

別冊資料 CD 3.2

**District Service Improvement Plan (DSIP), 2019
– English Version**

District Service Improvement Plan (DSIP), 2019

1. Valve Diagnosis Survey
2. Report on Pressure Survey
3. Report on Distribution Zoning & Schedule
4. District Service Improvement Plan (DSIP), 2019

1. Result of Valve Diagnosis Survey

SN	Valve name	No. According to map	District	No. of actual turns	No. of turns on site	No. of standard turns (VAG)	No. of standard turns (HAK)	Valve functioning status	Type of valve	Diameter of valve (inch)	Body condition of valve	Number of turns according to manufacture	Closing condition of valve inside the pipe tested by listening stick	Offset distance measurement	Chamber condition (if exists)
1	Bazian Valve 6"	48	District 2	null	18	30	30.5	Malfunction	Gate Valve	6"	Located inside surface box; the situation of valve body not clear.	null	null	✓	Surface box (bad condition especially in winter, the valve operator takes a lot of time to clean up the box; there is cover.
2	Alewi Valve 4"	40	District 2	null	22	20	20.5	Function	Gate Valve	4"	Good	null	null	✗	Located inside chamber; good condition
5	Burkeen St. 4"-A	16	District 1	null	Can't be determined	20	20.5	Buried	Gate Valve	4"	un clear(under pavement ;a lot of pavement & base coarse over it). Located inside chamber and buried now but according to WWD director this valve is working very well and the well excavate on it ASAP	null	null	✗	Located inside chamber; in bad condition, needs removal of pavement & base coarse accumulated over and inside the chamber.
6	Awartani 6"	19	District 1	null	24	30	30.5	Malfunction	Gate Valve	6"	Located inside surface box.	null	null	✓	Surface box (good condition with box cover)
7	Alzayed 6"	20	District 1	null	26	30	30.5	Malfunction	Gate Valve	6"	Located inside surface box (PVC Pipe) without cover.	null	null	✓	Surface box (lots of water and mud over the valve especially in winter and without cover); takes a lot of time to operate it on rainy days.
8	Jabriat Chamber 6"	4	District 1	null	25	30	30.5	Malfunction	Gate Valve	6"	Good	null	null	✗	Located inside chamber; in good condition.
9	Under Kena 6"-A	7	District 1	null	30	30	30.5	Function	Gate Valve	6"	Good (located inside chamber; needs cleaning)	null	null	✗	Needs cleaning
10	Dakhlia 8"	22	District 1	null	34	34	34	Function	Gate Valve	8"	Located inside surface box.	null	null	✗	In bad condition; Located inside surface box without box cover.
13	Burqeen St. 4"-B	17	District 1	null	Can't be determined	20	20.5	Buried	null	4"	Unclear (under pavement: lots of pavement & base coarse over it). Located inside chamber; now buried but according to WWD Director this valve is working very well and the well excavate on it ASAP	null	null	✗	Located inside chamber; In bad condition; Needs removal of pavement & base coarse accumulated over and inside the chamber.
14	Abu Ghada 4"	5	District 1	null	18	20	20.5	Function	Gate Valve	4"	Good	null	null	✓	Located inside surface box (PVC pipe) without cover.
15	Jenin 6"	1	District 1	null	8.5	8.5	8.5	Function	Butterfly Valve	6"	Good	null	null	✗	Located inside chamber; in good condition.
17	Near Doctors Housing 6"	24	District 1	null	32	30	30.5	Function	Gate valve	6"	Not clear; located inside surface box in middle of street.	null	null	✓	Located inside surface box; in bad condition; needs cleaning.
22	Abu Swai 2-Jenin Old Camp 6"	13	District 1	null	32	30	30.5	Function	Gate Valve	6"	Good	null	null	✗	Good Gondition (Chamber)

