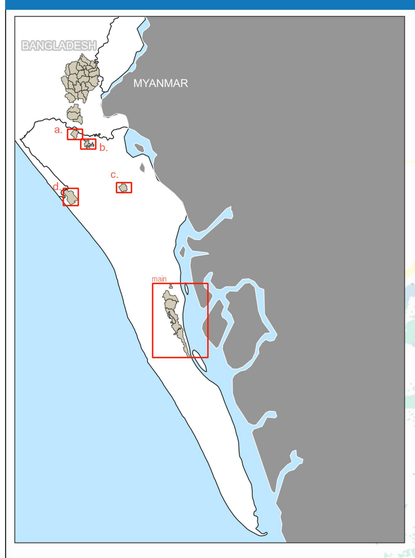
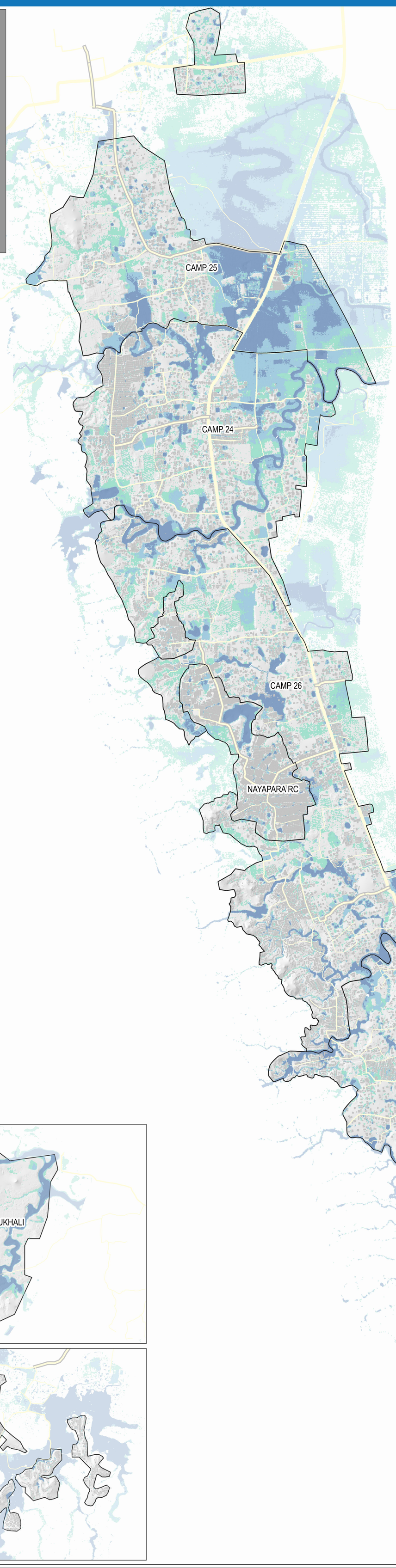
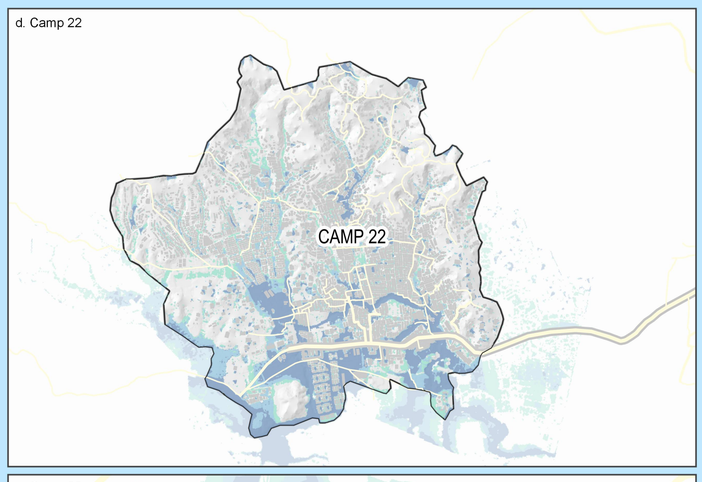
ISCG | INTER SECTOR COORDINATION GROUP

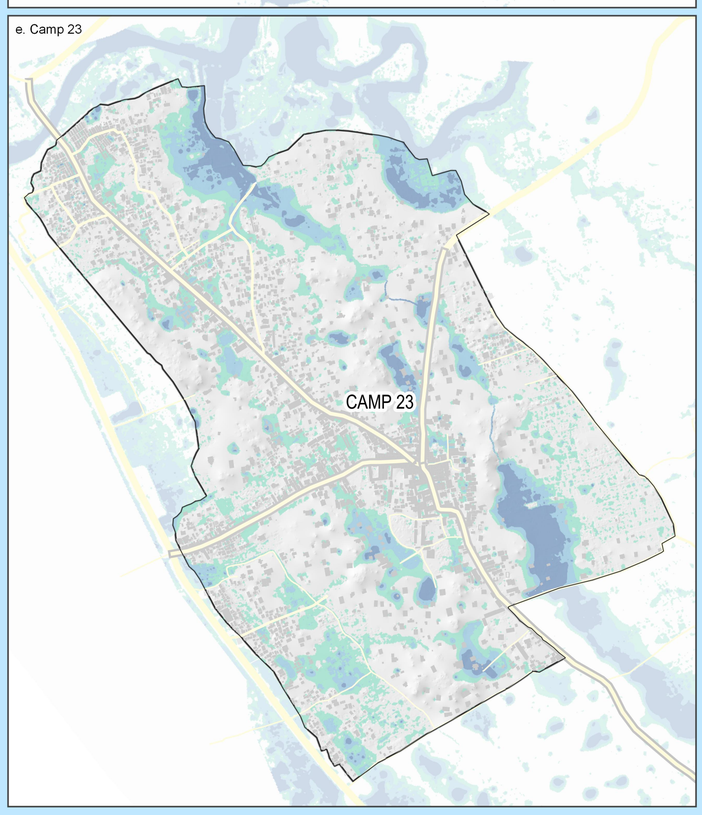
BANGLADESH - Rohingya Refugee Crisis - Cox's Bazar District - Teknaf Upazila
Flood Hazard - Hydrodynamic Modeling - 10 Year Average Return Interval

