



Introduction

The dynamic and multi-faceted nature of the South Sudanese displacement crisis has created significant challenges for the delivery of humanitarian aid. Accessibility issues within South Sudan have impeded a systematic understanding of WASH needs in many areas of the country. This has created difficulties in establishing a clear and unambiguous system for prioritising the delivery of aid, thereby limiting the effectiveness of humanitarian planning and limiting the potential impact of donor funding. In order to fill this information gap, REACH in partnership with Solidarities International (SI) conducted a WASH infrastructure mapping exercise in Munuki and Rejaf payams of Juba County. Data collection took place on August 18th, 2021 and succeeded in mapping 3059 latrines and 1251 waterpoints. Key findings are presented below in charts (pies & bars) and maps with figures in percentages (%) and numbers assessed enclosed in parenthesis next to each percentage value.

Methodology

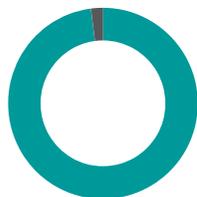
Using a GIS software, a polygon covering the municipal area was created and subdivided into grids squares of 250 meters of side length. Each of the resulting 1200 square grids was assigned to a team of 21 enumerators to map and assess existing WASH infrastructure. GPS points were recorded also for grids where no WASH infrastructure data was identified. Enumerators were trained to use mobile applications ([MapsMe](#) and [Kobo](#)) that allowed them to georeference data collected. For grids that could not be physically assessed through direct observation (due to lack of access) participatory mapping was conducted. As a result, 100% coverage was achieved (411/466 grids). Further details on the methodology and data collection tools can be found in the [Terms of Reference](#).



Waterpoints

Waterpoints by type

Storage tank	62% (779)	
Manual borehole	14% (170)	
Water trucking	10% (124)	
Standpipe	4% (53)	
Piped system/stand pipe	3% (39)	
Unprotected well	2% (28)	
Water kiosks	2% (23)	
Motorized boreholes	2% (19)	
Protected well	1% (14)	
Other	0% (2)	



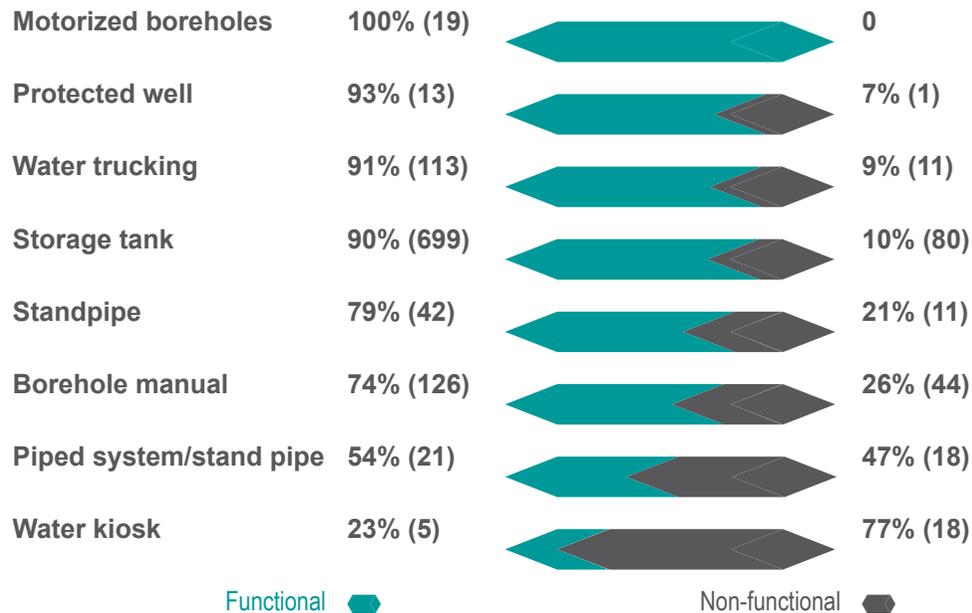
98% (1221)	Improved (3)
2% (28)	Unimproved
0% (2)	Other

