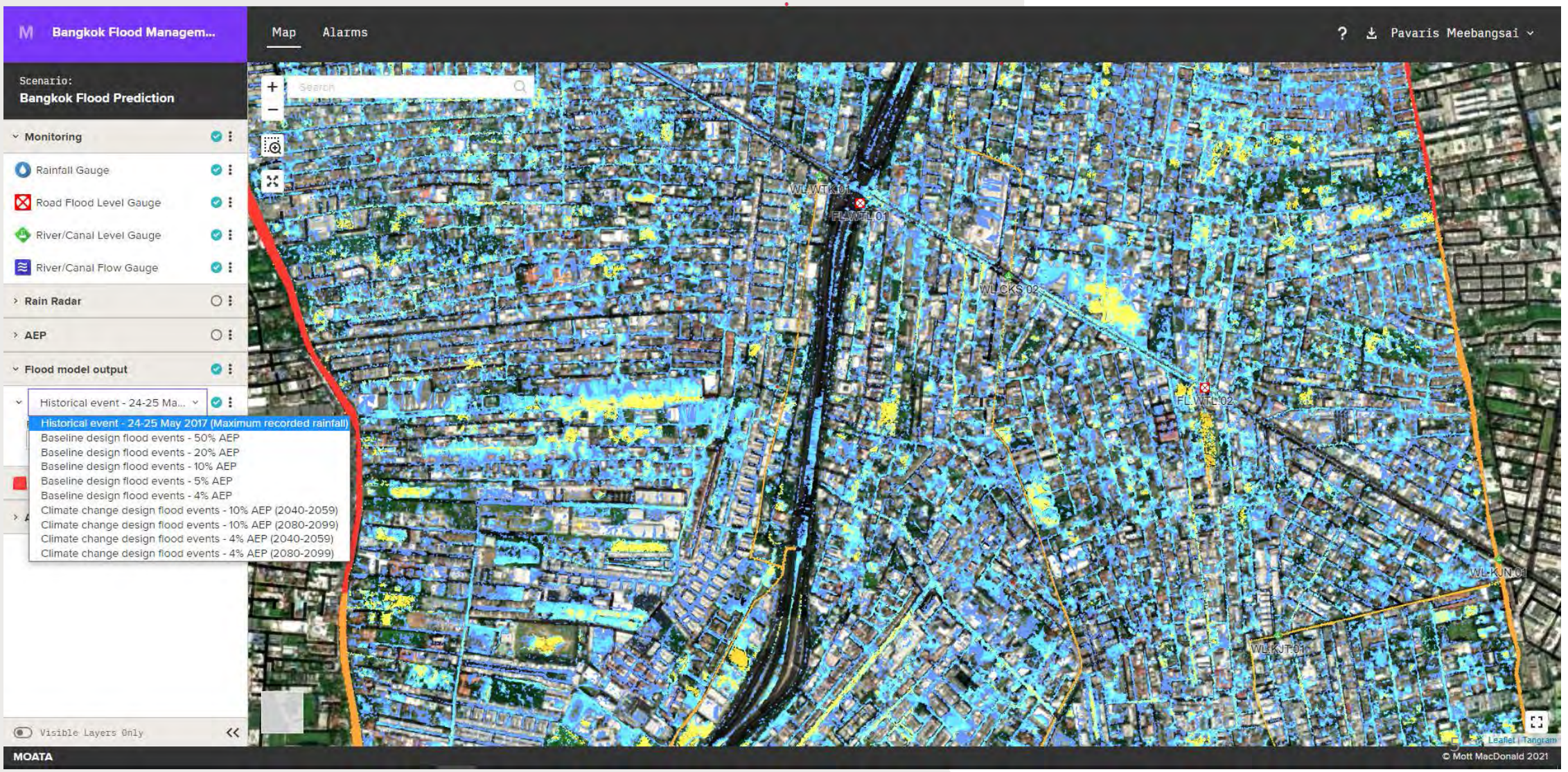
Source: Mott MacDonald

Project Scope and Current Status



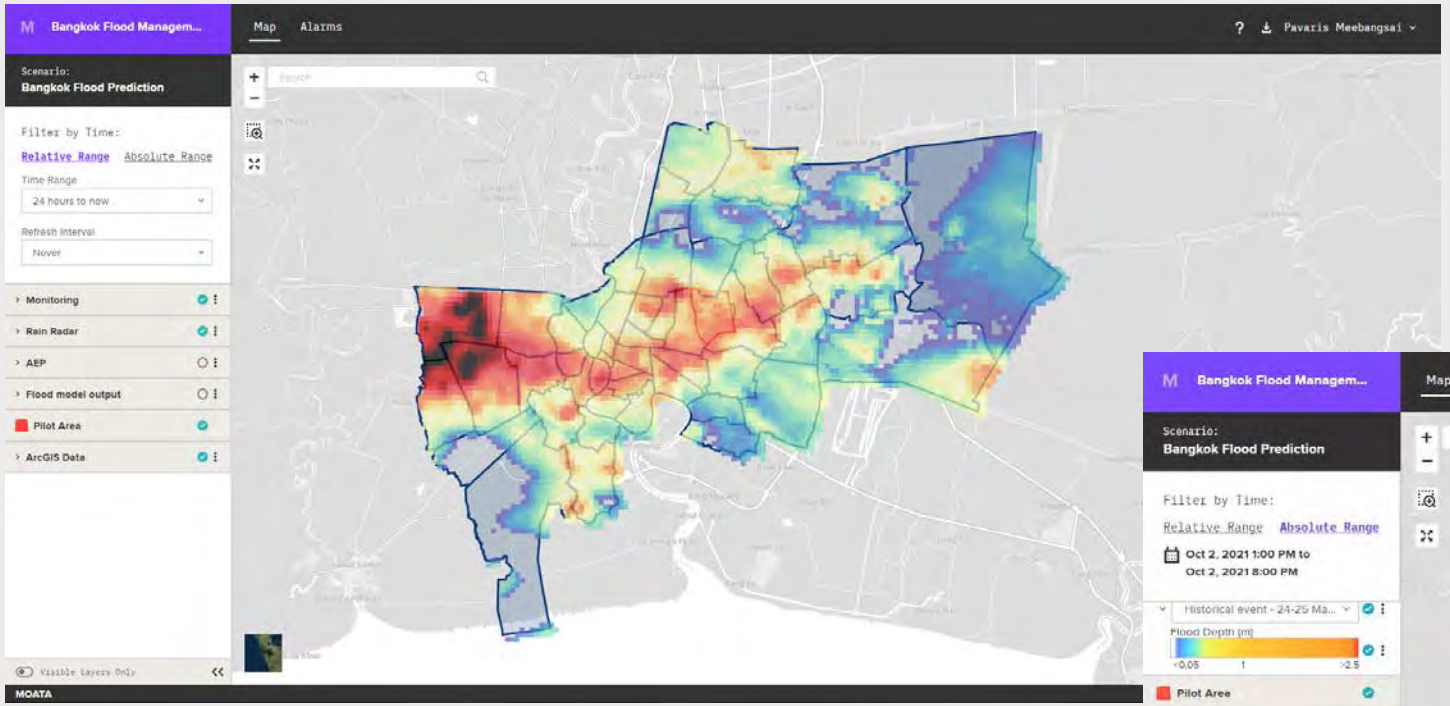
Project Scope and Current Status