1. Result of Valve Diagnosis Survey

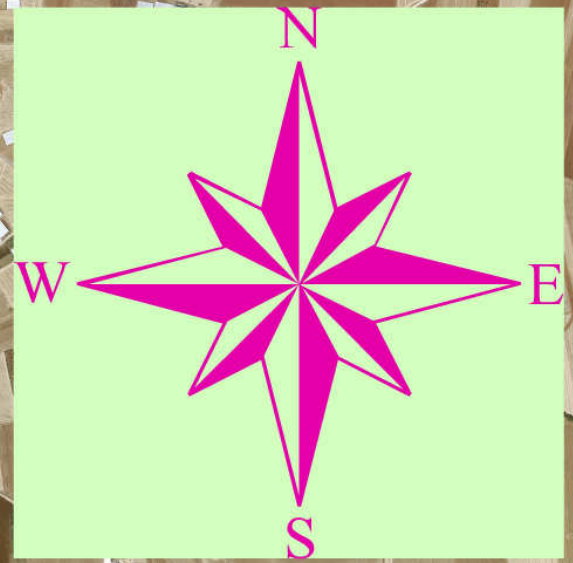
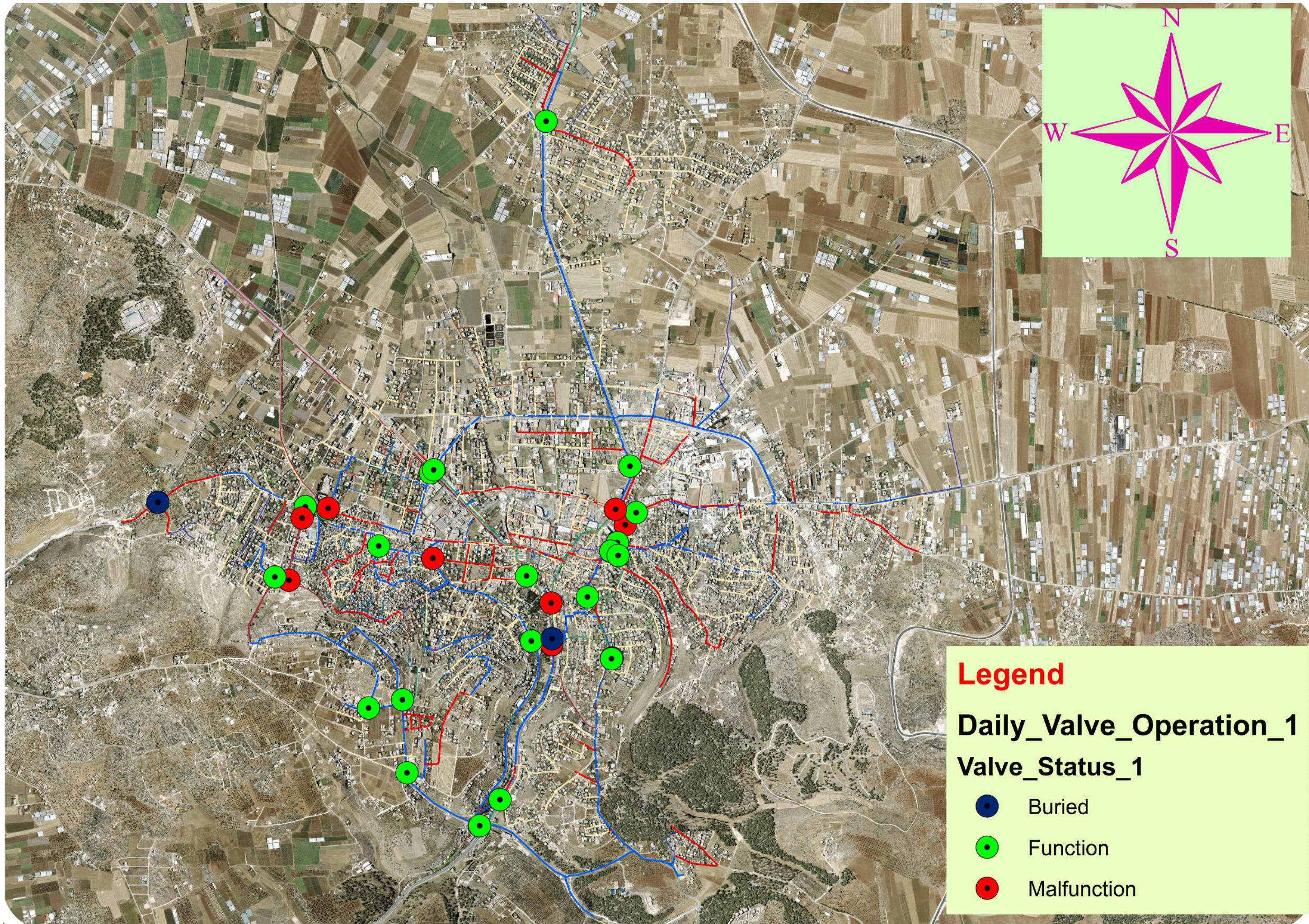
SN	Valve name	No. According to map	District	No. of actual turns	No. of turns on site	No. of standard turns (VAG)	No. of standard turns (HAK)	Valve functioning status	Type of valve	Diameter of valve (inch)	Body condition of valve	Number of turns according to manufacture	Closing condition of valve inside the pipe tested by listening stick	Offset distance measurement	Chamber condition (if exists)
23	Abu Ghada 6"	6	District 1	null	27	30	30.5	Malfunction	Gate Valve	6"	Located inside surface box.	null	null	✓	Almost burried (located inside a hole); Lots of rubbish over the valve.
24	Under Kena 6"-B	8	District 1	null	16	30	30.5	Malfunction	Gate Valve	6"	Good (located inside chamber; needs cleaning)	null	null	✗	Needs cleaning
25	Abu Swai 8"-A	10	District 1	null	Can't be determined	34	34	Malfunction	Gate Valve	8"	Bad: Needs to be replaced; Very old valve & there is no vertical stem inside it	null	null	✗	Located inside chamber; needs cleaning.
26	Ragheb Alnader	21	District 1	null	33	30	30.5	Malfunction	Gate Valve	6"	Located inside surface box.	null	null	✗	Located inside surface box without cover; needs cleaning.
27	Wajdi Al-Hallaq 6"	18	District 1	null	32	30	30.5	Function	Gate Valve	6"	Located inside surface box; In good condition	null	null	✓	Surface box in good condition.
29	Housing Valve 6"	25	District 1	null	30	30	30.5	Function	Gate Valve	6"	Good	null	null	✗	Good condition.
34	Court 6"	23	District 1	null	30	30	30.5	Function	Gate Valve	6"	Located inside surface box; Needs to be replaced.	null	null	✓	Surface box without cover; Needs cleaning.
35	Shooun 4	9	District 1	null	21	20	20.5	Function	Gate Valve	4"	Good condition; Located inside chamber.	null	null	✗	Needs cleaning; lots of rubbish inside it.
36	Jabriat Chamber 10"-A	2	District 1	null	46	43	43	Malfunction	Gate Valve	10"	Needs maintaince; there is leakage from the valve itself	null	null	✗	Located inside chamber; In good condition.
37	Jabriat Chamber 10"-B	3	District 1	null	null	43	43	Malfunction	Gate Valve	10"	Bad: there is no vertical stem; it is unscrewed.	null	null	✗	Located inside chamber; In good condition (chamber)
38	Abu Swai 8"-B	11	District 1	null	Can't be determined	34	34	Malfunction	Gate Valve	8"	Bad: Very old & worn; Difficult to diagnoze due to very high pressure when opened.	null	null	✗	In bad condition; Needs cleaning and rehabilitation.
39	Abu Swai2 6"-Wadi Burqeen	15	District 1	null	34	30	30.5	Malfunction	Gate ValveVAG	6"	Good	null	null	✗	In good condition (chamber)
40	Abu Swai2 6"-Al-Zahra' & Wadi Burqeen	14	District 1	null	8.5	8.5	8.5	Function	Butterfly Valve	6"	Good	null	null	✗	In good condition (chamber)
41	Abu Swai 8"-C	12	District 1	null	Can't be determined	34	34	Null	Gate Valve	8"	Good; Difficult to diagnoze due to very high pressure when opened.	null	null	✗	In good condition (chamber: Abu Swai chamber No.2)
42	Bayader Circle 4"	36	District 2	null	18	20	20.5	Function	Gate Valve	4"	Unclear; Located inside surface box.	null	null	✗	Located inside surface box (PVC pipe) with cover.
43	Antar Marah 6"	29	District 2	null	30	30	30.5	Function	Gate Valve	6"	Good	null	null	✗	Located inside room (Antar room), where lots of valves inside; Needs maintainence.
44	A-Marah 8"	46	District 2	null	8.5	9	9	Function	Butterfly Valve	8"	Medium	null	null	✗	Located inside a room at Al-Marah reservoir.
45	Abu Hazim 4"	31	District 2	null	22	18	18.5	Malfunction	Gate Valve	6"	Bad; located inside surface box; There is leakage from the valve itself.	null	null	✓	Located inside surface box; In bad condition without cover; Needs cleaning.