Waterpoint functionality



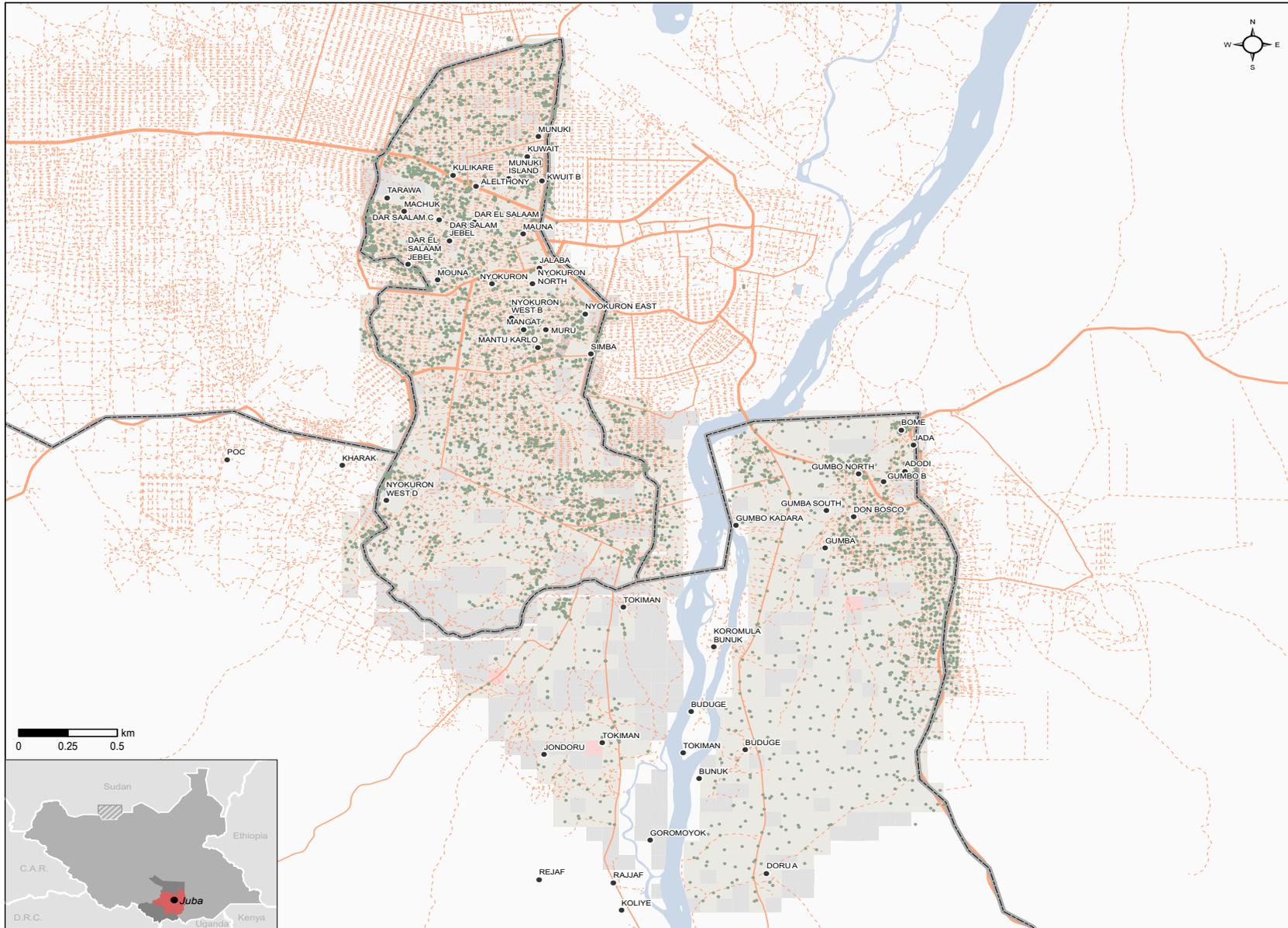
85% (1067)	Functional
14% (172)	Non-functional
1% (9)	Unable to confirm
0% (3)	Decommissioned

