

PALESTINIAN HYDROLOGY GROUP

Water & Environmental Resources Development



مجموعة الهيدرولوجيين الفلسطينيين

لتطوير مصادر المياه والبيئة

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**In Coordination With:
Palestinian Water Authority (PWA)**

**Water and Sanitation, Hygiene (WaSH)
Monitoring Project:
Impact of the Current Crisis in the West Bank and Gaza Strip**

**Weekly Report # 4
(1-20 October 2003)**

**In Cooperation with:
Palestinian Environmental NGOs Network (PENGON)**



Through the following members/organizations:

Applied Research Institute/ Jerusalem (ARIJ); Arab Studies Society- Land Research Center / Hebron (LRC); Green Peace Association/ Gaza Strip (GPA); Palestinian Agricultural Relief Committees/ Tulkarm (PARC); Palestinian Environmental Protection Society/ Jenin (PEPS)



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1. Introduction

Since the beginning of the Water, Sanitation, and Hygiene Monitoring Project (WaSH MP) in June 2002, 643 of the 708 communities defined by the Palestinian Central Bureau of Statistics (PCBS) have been surveyed in the West Bank and Gaza Strip. For the purposes of the WaSH MP, the total number of communities that will be monitored is 643, due to the fact that many of the PCBS-defined communities are considered part of a city, like Jerusalem, or are deemed seasonal living places (summer or winter).

The importance of the WaSH MP stems from the fact that it is nearly the only source of updated information on the impact of the current crisis on water, sanitation and hygiene in the West Bank and Gaza Strip, for all local and international agencies working in the sector. During the first phase of the project, detailed information was gathered from different localities in the West Bank and Gaza Strip. Such information has been analyzed and stored in a locally designed database. Seven monthly reports were published using this data, and the database can be accessed through the project website at the following address www.phg.org/campaign

The nature of the second phase of the WaSH MP has dictated certain modifications in the management of the project. As this phase will focus on updating the information, and as it will not require intensive fieldwork, the data collection teams were reduced from 12 to 5, in order to reflect this expected reduction in workload. Furthermore, there was a need to modify the reporting frequency and format to respond to the needs of some organizations accessing the reports. Accordingly, a new form for information update has been designed (APPENDIX 1) and weekly or biweekly updates will be published going forward.

The current report is the fourth weekly update, which covers the period from 1st to 20th October 2003. The goal is for each weekly / biweekly update to be disseminated at the beginning of the following week (Monday of the following week). All the updates can also be accessed through the project website. <http://www.phg.org/campaign>

Weekly reports will include information extracted from the newly designed questionnaire, as well as information on the related communities. In this fourth weekly report, detailed information related to 48 communities in the West Bank and Gaza Strip is included. Data related to these communities was updated during the past two weeks and presented in four main tables that reflect major problems in these communities.

Table 1: Monthly water supplies from all sources to the community, and average price per cubic meter for tanker water during and before current crisis.