1. Result of Valve Diagnosis Survey

SN	Valve name	No. According to map	District	No. of actual turns	No. of turns on site	No. of standard turns (VAG)	No. of standard turns (HAK)	Valve functioning status	Type of valve	Diameter of valve (inch)	Body condition of valve	Number of turns according to manufacture	Closing condition of valve inside the pipe tested by listening stick	Offset distance measurement	Chamber condition (if exists)
46	Almanya 6"-B	35	District 2	null	Can't be determined	30	30.5	Null	Gate Valve	6"	Located inside surface box; buried.	null	null	✓	Located inside surface box; In bad condition without cover; Needs cleaning. Note: According to WWD director no need to check or expose this valve since it is always closed.
47	Al-Marah 10"-B	27	District 2	null	42	43	43	Function	Gate Valve	10"	Good	null	null	✗	Located on the ground in the hall of Al-Marah Reservoir.
48	Almarah 10"-A	26	District 2	null	42	43	43	Function	Gate Valve	10"	Good	null	null	✗	Located on the ground in the hall of Al-Marah Reservoir.
49	Control Vavle-Dabos 8"	30	District 2	null	34	34	34	Function	Gate Valve	8"	Located inside surface box.	null	null	✓	Located inside surface box; In bad condition; Needs cleaning and cover.
50	Sharkeh 8"	33	District 2	null	34	34	34	Function	Gate valve	8"	Good; located inside surface box.	null	null	✓	Located inside surface box; In good condition with cover.
51	Abu Hazim 6"	32	District 2	null	36	30	30.5	Malfunction	Gate Valve	6"	Bad; there is a leakage from the valve itself.	null	null	✓	Surface box without cover: In bad condition.
52	Almanya 6"-A	34	District 2	null	18	30	30.5	Malfunction	Gate Valve	6"	Unclear (under pavement; just the stem appears).	null	null	✓	Unclear (under pavement, just the stem is apparent).
54	Behind Municipality 6"	37	District 3	null	32	30	30.5	Function	Gate Valve	6"	Good (located inside surface box.)	null	null	✓	Surface box; In good condition with cover.
55	Naffa' Fuel Station 8"	38	District 3	null	Can't be determined	34	34	Malfunction	Gate Valve	8"	Needs maintenance	null	null	✓	Not checked yet according to WWD instructions; there is a problem with it.
56	Jabryiat 6"	46	District 3	null	30	30	30.5	Function	Gate valve	6"	Good	null	null	✗	Located inside chamber; In bad condition; must be raised up to the level of road surface.
57	Civil Defence 6"-A	35	District 3	null	12	8	8	Malfunction	Butterfly Valve	6"	Good	null	null	✗	In good condition (chamber)
58	Hab Alreih	40	District 3	null	34	34	34	Function	Gate Valve	8"	Good	null	null	✓	Located inside surface box with cover.
59	Abu Dhair 6"	47	District 3	null	28	30	30.5	Function	Gate Valve	6"	Good	null	null	✗	Located inside chamber; In bad condition; Must be raised up to the level of road.
60	Sekeh 6"	45	District 3	null	8.5	8	8	Function	Butterfly Valve	6"	Good	null	null	✗	Located inside surface box; In good condition.
61	Zalmot 6"	44	District 3	null	28	30	30.5	Function	Gate Valve	6"	Bad: there is a leakage from the valve itself; Needs maintenance	null	null	✗	In good condition (chamber)
62	Chic Model 8"	39	District 3	null	36	34	34	Function	Gate Valve	8"	Bad: there is difficulty in operate it.	null	null	✓	Surface box without cover; The valve operator takes a lot of time to operate it in winter: lots of water and rubbish accumulated on it in winter.
63	Civil Defence 6"-B "Always closed"	42	District 3	null	Can't be determined	30	30.5	Buried	Gate valve	6"	Bad	null	null	✗	Located inside chamber; In bad condition full of mud and water.

