

Disaster Risk Reduction Report

1. Preface

ACU WASH team has conducted a field investigation in Al-Bab city based on a response appeal raised by the local authorities in the area which indicates the presence of contamination in the wells surrounding Al-Nahda neighborhood in the city.

2. Location

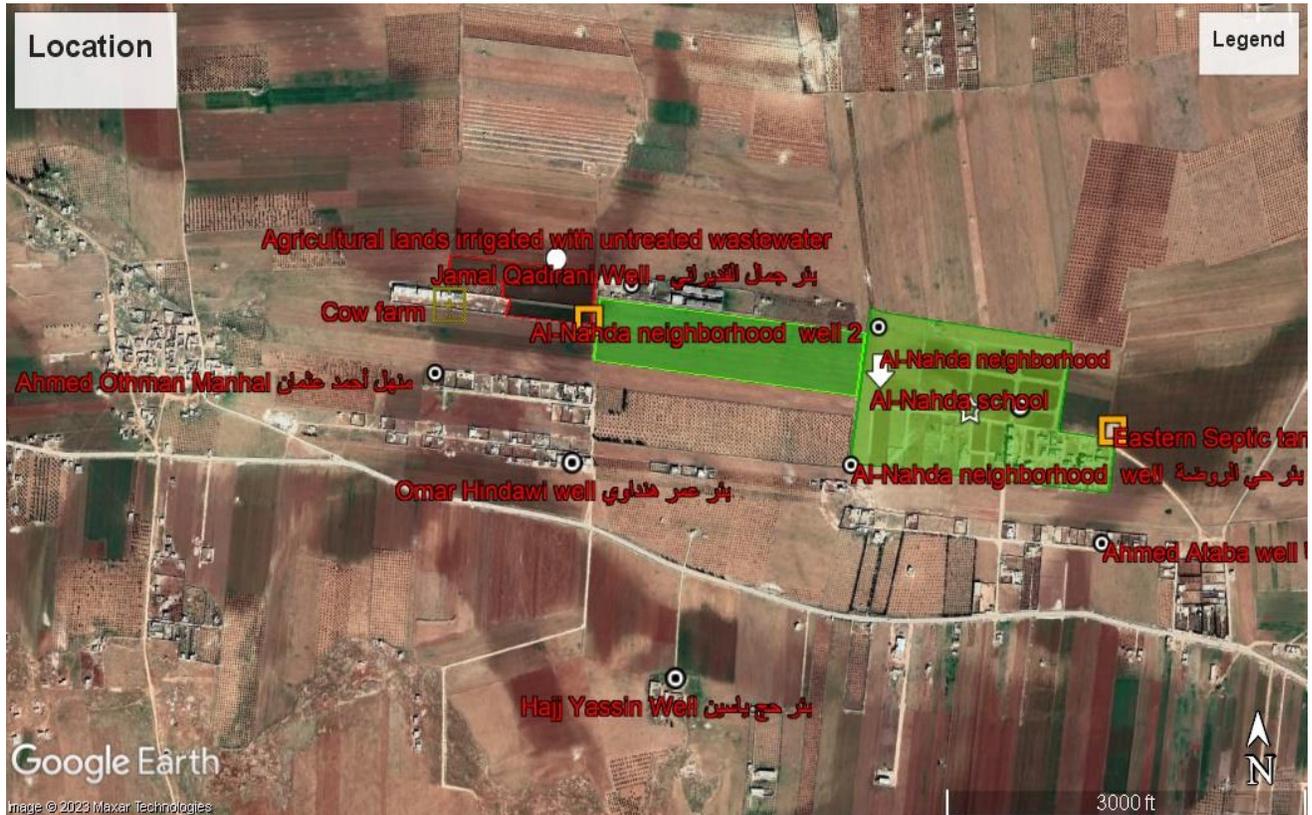
Governorate	District	Sub-district	Community	Community	Community code	Total Population
Aleppo	Al Bab	Al Bab	الباب	Al Bab	C1202	98162

Al-Nahda neighborhood is about 5 km away from Al-Bab city towards the northwest. The photos below show the site with the wells surrounding the neighborhood, which may have contamination.



There are about 1,400 houses in Al Nahda neighborhood (Area with green color) where the untreated wastewater from these houses is discharged through the sewer network to a cow farm close to the

neighborhood into the western septic tank (The orange squares refer to the septic tank) as nearby farmers pump that water and use it to irrigate crops (Area with black color).



