

SITES EXPOSED TO FLOOD RISK

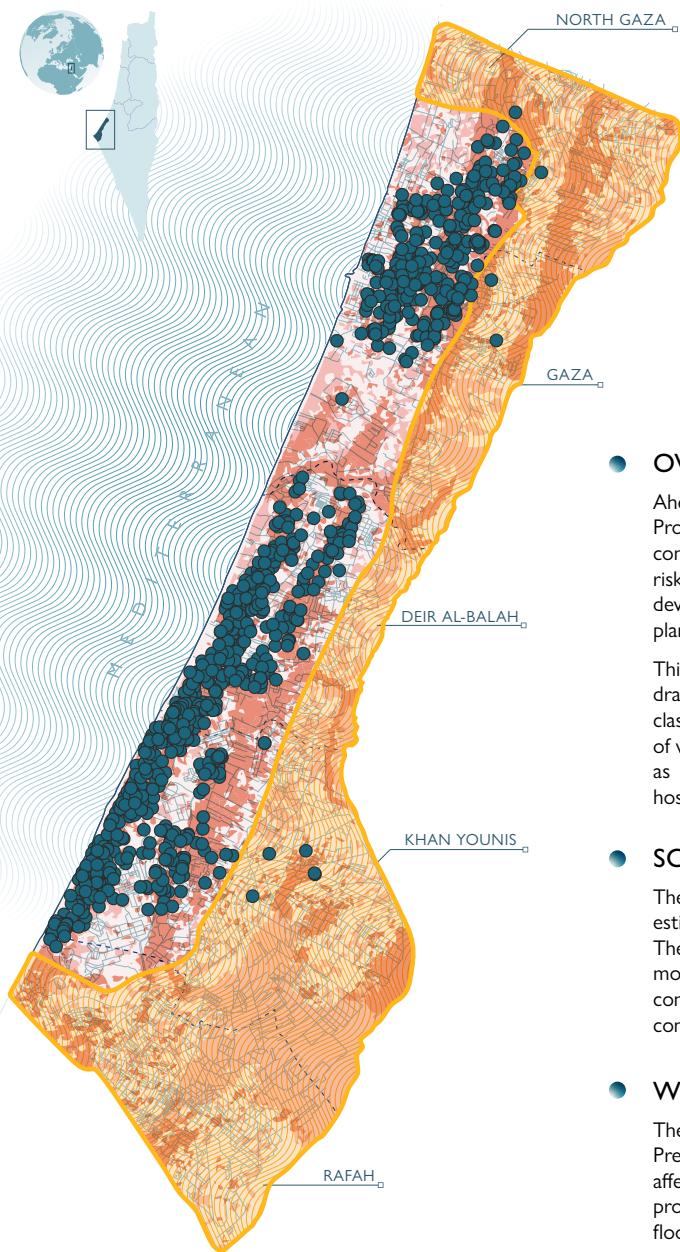
Gaza Flooding Risk Assessment:

Phase One Outlook for Rainy Season 2026–27

NPM
NEEDS AND POPULATION MONITORING

Site Management Cluster
Palestine

PALESTINE
SHELTER CLUSTER
Coordinating Humanitarian Shelter and Settlements



80%

Of assessed sites are **makeshift sites**



989

Displacement sites located in **medium** or **high flood-risk areas**



956,389

Estimated population living in assessed sites

OVERVIEW

Ahead of the 2026–27 rainy season, the IOM Needs and Population Monitoring Programme, in collaboration with the Site Management Cluster (SMC) and Shelter Cluster, conducted a mapping-based assessment to identify displacement sites and populations at risk of flooding. The analysis combines verified site-level data with flood-risk classification developed by IOM and Acacia Water (2024), providing an evidence base for preparedness planning and resource prioritization across Gaza's five governorates.

This assessment includes all known sites located within medium and high flood-risk areas, drawing on both verified and unverified site data from the Site Management Cluster. Sites classified as low or no risk are excluded. A total of **1,764** displacement sites were assessed, of which approximately **56** per cent (**989** sites) are currently located within areas classified as medium or high flood risk. Of these, **451** sites are located in high flood-risk areas, hosting more than **400,000** people who may require relocation.

SCALE OF EXPOSURE

The assessment identifies **989** sites located in medium or high flood-risk areas, hosting an estimated **956,389** people—approximately **60** per cent of Gaza's displaced population. The overwhelming majority of these sites are makeshift structures (**80** per cent), inherently more vulnerable to flooding and requiring targeted preparedness support. Flooding in congested areas could trigger secondary displacement, requiring pre-positioned contingency stocks for families forced to evacuate.

WHY THIS MATTERS

These figures establish a significant exposure baseline for the 2026–27 rainy season. Previous winter storms damaged over **42,000** tents, with 10–30 cm of water observed in affected areas, while many displaced families remain in deteriorated shelters with limited protection and inadequate drainage. Heavy rain creates a double shelter crisis: ground flooding damages mattresses, blankets, and essential household items, while roof leakage can cause overhead shelter failure. The concentration of makeshift sites in flood-prone areas and drainage constraints indicates elevated vulnerability. Identifying the highest-risk sites can help humanitarian actors prioritize drainage improvements, shelter reinforcement, pathway maintenance, and essential materials and equipment ahead of heavy rainfall.

METHODOLOGY

This assessment combines active site-level information from the Site Management Cluster with flood-risk classification developed by IOM and Acacia Water (December 2024). The classification applies weighted analysis of terrain depressions, relative elevation, drainage pathways and previously recorded inundation areas to identify areas of susceptibility.

LIMITATIONS

Approximately 200 of the assessed sites remain unverified. These sites have been made known to the Site Management Cluster; however, members have not yet visited them to confirm details and conduct the verification assessment.

These findings provide an exposure outlook, not a prediction of flooding. Actual impacts will depend on rainfall intensity, drainage conditions, site characteristics, and response capacity, and the findings should be used as a baseline for preparedness planning.

Flooding Risk Map

High Risk
Moderate Risk
Low/No Risk

Sites Exposed to Flooding

Yellow Line (Ongoing Military Presence)
Displacement Sites

This map illustrates the relationship between active sites and mapped flood-risk classes.

*All maps presented under this update are for illustration purposes only. The depiction and use of boundaries, geographic names, and related data shown on maps and included in this report are not warranted to be free of error nor do they imply judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries by IOM, Site Management and Shelter Cluster.