1. Result of Valve Diagnosis Survey




SN	Valve name	No. According to map	District	No. of actual turns	No. of turns on site	No. of standard turns (VAG)	No. of standard turns (HAK)	Valve functioning status	Type of valve	Diameter of valve (inch)	Body condition of valve	Number of turns according to manufacture	Closing condition of valve inside the pipe tested by listening stick	Offset distance measurement	Chamber condition (if exists)
64	Civil Defence 6"-C "Always closed"	43	District 3	null	Can't be determined	30	30.5	Buried	Gate Valve	6"	Bad	null	null	✗	Located inside chamber; In bad condition full of mud and water.
65	Horse Circle 6"	43	District 3	null	Can't be determined	30	30.5	Malfunction	Gate Valve	6"	Bad: there is a big problem on it	null	null	✓	Surface box full of water in winter.
66	Ameen Butchery 6"	42	District 3	null	30	30	30.5	Function	Gate Valve	6"	Good: located inside surface box.	null	null	✓	Surface box with cover.



Legend

Daily_Valve_Operation_1

Valve_Status_1

-  Buried
-  Function
-  Malfunction



Legend

Daily_Valve_Operation_1

Valve_Status_1

Buried

Function

Malfunction



Legend

Daily_Valve_Operation_1

Valve_Status_1

Buried

Function

Malfunction





DISTRICT SERVICE IMPROVEMENT PLAN AS OF 31ST OCTOBER 2019

2. WATER PRESSURE SURVEY

المساهمين

بلدية جنين

عبدالهادي محمد حمران
رمزي جعفر
مطيع جبالي
جهاد نظمي علاونة
سامح سويطات
امجد سعدي

امين نصري
عبدالناصر احمد
محمد سلامة
محمود أحمد
فيصل ايوب

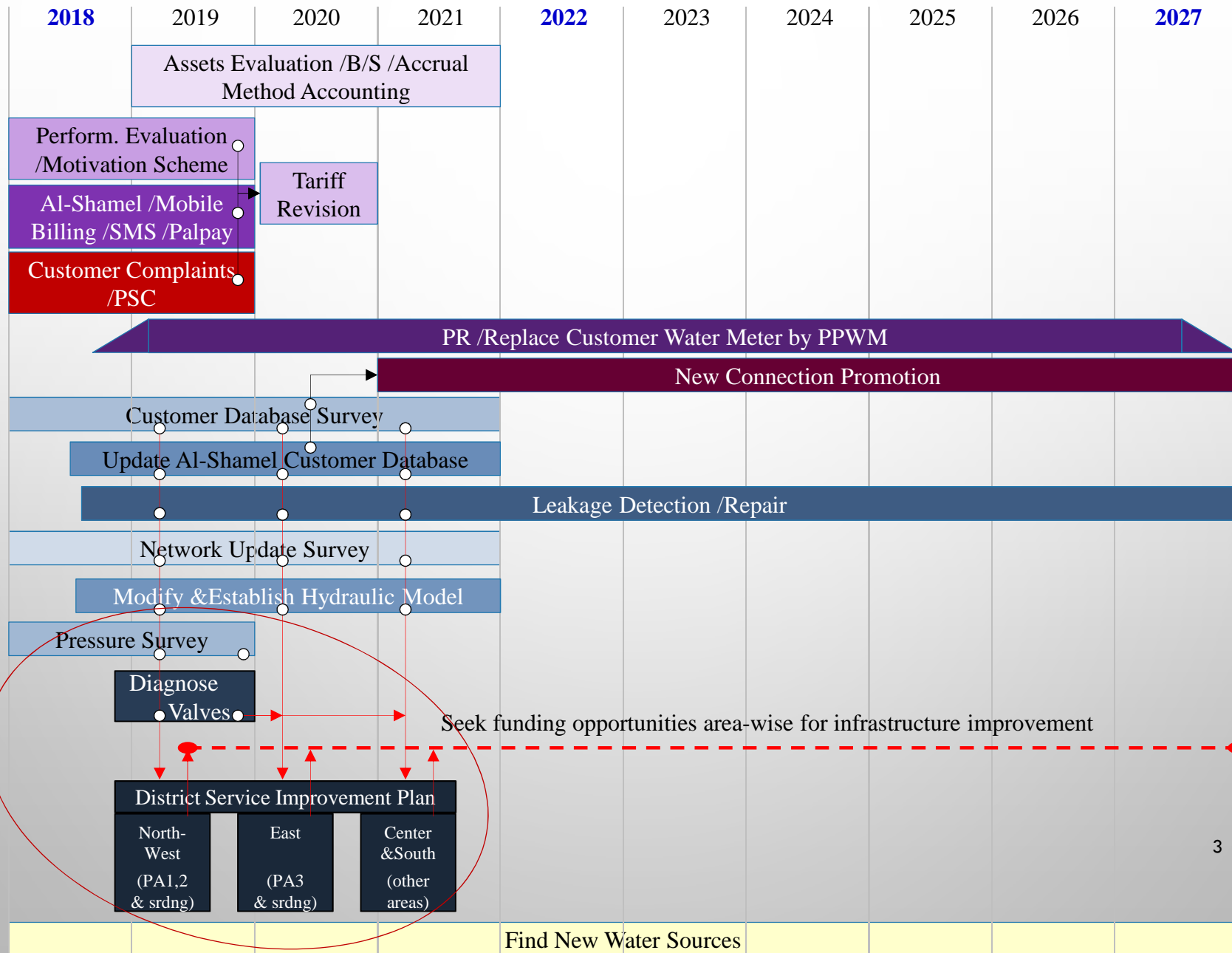
فريق خبراء جايكا

توشيهيكو تماما
ناوته كويكي
سامح صوالحة
عبدالله البزور

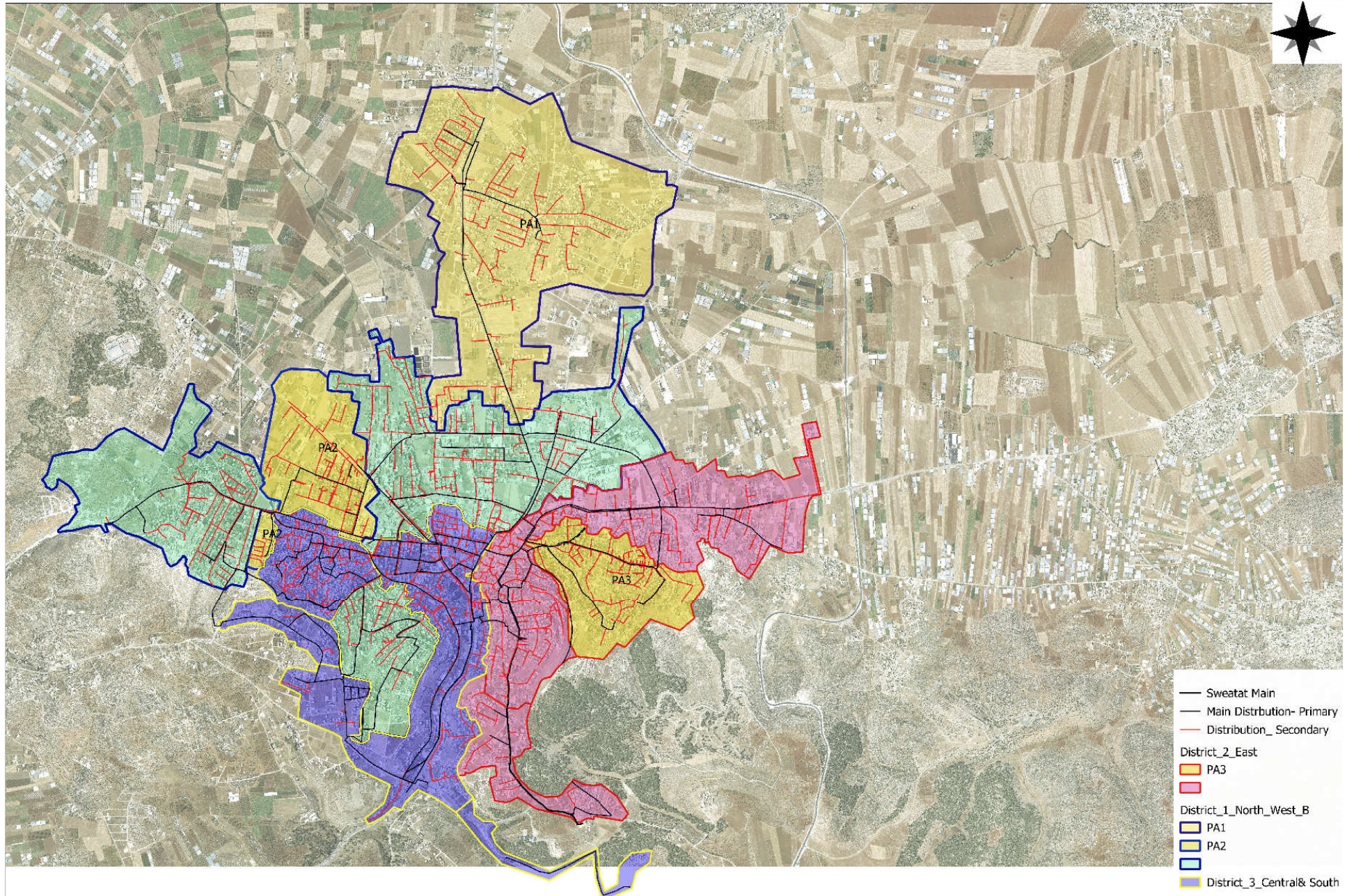
District Service Improvement Plan (DSIP)

1. Valve diagnosis survey: diagnosed the functioning status of each main valve;
2. Bordered the area and assessed the degree that each valve could control the distribution;
3. Developed a BOQ with estimated cost to replace malfunctioned valves;
4. Pressure measurement survey in each area;
5. Developed and implemented measures to improve water supply based on #1 & #4;
6. Mapped distribution zones based on #2 and modified the boundaries based on #5 above;
7. Developed a distribution schedule based on current practice.