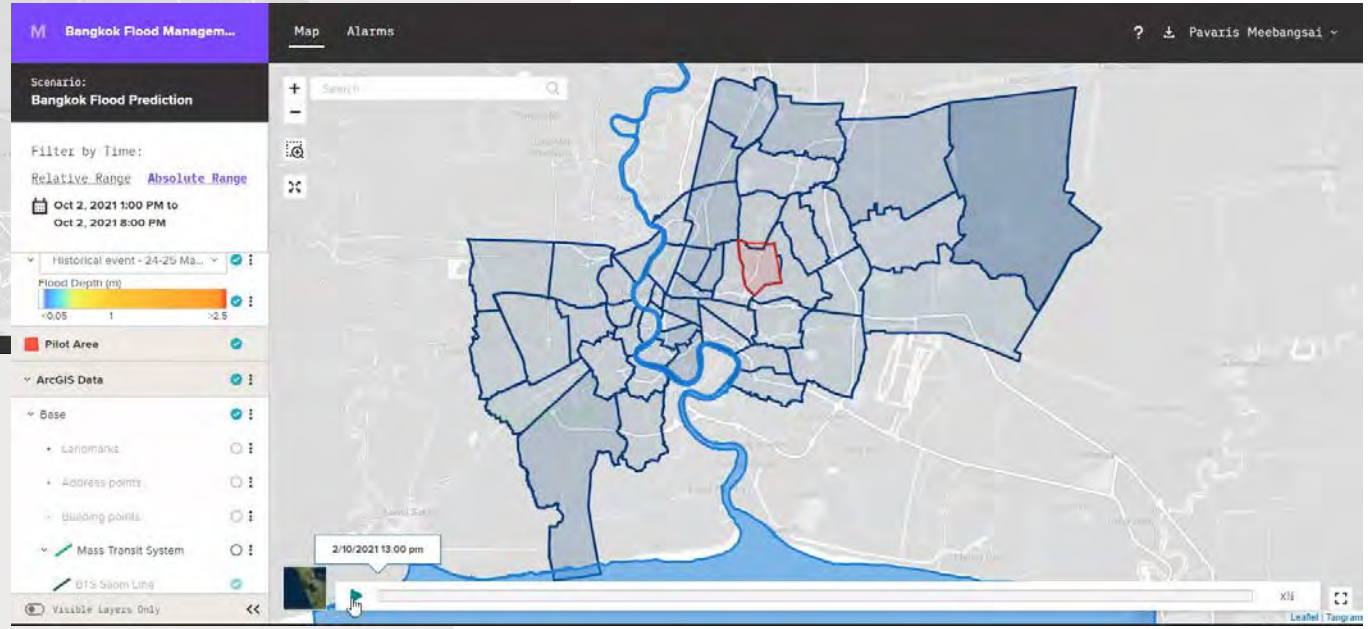
Flood Model Output



Project Scope and Current Status

rainfall estimation and forecasting (QPE/QPF) by a Vertical Profiling Radar (VPR) system