No.	ID	Community Name	District	Water tanker price (NIS / m ³) *		Total monthly supply for the community (m ³ / month)	Per capita supply (l/c/d) **
				During the current crisis	Before the current crisis		
1	301685	At Tayba	Ramallah	33.0	32.0	2900	54
2	502810	Deir Samit	Hebron	25.0	10.0	5500	37
3	301485	'Abwein	Ramallah	21.0	17.0	5000	58
4	10175	Khirbet al Muntar al	Jenin	20.0	17.0	50	56
5	452235	Wadi Fukin	Betlehem	20.0	10.0	1200	38
6	502550	Hitta	Hebron	20.0	10.0	700	38
7	301500	Sinjil	Ramallah	16.0	14.0	10500	75
8	502680	Beit 'Einun	Hebron	15.0	10.0	2000	32
9	452230	Husan	Betlehem	15.0	10.0	6000	40
10	452285	Ash Shawawra	Betlehem	15.0	10.0	2500	36
11	502595	Kuziba	Hebron	15.0	10.0	500	41
12	502675	Khirbet al Hasaka	Hebron	15.0	10.0	200	36
13	502895	Kharsa	Hebron	15.0	10.0	3000	34
14	502635	Ash Shuyukh	Hebron	15.0	10.0	7000	38
15	503000	'Abda	Hebron	15.0	10.0	200	44
16	502910	Al Majd	Hebron	15.0	10.0	1500	32
17	151445	Duma	Nablus	13.0	13.0	3500	59
18	301505	Deir as Sudan	Ramallah	13.0	9.0	2400	44
19	151160	'Urif	Nablus	13.0	11.0	4500	59
20	100250	'Akkaba	Tulkarem	12.0	12.0	900	129
21	301525	'Ajjul	Ramallah	12.0	7.0	2000	55
22	151180	Odala	Nablus	11.0	9.0	1800	62
23	502960	Ar Rihya	Hebron	10.0	5.0	3000	34
24	502920	Hadab al Fawwar	Hebron	10.0	5.0	1700	36
25	301530	Al Mughayyir	Ramallah	10.0	8.0	5500	90
26	10600	Siris	Jenin	9.0	12.0	9000	67
27	10565	Al Jadida	Jenin	5.0	5.0	7000	54
28	150705	Beit Imrin	Nablus			4000	52
29	150770	Ijnisinya	Nablus			1800	121
30	100815	Ar Ras	Tulkarem			1500	111
31	402145	As Sawahira ash	Jerusalem			9000	65
32	301520	Jilijliya	Ramallah			1800	70
33	100900	Kafr Jammal	Tulkarem			4500	66
34	301550	Umm Safa	Ramallah			1200	66
35	301650	Deir Jarir	Ramallah			6800	63
36	301750	Rammun	Ramallah			9000	111
37	301785	Deir Dibwan	Ramallah			13000	74
38	402120	Abu Dis	Jerusalem			18500	58
39	753500	Al Bayuk	Rafah			9000	64
40	552740	Beit Hanun	North Gaza			100000	135
41	653240	Deir al Balah	Deir Al-			90000	73

No.	ID	Community Name	District	Water tanker price (NIS / m ³) *		Total monthly supply for the community (m ³ / month)	Per capita supply (l/c/d) **
				During the current crisis	Before the current crisis		
42	703420	Khan Yunis	Khan Yunis			470000	149
43	703450	Qizan an Najjar	Khan Yunis			8500	87
44	703485	Al Fukhkhari	Khan Yunis			3000	32
45	753435	Al Mawasi (Rafah)	Rafah			3200	91
46	753460	Tall as Sultan	Rafah			62000	101
47	753495	Rafah Camp	Rafah			45000	30
48	402100	Al 'Eizariya	Jerusalem			30000	65

* Communities with no prices do not use water tankers

** Supply includes all domestic uses, including domestic agriculture and domestic livestock, in addition to all losses in the water network for communities that have one. Estimated average losses in the water network is about **40%** of the total supplied amount according to Palestinian Water Authority (PWA).

Table 2: Destruction of water infrastructure between 1st and 20th October 2003.

No.	Community ID	Community Name	District	Water network damages		Percentage of affected population	# of damaged wells		# of damaged springs		# of damaged water tankers		# of damaged roof tanks	# of damaged cisterns	# of damaged reservoirs	
				Main line	Secondary lines		Complete	Partial	Complete	Partial	Complete	Partial			Complete	Partial
1	703485	Al Fukhkhari	Khan Yunis	Yes	Yes	80							30			
2	753495	Rafah Camp	Rafah	Yes	Yes	60							120			
3	753500	Al Bayuk	Rafah	Yes	Yes	55							25			
4	301550	Umm Safa	Ramallah	No	Yes	30							3			
5	703450	Qizan an Najjar	Khan Yunis	Yes	Yes	30	1						20			
6	151180	Odala	Nablus	Yes	Yes	30										
7	753460	Tall as Sultan Camp	Rafah	Yes	Yes	10										
8	753435	Al Mawasi (Rafah)	Rafah	Yes	No	10	1									
9	150770	Ijnisinya	Nablus	No	Yes	10										
10	703420	Khan Yunis	Khan Yunis	Yes	Yes	5							30			
11	653240	Deir al Balah	Deir Al-Balah	Yes	Yes	5	1						10			
12	552740	Beit Hanun	North Gaza	No	Yes	1	3						4			
13	301505	Deir as Sudan	Ramallah	No	No						2					
14	301485	'Abwein	Ramallah	No	No								5			
15	301530	Al Mughayyir	Ramallah	No	No								7			
16	301650	Deir Jarir	Ramallah	No	No								10			
17	100250	'Akkaba	Tulkarem	No	No									2		
18	10600	Siris	Jenin	No	No								2			
19	301685	At Tayba	Ramallah	No	No								6			