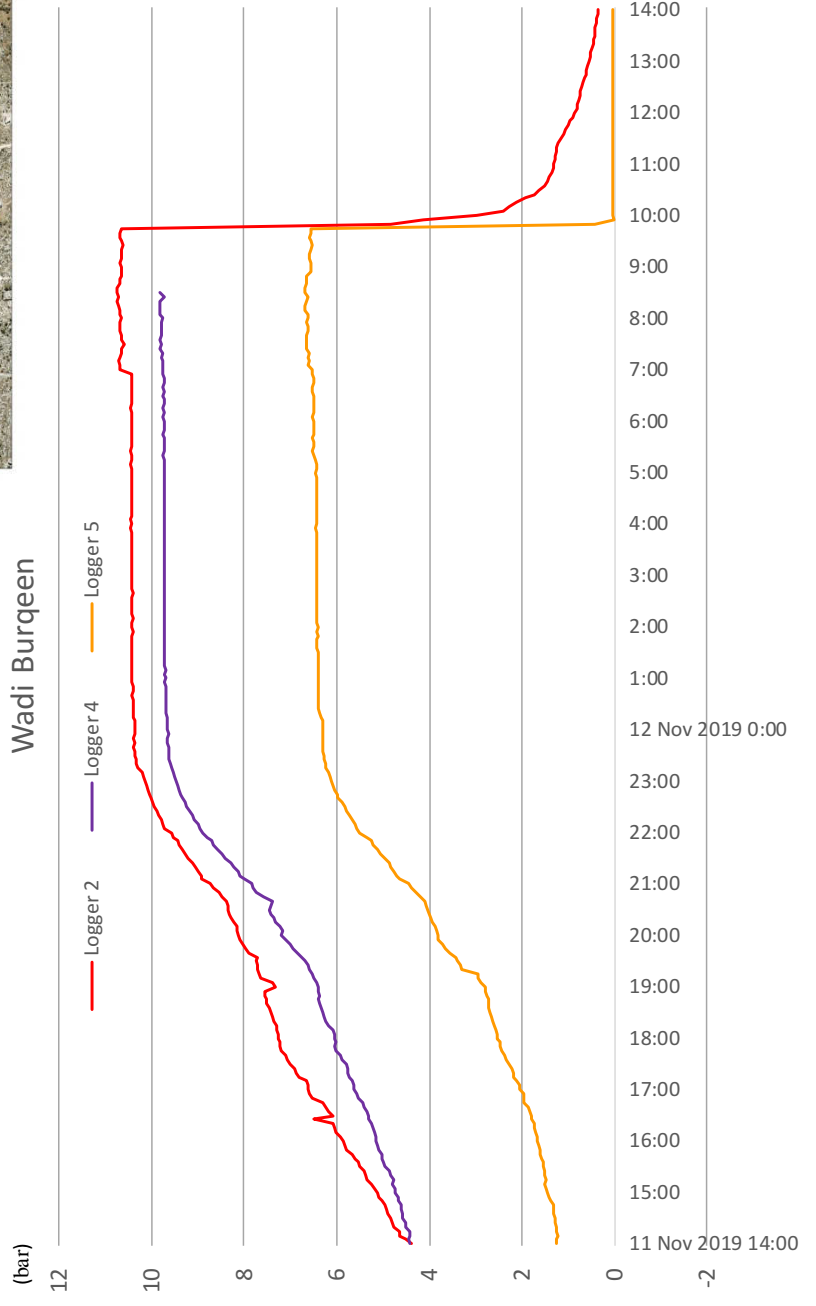
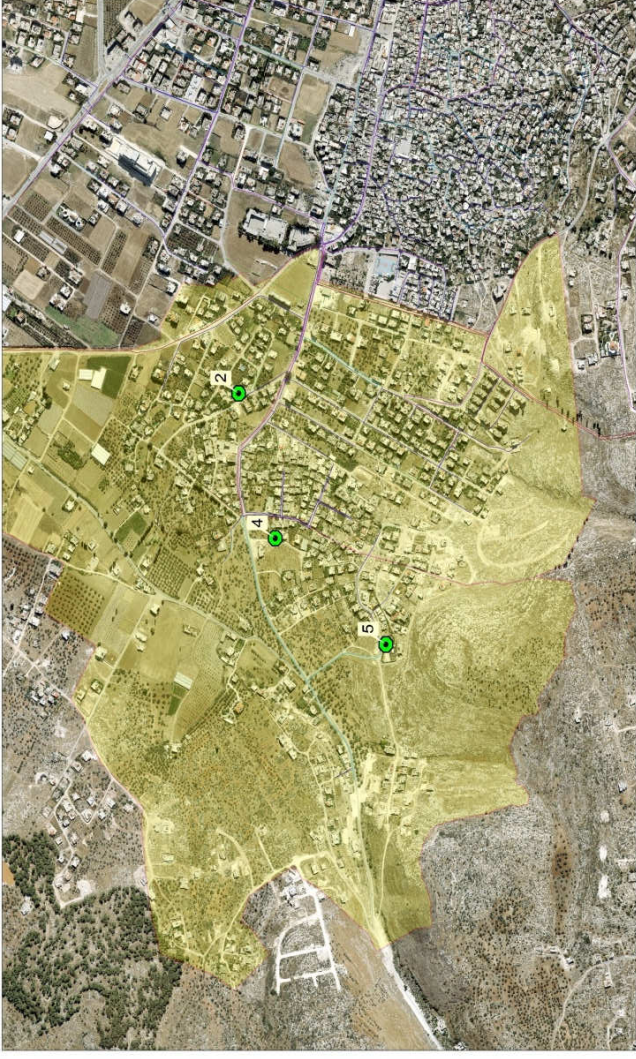
Activities in the Water Service Management Plan 2018-2027 including DSIP



