Water and Environmental Research Institute
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University of Guam
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Hydrologic Map of Guam Watersheds

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Hydrologic Analysis

The hydrologic features of plateau basins, watersheds, fill area and depth, watersheds of fill area, runoff paths, streams, and rivers are delineations based on a GIS spatial hydrologic analysis of the NOS Topobathy LiDAR based DEM (NOAA 2020).

Hydrologic Science Disclaimer

The hydrologic information, analyses, maps, and interpretations presented are intended for scientific, educational, and planning purposes only. While efforts have been made to produce a high-resolution map, the information are based on the best available information and are subject to change as new data or methods emerge.

Hydrologic processes are complex, variable, and site-specific. Therefore, the authors and WERI make no guarantees regarding the completeness, precision, or suitability of this information for regulatory, engineering, or legal use.

Users are encouraged to consult with qualified hydrologists, engineers, or local authorities before making decisions based on this material. The authors and institutions assume no liability for any loss, damage, or adverse outcomes resulting from the use or interpretation of this information.

Names of places and geographic features is in progress with *Kumision i Na'an Lugât Guahan* (Guam Place Name Commission) and will update map place names to their recommendations. The current names of places and features used are based on the Army Map Service (1954) and Geologic Map of Guam (Siegrist et al. 2007).

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Watershed group boundary
Plateau Basin
Watershed/Basin
≥ 2 sqKm
[1, 2) sqKm
[0.5, 1) sqKm
[0.25, 0.5) sqKm
[0.1, 0.25) sqKm
[50K, 100K) sqm
[20K, 50K) sqm
[2.5K, 20K) sqm
Internal basin boundary
Watershed of fill area ≥ 300 sqm
Tributary watershed divide
River
River
Creek
Channel
Major ROP/Tributary
Other tributary

Runoff path (Strahler)
1
2 - 3
4 - 5
6 - 7
8 - 9
Surface water seen in imagery
2025 and previous imagery
2025 and previous imagery, observed wetland
Fill Area Depth, ft
0.004 - 0.5
0.501 - 1
1.001 - 5
5.001 - 10
10.001 - 15
15.001 - 20
20.001 - 25
25.001 - 30
30.001 - 40
Surface depression low point
HiwayLabel1

MN TN
1:12000
0 1 2 4 Miles
0 0.5 1 2 3 4 5 6 Km

Guam Hydrologic Survey (GPL 24-247) and NIWR (USGS 104-B)

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