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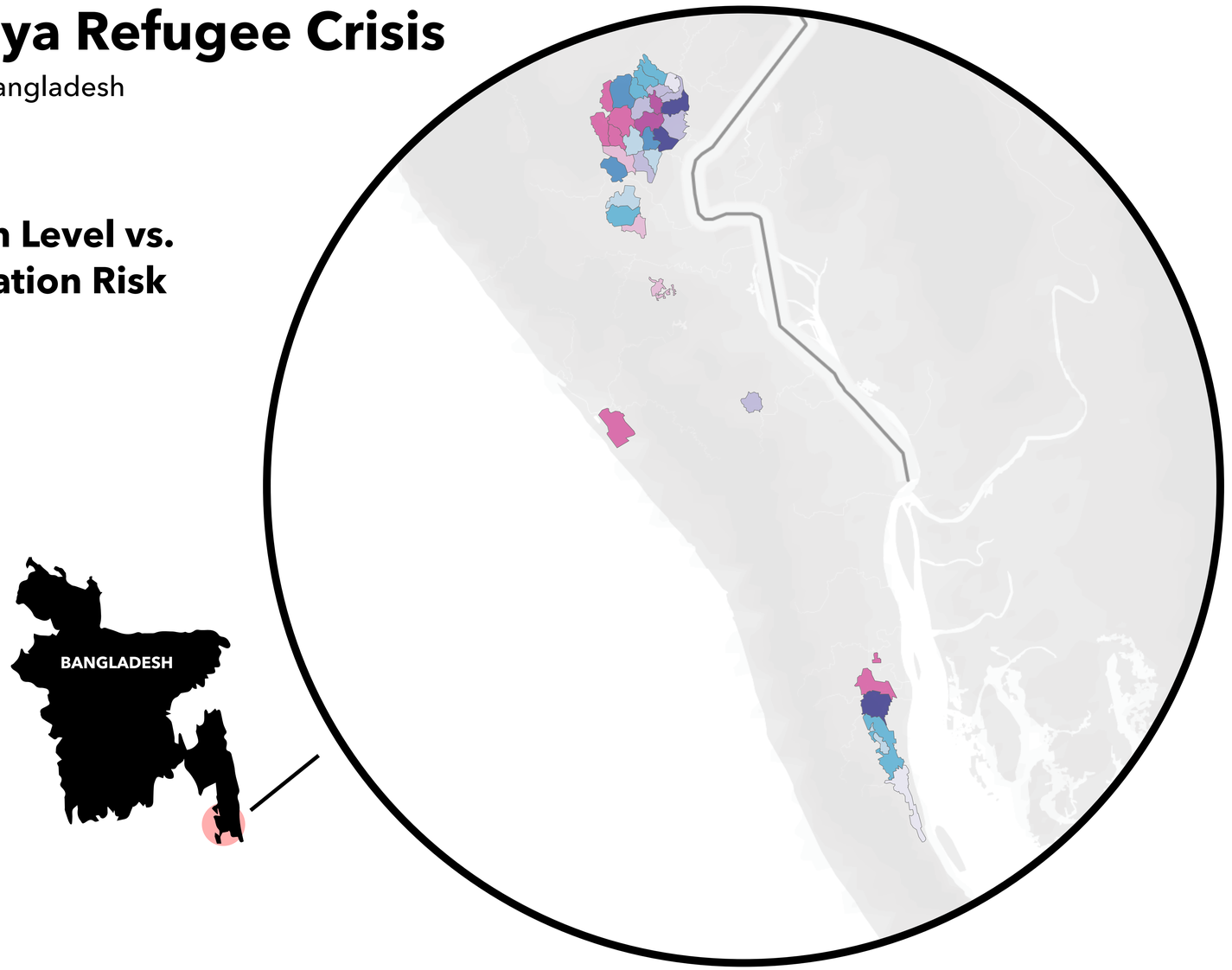
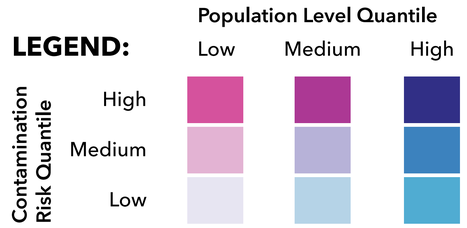
Rohingya Refugee Crisis

Cox's Bazar, Bangladesh

Population Level vs. Contamination Risk





Contamination Risk Classifications:
Scores < 3.003: Higher risk
Scores < 3.296: Medium risk
Scores > 3.296: Lower risk

Population Level Classifications:
Population < 22045: Lower
Population < 32360: Medium
Population > 32360: Higher

Sources:
- UNHCR article by Areez Tanbeen Rahman, 1/4/19: https://bit.ly/2MUxJe9
- Shape file of camp outlines by ISCG, updated 4/16/19: https://bit.ly/36cK2tw
- Tube well data by REACH Initiative, updated 10/9/19: https://bit.ly/2NljkGR
- Population statistics by ISCG as of 9/30/19:https://bit.ly/2MQQ0bZ

Background:
With the initial influx of Rohingya refugees, tube wells were installed to provide water but with poor planning. Many were installed and often too close together and in proximity of latrines uphill, posing a contamination risk to these vital water sources (Rahman, January 2019).

Visualization:
A bivariate map is used to explore the relationship between levels of water contamination risk and population level within each camp. The aim is to inform water, sanitation, and hygiene sector agencies where they should prioritize the decommisioning of tube wells as well as focusing of hygiene education efforts.

Method:
Water contamination Risk levels are based on a three-class quantile classification of average sanitation scores (0–10) for each camp, sourced from the REACH Initiative's Refugee Camp WASH Infrastracture Coding 2019 data. Population levels are also based on a three-class quantile classification of data as of September 30, 2019.

Tableau Public: tabsoft.co/2PsdZ2X