Table 3: Checkpoint and Closure Effects on the WaSH Situation in the Palestinian Communities

(0: No Effect 1: Intermediate Effect 2: High Effect NA: Not Applicable—For example, a fixed checkpoint does not exist within this community, or water tankers are not used there, etc.)

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
1	10175	Khirbet al Muntar al Gharbiya	Jenin	2	Qaffin and Um Al Rihan checkpoints	NA		2	Qaffin and Um Al Rihan checkpoints	2	NA	2	2	NA	2	2	NA	2
2	10565	Al Jadida	Jenin	NA		NA		NA		1	NA	1	1	NA	1	1	NA	1
3	10600	Siris	Jenin	NA		NA		NA		1	3	1	1	3	1	1	3	1
4	100250	'Akkaba	Tulkarem	NA		NA		NA		1	NA	1	NA	NA	NA	NA	NA	1
5	100815	Ar Ras	Tulkarem	NA		NA		2	Tulkarem checkpoint	NA	NA	1	NA	NA	1	NA	NA	1
6	100900	Kafr Jammal	Tulkarem	NA		NA		NA		NA	NA	1	NA	NA	1	NA	NA	NA

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
7	150705	Beit Imrin	Nablus	NA		0		2	Shafi Shamron and Beit Eba checkpoints	NA	0	2	NA	0	1	NA	0	0
8	150770	Ijnisinya	Nablus	NA		0		2	Shaffi Shemron and Beit Eba checkpoints	NA	0	2	NA	0	2	NA	0	1
9	151160	'Urif	Nablus	0		NA		2	Howwara checkpoint	2	NA	2	2	NA	2	2	NA	2
10	151180	Odala	Nablus	0		0		2	Howwara checkpoint	1	0	0	1	0	0	1	0	0
11	151445	Duma	Nablus	0		NA		2	Za'tara and Howwara checkpoints	2	NA	1	0	0	0	0	0	0
12	301485	'Abwein	Ramallah	NA		2	'Atara and Surda checkpoits	2	'Atara and Surda checkpoits	2	2	2	1	1	2	2	2	2

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
13	301500	Sinjil	Ramallah	NA		2	'Atara and Surda checkpoints	2	'Atara and Surda checkpoints	2	2	2	1	1	1	1	1	1
14	301505	Deir as Sudan	Ramallah	NA		2	'Atara and Surda checkpoints	2	'Atara and Surda checkpoints	2	2	2	NA	1	1	2	2	2
15	301520	Jilijliya	Ramallah	NA		1	'Atara and Surda checkpoints	2	'Atara and Surda checkpoints	NA	2	2	NA	1	1	NA	1	1
16	301525	'Ajjul	Ramallah	NA		2	'Atara and Surda checkpoints	2	'Atara and Surda checkpoints	2	2	2	NA	NA	0	1	1	1
17	301530	Al Mughayyir	Ramallah	NA		1	'At Tayba checkpoint	2	'At Tayba checkpoint	2	1	2	0	0	1	2	1	2
18	301550	Umm Safa	Ramallah	NA		2	'Atara and Surda checkpoints	2	'Atara and Surda checkpoints	NA	2	2	NA	2	2	NA	1	1
19	301650	Deir Jarir	Ramallah	NA		2	'At Tayba checkpoint	2	'At Tayba checkpoint	NA	1	1	NA	0	0	NA	1	1
20	301685	At Tayba	Ramallah	NA		2	'At Tayba checkpoint	2	'At Tayba checkpoint	1	2	2	NA	NA	0	2	2	2
21	301750	Rammun	Ramallah	NA		2	'At Tayba checkpoint	2	'At Tayba checkpoint	NA	2	1	NA	1	1	NA	0	0