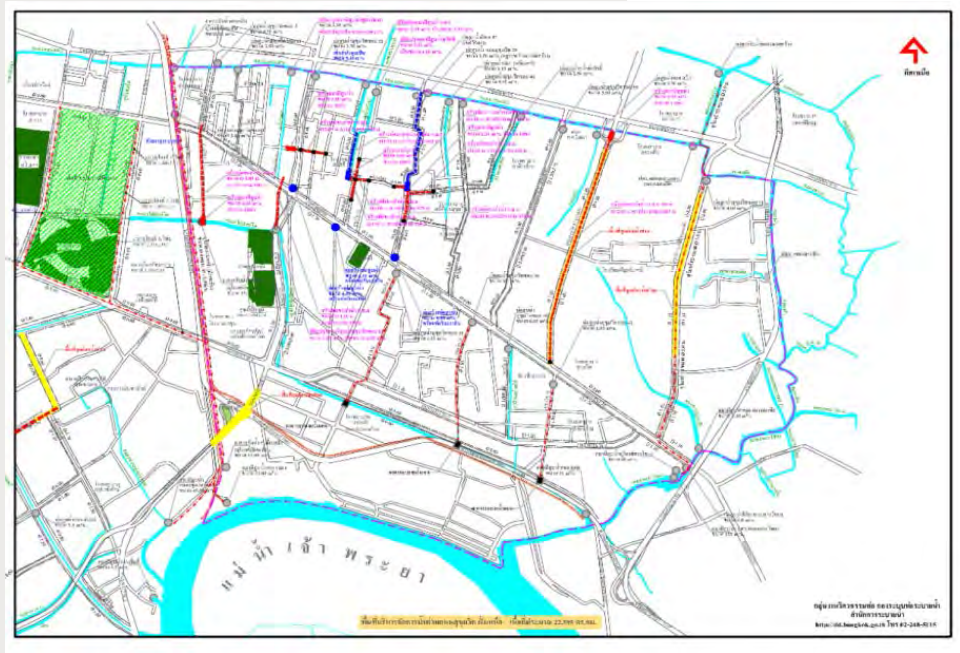


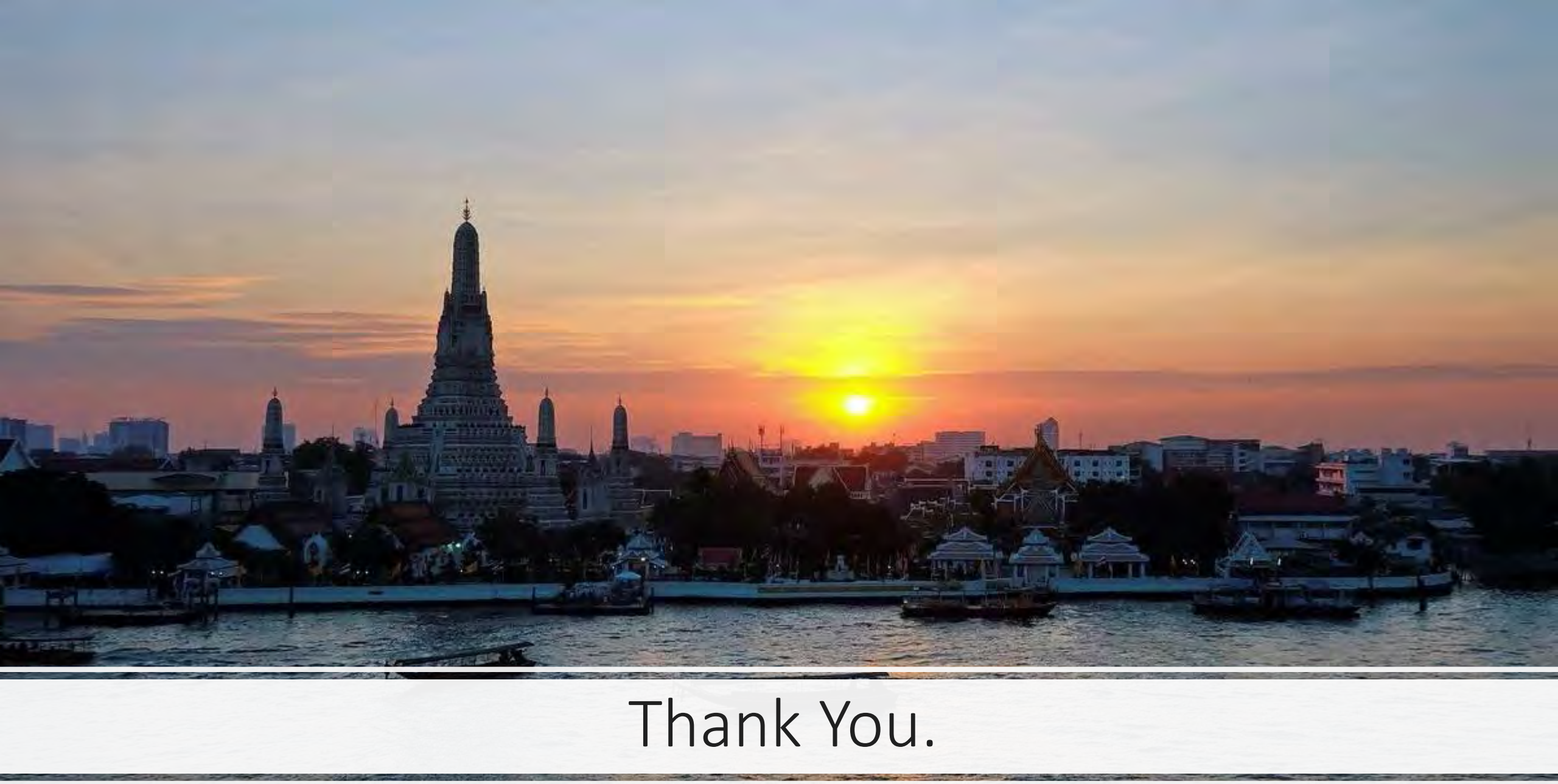
Lessons learned and key risks

- Capacity building for official staffs in flood modeling.
- Flood modeling for water management in Bangkok area.
- Implementation plans/projects for flood management and forecasting system to warning people.
- Considering hydraulic data in flood control center and suggestion data which could increase.
- Flood emergency plan & Communication system for warning peoples.

Challenges and Opportunities

- The climate change effects, uncertainly rainfall
- Personal capacity / Expert for flood modeling





Thank You.