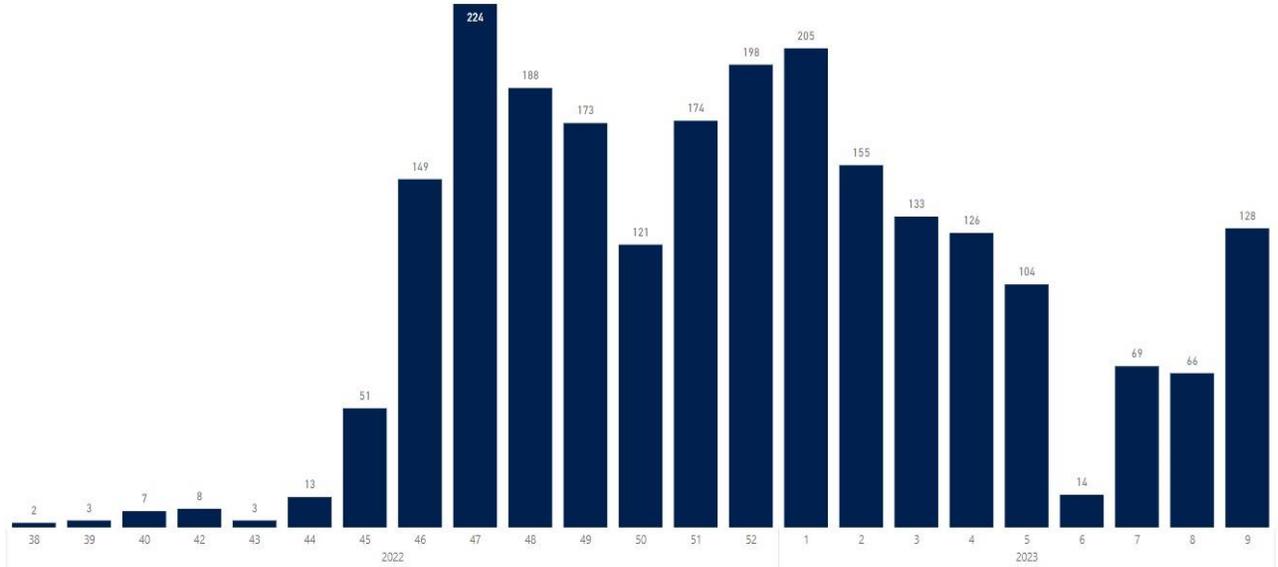
Previously and not so long, the untreated wastewater was drained into three wells (The eastern septic tank in the orange color) on the eastern side of the neighborhood, where the local council filled those wells and turned the wastewater to the western side (The western septic tank).

From the picture above, you can see a group of wells that are very close to the septic tanks (The gray circles refer to the well). Practically, discharging wastewater in this way, whether old or current way, does not take into consideration the health, environmental, and social negative impacts of untreated wastewater that definitely lead to polluting the soil, crops, environment, and groundwater.

3. Cholera in Al Bab sub-district

The first cholera case in Harim city was confirmed on September 24, 2022. Since that date, the number of cases has been increasing as the number of cholera cases up to the date of preparing this report reached 2314 cases considering that the prevalence rate is around 0.011 (Prevalence is the result of dividing the total number of cases by the total number of the population living in Al Bab subdistrict which is 201298).

The figure below shows more details about the history of cholera in Al Bab subdistrict.



4. Key findings

We have conducted water quality tests for all the wells surrounding the neighborhood and the results are summarized below:

The place where the sample was taken	Coordinates	Physical test (Results)	Chemical test (Results)	Bacteriological test (Results)
Al-Nahda neighborhood Manhal منهل حي النهضة	36°24'8.54"N 37°27'21.91"E	Not suitable for drinking	Not suitable for drinking	Not suitable for drinking
Omar Hindawi well بئر عمر هندراوي	36°24'4.59"N 37°26'36.08"E	Not suitable for drinking	Not suitable for drinking	Not suitable for drinking
Jamal Qadirani Well - بئر جمال القديراني	36°24'18.49"N 37°26'42.35"E	Not suitable for drinking	Not suitable for drinking	Not suitable for drinking
Ahmed Ataba well بئر أحمد عتابا	36°23'57.69"N 37°27'30.05"E	Not suitable for drinking	Not suitable for drinking	Not suitable for drinking
Al-Nahda neighborhood water tank خزان حي النهضة	36°24'8.54"N 37°27'21.91"E	Not suitable for drinking	Not suitable for drinking	Suitable for drinking

Ahmed Othman Manhal منهل أحمد عثمان	36°24'11.74"N 37°26'22.18"E	Suitable drinking	for	Suitable drinking	for	Suitable drinking	for
Al-Nahda school مدرسة النهضة	36°24'8.32"N 37°27'16.65"E	Suitable drinking	for	Suitable drinking	for	Not suitable for drinking	
Al-Nahda neighborhood well 2 بئر النهضة 2	36°24'14.91"N 37°27'7.52"E	Suitable drinking	for	Suitable drinking	for	Suitable drinking	for
Hajj Yassin Well بئر حج ياسين	36°23'47.55"N 37°26'46.38"E	Suitable drinking	for	Suitable drinking	for	Not suitable for drinking	

As shown by the results of water quality tests, all wells except two well (**Ahmed Othman Manhal and Al-Nahda neighborhood well 2**) are not suitable for drinking, and most of them are bacteriologically contaminated.





5. Recommendation

1. Stop the usage of contaminated wells or provide them with needed chlorine.
2. Establishing a wastewater treatment plant before using the untreated wastewater for irrigation or connecting the main wastewater line of Al-Nahda neighborhood with the main line of Al-Bab city and stopping discharging wastewater into the septic tank.
3. Conduct awareness campaigns in the region.
4. Distribution of chlorine tablets/aqua taps to people at houses.