



WASH Infrastructure Mapping

Juba, Central Equatoria State

October 2021

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.

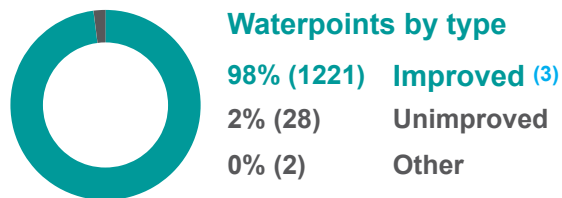
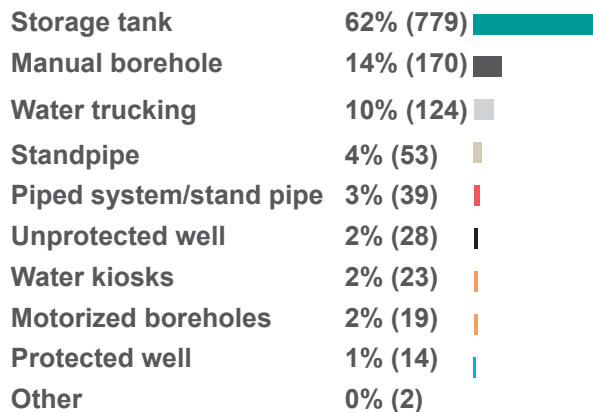
Methodology

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](#).