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
22	301785	Deir Dibwan	Ramallah	NA		2	'At Tayba checkpoint	0		NA	2	1	NA	0	0	NA	1	1
23	402100	Al 'Eizariya	Jerusalem	NA		NA		NA		NA	NA	0	NA	NA	NA	NA	1	0
24	402120	Abu Dis	Jerusalem	NA		NA		NA		NA	2	2	NA	NA	NA	NA	0	1
25	402145	As Sawahira ash Sharqiya	Jerusalem	NA		NA		NA		NA	2	2	NA	NA	NA	NA	0	1
26	452230	Husan	Betlehem	1	Beit Jala checkpoint	0	Beit Jala checkpoint	1	Beit Jala checkpoint	1	1	1	2	0	2	NA	NA	NA
27	452235	Wadi Fukin	Betlehem	1	Beit Jala checkpoint	1	Beit Jala checkpoint	1	Beit Jala checkpoint	1	1	1	2	2	2	NA	NA	NA
28	452285	Ash Shawawra	Betlehem	NA		NA		NA		1	1	1	NA	NA	NA	NA	NA	NA
29	502550	Hitta	Hebron	NA		NA		NA		1	1	1	NA	NA	NA	NA	NA	NA
30	502635	Ash Shuyukh	Hebron	NA		NA		NA		1	1	1	2	0	2	NA	NA	NA

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
31	502675	Khirbet al Hasaka	Hebron	NA		NA		NA		NA	NA	NA	2	0	2	NA	NA	NA
32	502680	Beit 'Einun	Hebron	NA		NA		NA		NA	NA	NA	2	2	2	NA	NA	NA
33	502810	Deir Samit	Hebron	2	Beit Awa checkpoint	0		2	Beit Awa checkpoint	1	0	1	1	0	1	NA	NA	NA
34	502895	Kharsa	Hebron	NA		NA		NA		1	1	1	2	2	2	NA	NA	NA
35	502910	Al Majd	Hebron	NA		NA		NA		1	1	1	1	1	1	NA	NA	NA
36	502920	Hadab al Fawwar	Hebron	NA		NA		NA		0	0	1	0	0	2	NA	NA	NA
37	502960	Ar Rihya	Hebron	NA		NA		NA		1	0	1	1	0	2	NA	NA	NA
38	503000	'Abda	Hebron	NA		NA		NA		1	1	1	2	2	2	NA	NA	NA
39	552740	Beit Hanun	North Gaza	NA		1	Eritz checkpoint	0		NA	1	0	NA	1	0	NA	1	0

No.	Community Id	Community Name	District	Fixed Checkpoint Effect On						Mobile Checkpoint Effect On			Earth Mounds Effect On			Curfew Effect On		
				Water Supply by Tankers		Maintenance Teams		PHC Access		Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access	Water Supply by Tankers	Maintenance Teams	PHC Access
				Effect	Name of checkpoint	Effect	Name of checkpoint	Effect	Name of checkpoint									
40	653240	Deir al Balah	Deir Al-Balah	NA		2	Kfar Daroom checkpoint	0		NA	2	0	NA	2	0	NA	2	0
41	703420	Khan Yunis	Khan Yunis	NA		2	Gosh Qatif and Moraj checkpoint	2	Moraj checkpoint	NA	2	2	NA	2	2	NA	2	2
42	703450	Qizan an Najjar	Khan Yunis	NA		2	Moraj checkpoint	2	Moraj checkpoint	NA	2	2	NA	2	2	NA	2	2
43	703485	Al Fukhkhari	Khan Yunis	NA		2	Moraj checkpoint	2	Moraj checkpoint	NA	2	2	NA	2	2	NA	2	2
44	753435	Al Mawasi (Rafah)	Rafah	NA		2	Rafeh Yam settlement	2	Rafeh Yam settlement and Moraj	NA	2	2	NA	2	2	NA	2	2
45	753460	Tall as Sultan Camp	Rafah	NA		2	Palestinian / Egyptian border and	1	Palestinian / Egyptian border	NA	2	2	NA	2	2	NA	0	0
46	753495	Rafah Camp	Rafah	NA		2	Palestinian Egyptian borders	2	Palestinian Egyptian borders	NA	2	2	NA	2	2	NA	2	2
47	753500	Al Bayuk	Rafah	NA		2	Moraj checkpoint	2	Moraj checkpoint	NA	2	2	NA	2	2	NA	2	2