Improved waterpoints functionality by type





Juba Assessment Coverage Map



Coverage

- All infrastructure (4779)
- Reported referred area name

Road network

- Primary
- Secondary
- - - Other roads

▭ Munuki & Rejaf boundaries (approximate)

— White Nile

Assessed grids (250m2)

- No infrastructure observed (4)
- Limited information/ inaccessible (247)
- Observed inhabited areas (949)

Infrastructure: REACH (2018)
 Roads: © OpenStreetMap contributors (2018)
 Coordinate System: WGS 1984 UTM Zone 36N
 File:
 REACH_SSD_WASH_Inf_Juba_Coverage_October2021
 Contact: south.sudan@reach-initiative.org

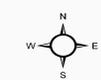
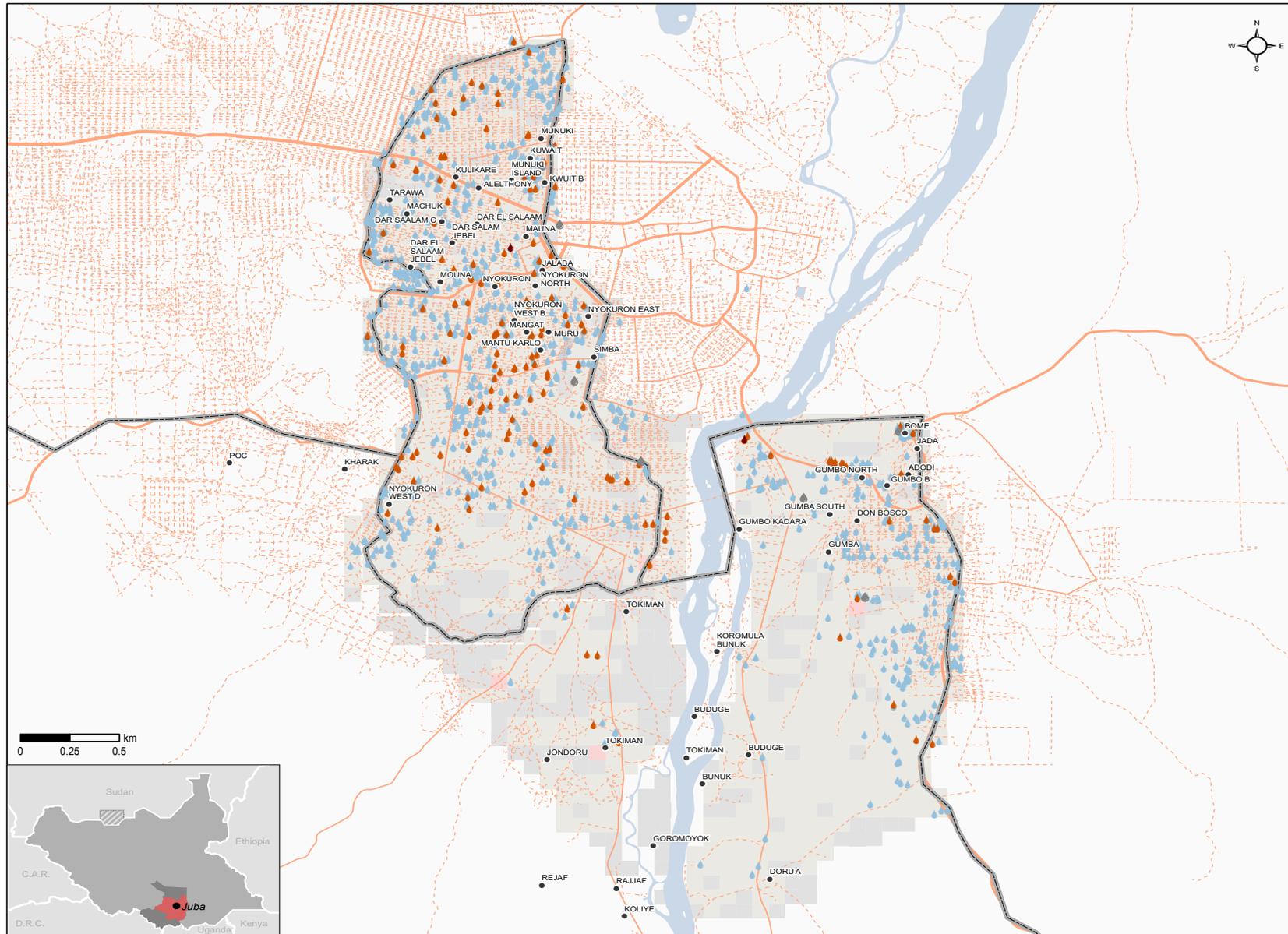
Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associates, donors mentioned on this map.