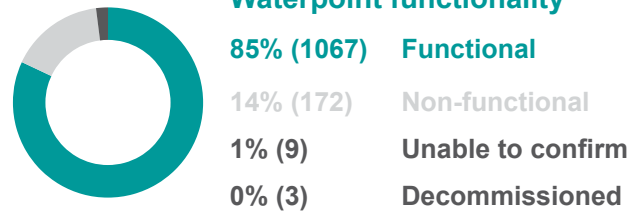


Waterpoints

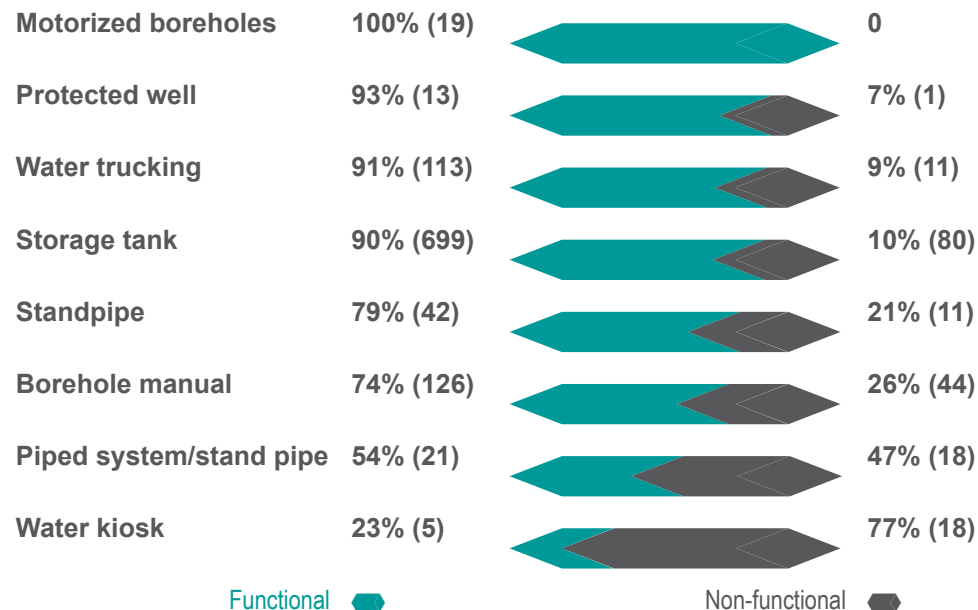
Waterpoints by type



Waterpoint functionality

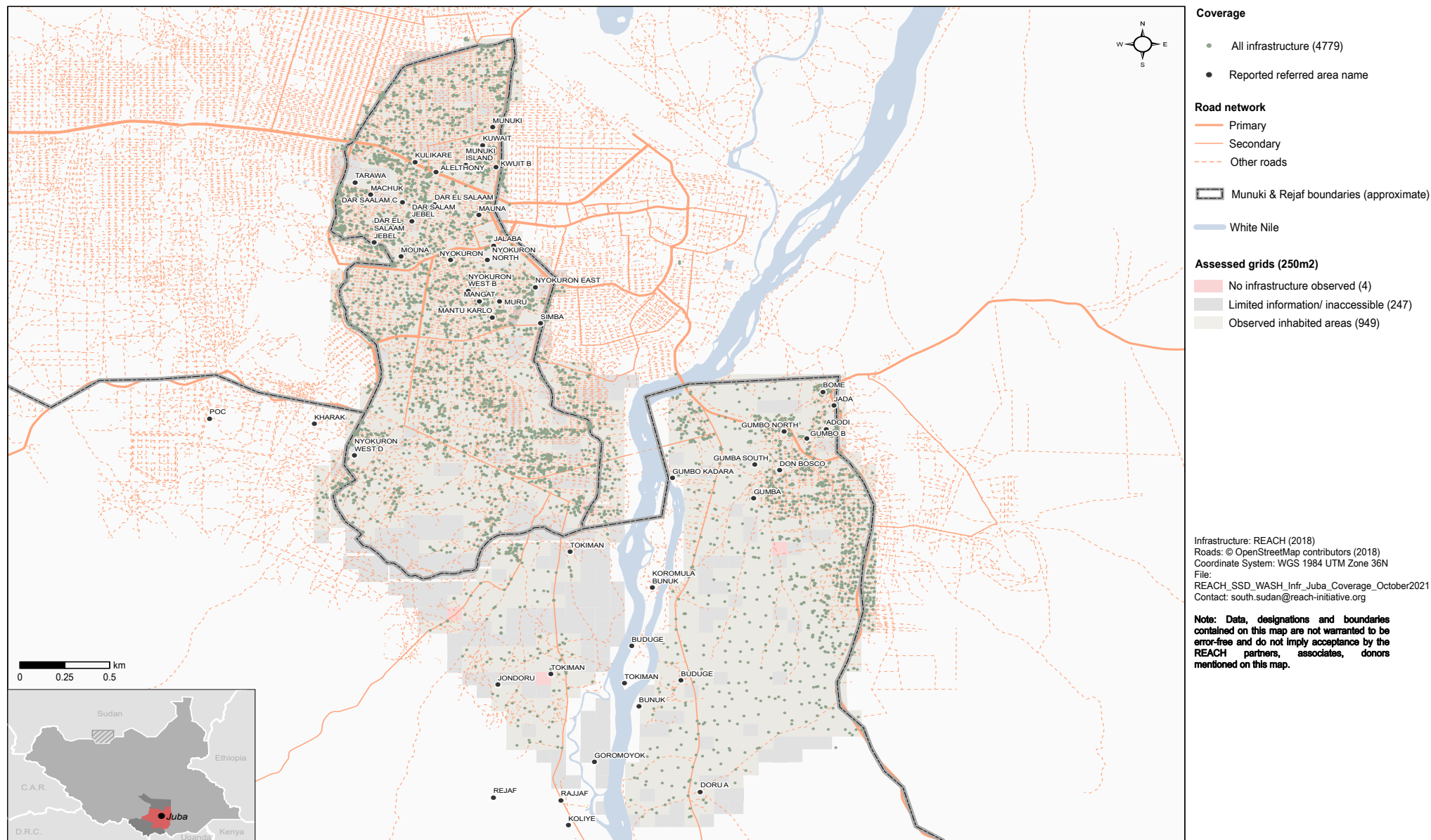


Improved waterpoints functionality by type



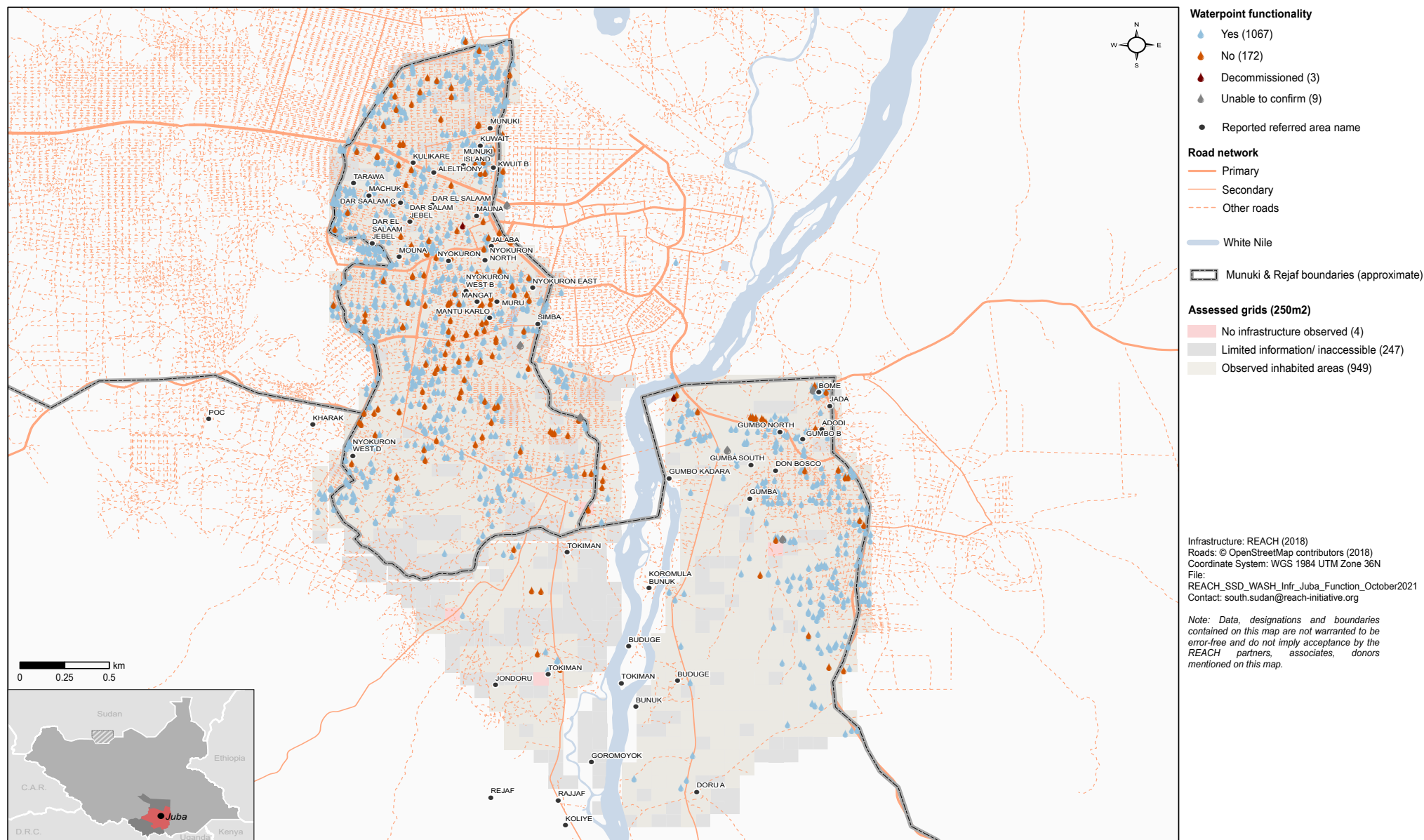


Juba Assessment Coverage Map





Juba Waterpoints Functionality Map





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Waterpoint requiring payment

23% (247) Do not require payment

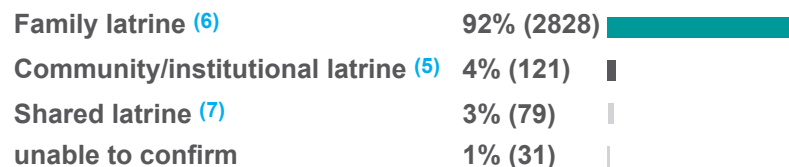
76% (815) Require payment

1% (10) Unknown



Sanitation

Latrine by type

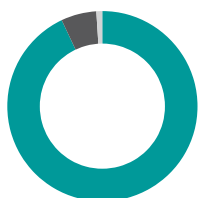


Latrine with lockable doors

86% (433) With lockable doors

13% (67) Without lockable doors

1% (5) Unable to confirm



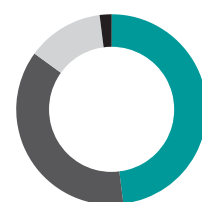
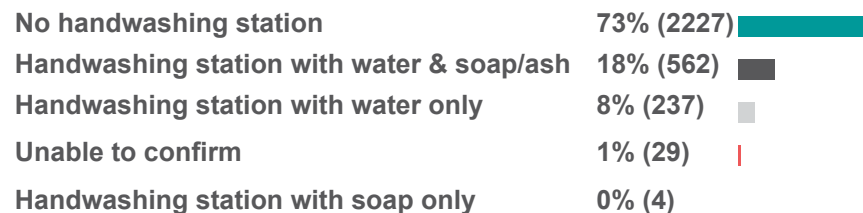
Accessibility to latrine

93% (2837) Accessible to everyone

6% (184) Not accessible to everyone

1% (38) unable to confirm

Functional handwashing station at latrine



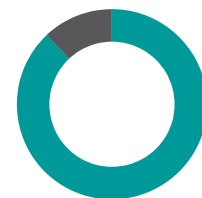
Estimated latrine sludge level

48% (240) Less full with sludge

37% (189) Almost full with sludge

13% (67) Unable to confirm

2% (9) Full

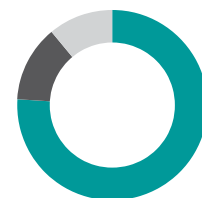


Latrine by cleanliness

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

1. () numbers in parenthesis indicate number of facilities assessed

2. 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)

3. **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)

4. A latrine was considered unclean when faeces were found on it(JMP,2020).

5. A communal/institutional latrine refers to latrines found in public areas such as NGOs compounds, schools, churches/mosques etc. (JMP,2020)

6. A family latrines refer to latrines used by a particular household with full latrine ownership, construction and maintenance (JMP,2020)

7. Shared latrines refer to those used by a number of households, who are all responsible for care and maintenance (JMP,2020)