Table 4: Changes in supply from Mekorot Company and in water supplied by tankers in Palestinian communities.

No.	Community Id	Community Name	District	Mekorot Company Supply (m ³ / month)			Tankers Supply (m ³ / month)		
				During Current Crisis	Before Current Crisis	Percentage Change	During Current Crisis	Before Current Crisis	Percentage Change
1	10175	Khirbet al Muntar al	Jenin				50	50	0
2	10565	Al Jadida	Jenin	7000	7000	0			
3	10600	Siris	Jenin				9000	9000	0
4	100250	'Akkaba	Tulkarem				900	900	0
5	100815	Ar Ras	Tulkarem	1500	1500	0			
6	100900	Kafr Jammal	Tulkarem	4500	4500	0			
7	151160	'Urif	Nablus	3500	4500	-23			
8	151180	Odala	Nablus	1000	1650	-40	300		
9	151445	Duma	Nablus				3000	3500	-15
10	301485	'Abwein	Ramallah				1500	2500	-40
11	301500	Sinjil	Ramallah				450	600	-25
12	301505	Deir as Sudan	Ramallah				2100	3000	-30
13	301525	'Ajjul	Ramallah				2000	3000	-34
14	301530	Al Mughayyir	Ramallah	2500	4500	-45			
15	301550	Umm Safa	Ramallah	1000	1400	-29			
16	301685	At Tayba	Ramallah				250	350	-29
17	402100	Al 'Eizariya	Jerusalem	12000	32000	-63			
18	402120	Abu Dis	Jerusalem	8000	20000	-60			
19	402145	As Sawahira ash Sharqiya	Jerusalem	4000	10000	-60			
20	452230	Husan	Betlehem	3000	7000	-58	2000	1000	100
21	452235	Wadi Fukin	Betlehem	500	1000	-50	400	100	300
22	452285	Ash Shawawra	Betlehem	1500	2500	-40	500	200	150
23	502550	Hitta	Hebron	300	700	-58	200	100	100
24	502595	Kuziba	Hebron	200	500	-60	100	50	100
25	502635	Ash Shuyukh	Hebron	4000	7500	-47	2000	1000	100
26	502675	Khirbet al Hasaka	Hebron	100	200	-50			
27	502680	Beit 'Einun	Hebron	1200	2500	-52	500	200	150

No.	Community Id	Community Name	District	Mekorot Company Supply (m ³ / month)			Tankers Supply (m ³ / month)		
				During Current Crisis	Before Current Crisis	Percentage Change	During Current Crisis	Before Current Crisis	Percentage Change
28	502810	Deir Samit	Hebron	3000	6000	-50	1500	1000	50
29	502895	Kharsa	Hebron	1500	4000	-63	1000	500	100
30	502910	Al Majd	Hebron	1000	2000	-50	300	100	200
31	502920	Hadab al Fawwar	Hebron	1000	2000	-50	500	100	400
32	502960	Ar Rihya	Hebron	1500	3500	-58	1000	500	100
33	503000	'Abda	Hebron	100	170	-42	50	30	66
34	653240	Deir al Balah	Deir Al-Balah	18000	40000	-55			

Although Mekorot is reducing its supply by, in some cases, 100% of its pre-crisis amount, this shortfall is in some cases being filled by tankers or any other available source. Water from tankers is of course more expensive than piped water—partly due to the requirement of having to pass through checkpoints. Where this is not possible (due to lack of access, tankers, etc.) then the communities suffer an artificial drought.

APPENDIX 1