0 0.25 0.5 km





Juba Waterpoints Functionality Map



Waterpoint functionality

- ▲ Yes (1067)
- ▲ No (172)
- ▲ Decommissioned (3)
- ▲ Unable to confirm (9)
- Reported referred area name

Road network

- Primary
- Secondary
- - - Other roads

— White Nile

Munuki & Rejaf boundaries (approximate)

Assessed grids (250m2)

- No infrastructure observed (4)
- Limited information/ inaccessible (247)
- Observed inhabited areas (949)

Infrastructure: REACH (2018)
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 Coordinate System: WGS 1984 UTM Zone 36N
 File: REACH_SSD_WASH_Infr_Juba_Function_October2021
 Contact: south.sudan@reach-initiative.org

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0 0.25 0.5 km





Waterpoint requiring payment
 23% (247) Do not require payment
 76% (815) Require payment
 1% (10) Unknown

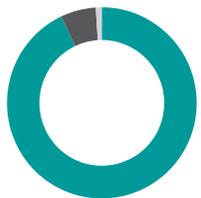


Sanitation

Latrine by type

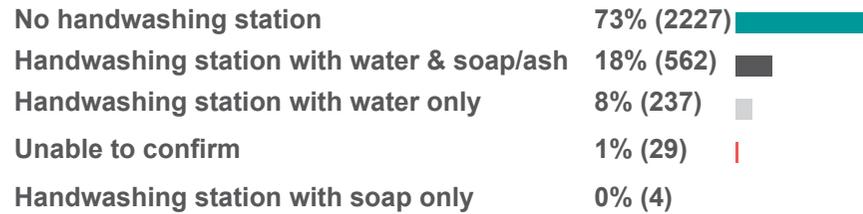


Latrine with lockable doors
 86% (433) With lockable doors
 13% (67) Without lockable doors
 1% (5) Unable to confirm

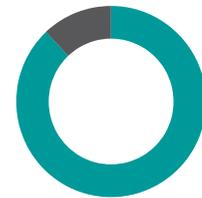


Accessibility to latrine
 93% (2837) Accessible to everyone
 6% (184) Not accessible to everyone
 1% (38) unable to confirm

Functional handwashing station at latrine



Estimated latrine sludge level
 48% (240) Less full with sludge
 37% (189) Almost full with sludge
 13% (67) Unable to confirm
 2% (9) Full



Latrine by cleanliness
 88% (443) Unclean (4)
 12% (60) Clean
 0% (2) Unable to confirm



Latrine requiring payment
 76% (175) Do not require payment
 13% (29) Require payment
 11% (27) unable to confirm

footnotes

- () numbers in parenthesis indicate number of facilities assessed
- A water point is **unsafe** to drink when it is contaminated by faecal matter (e.g. H2S test result turn black) and a water point is **safe** to drink when it is free from faecal contamination (e.g. H2S test result do not turn black) (WHO,2017)
- Improved** water source is the water source that, by its nature of its design and construction is likely to be protected from faecal contamination (e.g. boreholes, protected wells, storage tanks, water kiosks and piped systems) and **Unimproved** water source is the water source that is likely to be contaminated by faecal matter (e.g. unprotected well, unprotected springs, unequipped borehole etc) (JMP,2020)
- A latrine was considered unclean when faeces were found on it(JMP,2020).
- A communal/institutional latrine refers to latrines found in public areas such as NGOs compounds, schools, churches/mosques etc. (JMP,2020)
- A family latrines refer to latrines used by a particular household with full latrine ownership, construction and maintenance (JMP,2020)
- Shared latrines refer to those used by a number of households, who are all responsible for care and maintenance (JMP,2020)