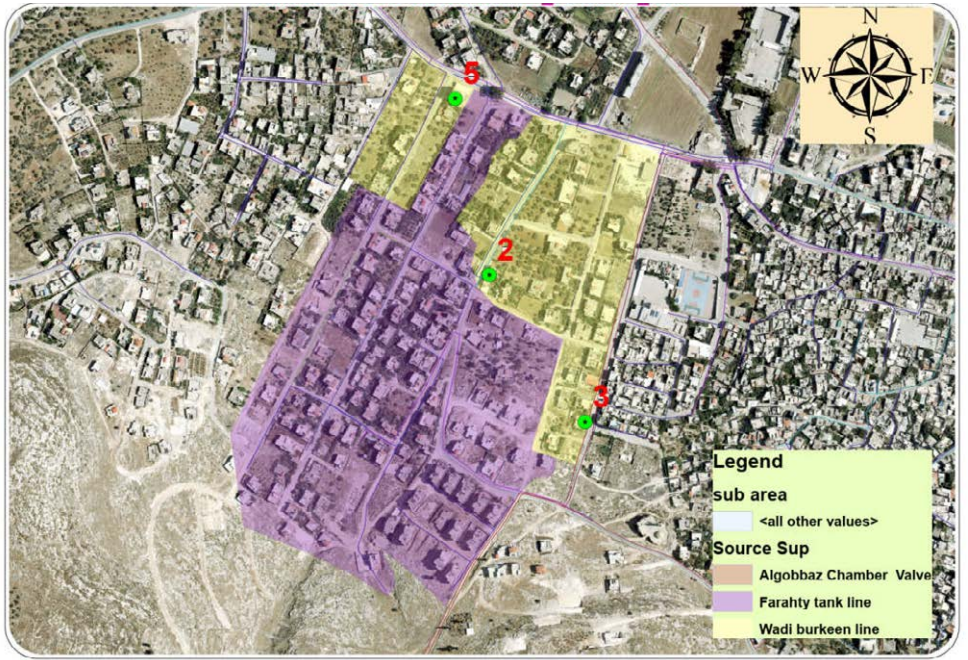
Boundary of 3 Districts in Jenin Municipality



District 1: Wadi Burqeen



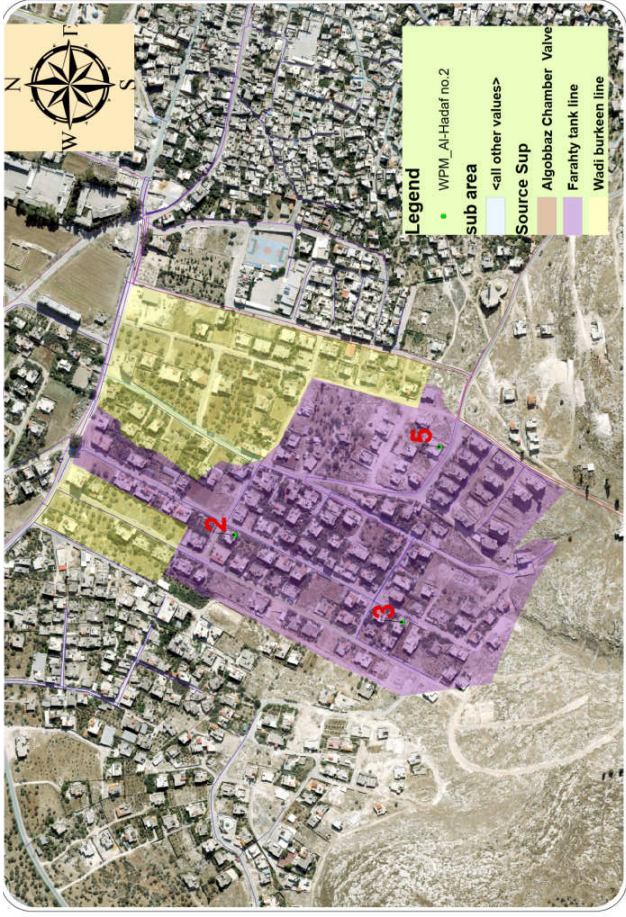
District 1: Al Hadaf -1 (Supplied from Al Jabryat Tank)



