Legend

★ Governorate Capital

Road

Governorate boundary 9,380,660

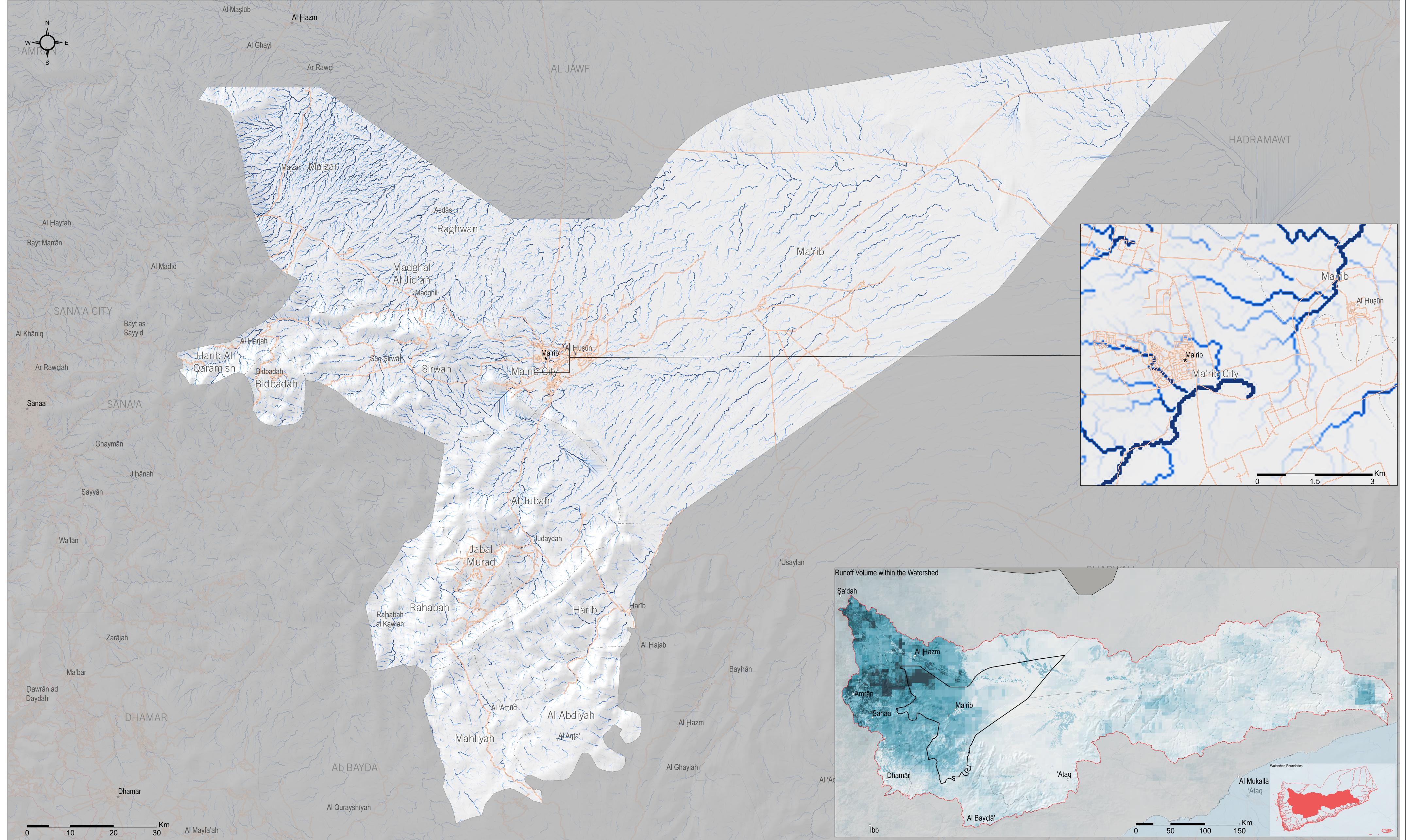
Watershed boundary

Runoff Volume Accumulation (m3)

Saudi Arabia

## YEMEN - Ma'rib Runoff Volume Accumulation for 50-year return period - May 2020

**Intended for Exploratory Purposes** Version 1 Production date: 21 May 2020



planning. Methods are unverified by hydrological experts. Data, designations and boundaries contained on this map are not warranted to be error-free and do not

occurring in a timespan of 50 years. The boundaries of the catchments indicate the basin where runoff will flow.

The runoff potential was calculated using the SCS-Curve Number method, developed by the United States Department of Agriculture. The curve number is an empirical parameter deriving from soil hydrological properties and landcover types, and it is inversely related to the potential maximum

The map represents the surface runoff volume accumulation in river channels, during an extreme rain intensity event which has a high probability of

The runoff accumulation was derived by calculating the flow accumulation from a Digital Elevation Model and using the Runoff volume as a weight. The rain intensity return period takes into account daily rainfall data from 1984 to 2019, and it represents estimated maximum rainfall intensity occurring in a timespan of 50 years, with a duration of 24 hours. It was calculated through the generation of a generalized extreme event distribution

Data sources: Note: The results of this exploratory analysis are not to be used for strategic Rainfall: CHIRPS Daily v2 (0.05°) (https://www.chc.ucsb.edu/data/chirps) Curve Number: GCN250 (250m) (https://www.nature.com/articles/s41597-019-0155-x) Elevation: NASA-DEM (30 m) (https://earthdata.nasa.gov/esds/competitive-programs/measures/ imply acceptance by the REACH partners, associated, donors mentioned on this Administrative boundaries, cities: OCHA

Coordinate System: WGS 1984 UTM Zone 38N File: REACH\_YEM\_MAP\_RunoffAccumulation\_Ma'rib\_21May2020\_A0\_EN\_V1.pdf Contact: reach.mapping@impact-initiatives.org