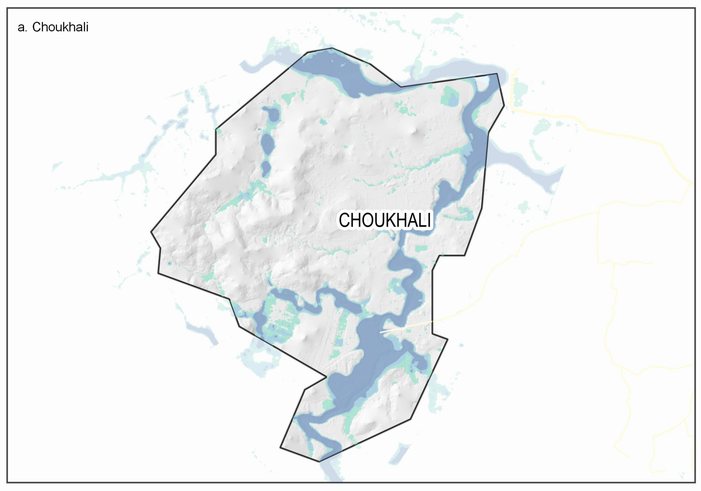
VERSION 1.0
For Humanitarian Purposes Only
Production Date: 2020-02-25

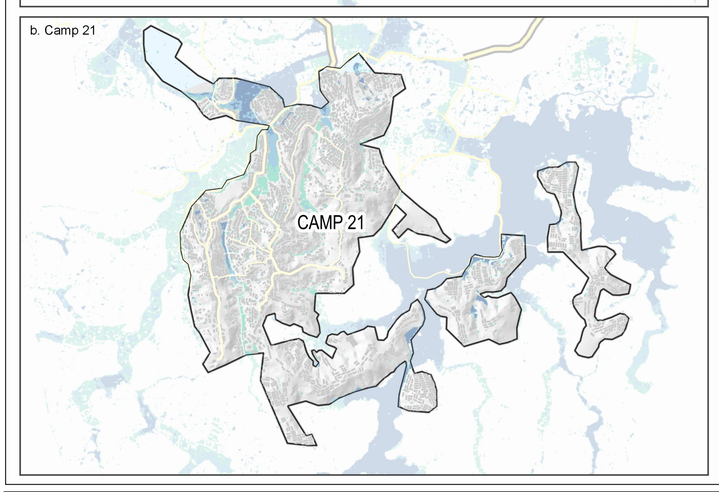












N
W E
S

0 0.5 1 km

* all maps set to same scale

Description:
This map represents modelled flood depth derived from a 10-year average return interval (ARI) rainfall event. The maximum of two different rainfall duration/intensity scenarios for the 10-year ARI storm (3 & 24 hr max precipitation) is modelled:

Depth Classification
> 0 to 0.5m: low flood depth
0.5 to 1m: moderate flood depth
1m or higher: high flood depth

These results are derived from hydrodynamic flood modelling (ARUP, 2019). It is based on assumptions that need to be verified with on the ground data collection. The results of the model are not interpreted and do entail a degree of uncertainties and artefacts.

Usage and limitations:
The aim of this map is to help planners and decision makers to identify priority areas for interventions at camp level. It is NOT designed as a stand-alone tool for detailed site planning decisions. Map results need to be ground verified and decisions combined with specific on-site evaluation and appropriate technical expertise. The map does not provide any information about the water flow. Results are derived from remote sensing data and computational modelling; they are not ground proofed and inherently limited by the quality of the input data and/or model assumptions. The flood zones do not necessarily imply exposure and, similarly, the areas outside the flood zones are not necessarily free from any danger.

Because of these limitations, the following guidelines should be considered as indicative only and verified in the field:

Low flood depth: People and infrastructures can be affected but the impact is likely to be minor.
Moderate flood depth: People and infrastructures can be affected. Site development activities need to be combined with appropriate protection measures
High flood depth: People and infrastructures are exposed; this zone should be avoided.

This map product is part of on-going analysis and has been released in addition to the the Summary report (status 10.06.2019) produced by the Natural Hazards and Risk Analysis Taskforce. Refer to the report for further details. Please submit any requests to the ISCG Information Management Unit.

Data Sources:
Background: Hillshade derived from NPM - UAV Orthographic DEM, January 2019
Structure Footprint: UNOSAT- REACH, 2019
Roads: ©OpenStreetMap contributors
Hydrodynamic Modeling- ARUP, 2019
Camp Boundary - ISCG, 2019
Coordinate System: WGS 1984 UTM Zone 46N

Flood Depth
- Low (> 0 to 0.5 m)
- Moderate (0.5 to 1 m)
- High (> 1 m)

- Camp Boundary
- Road/ Footpath
- Structure
- Bridge

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