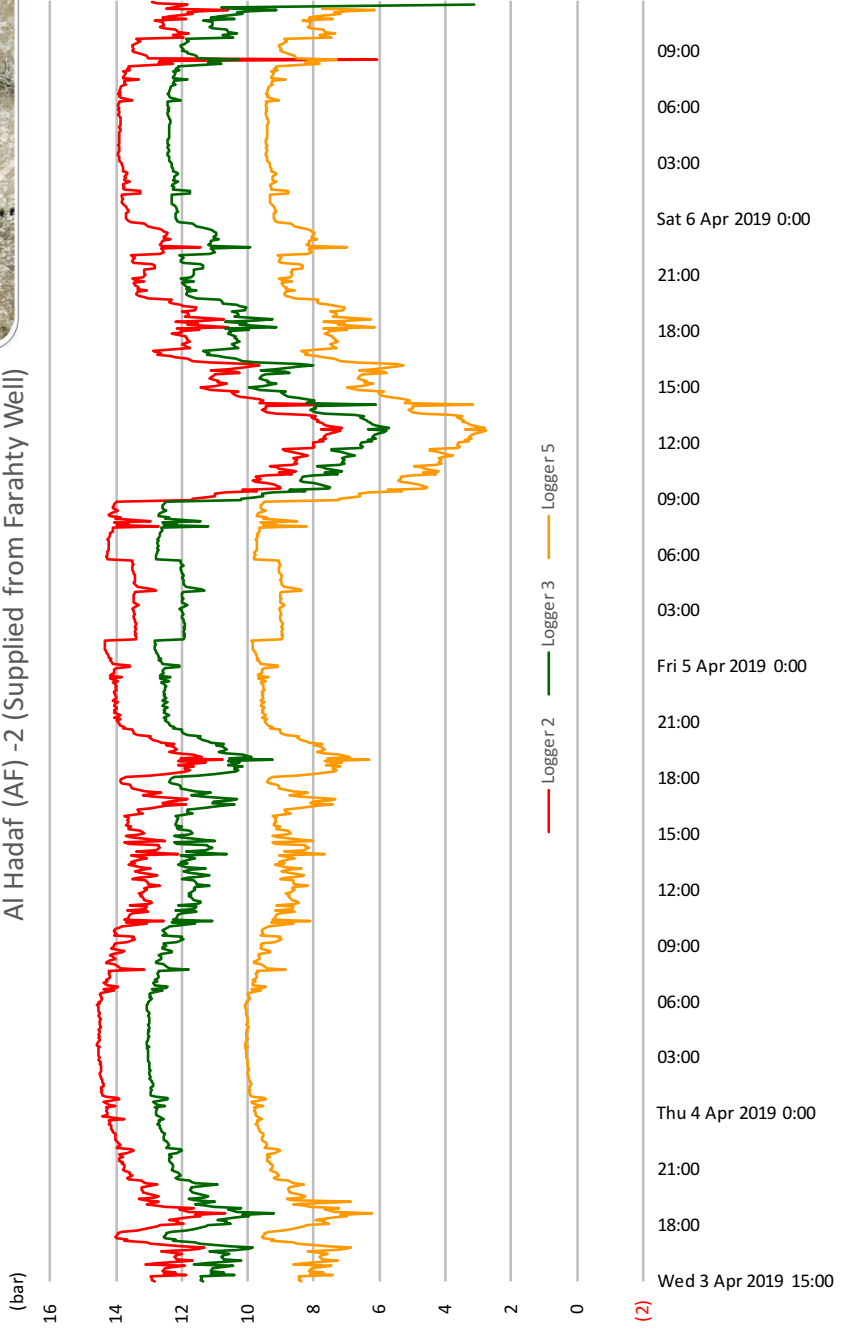
Al Hadaf (AF) -1 (Supplied from Al Jabryat Tank)



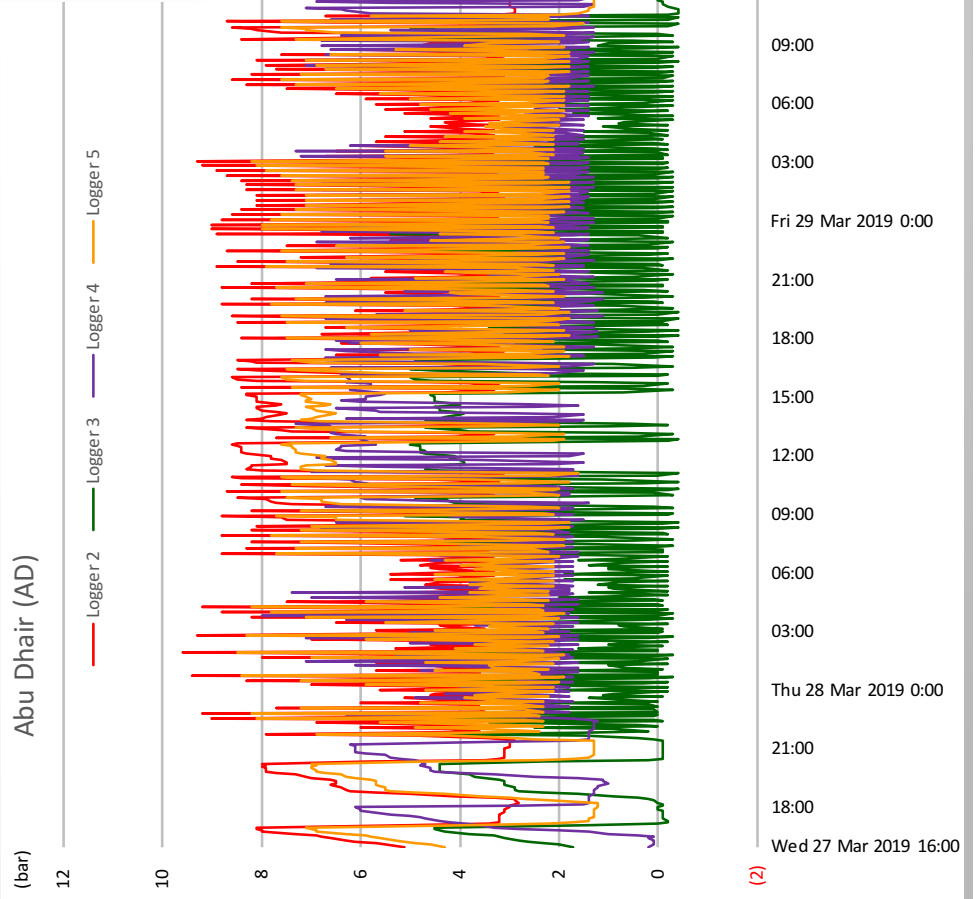
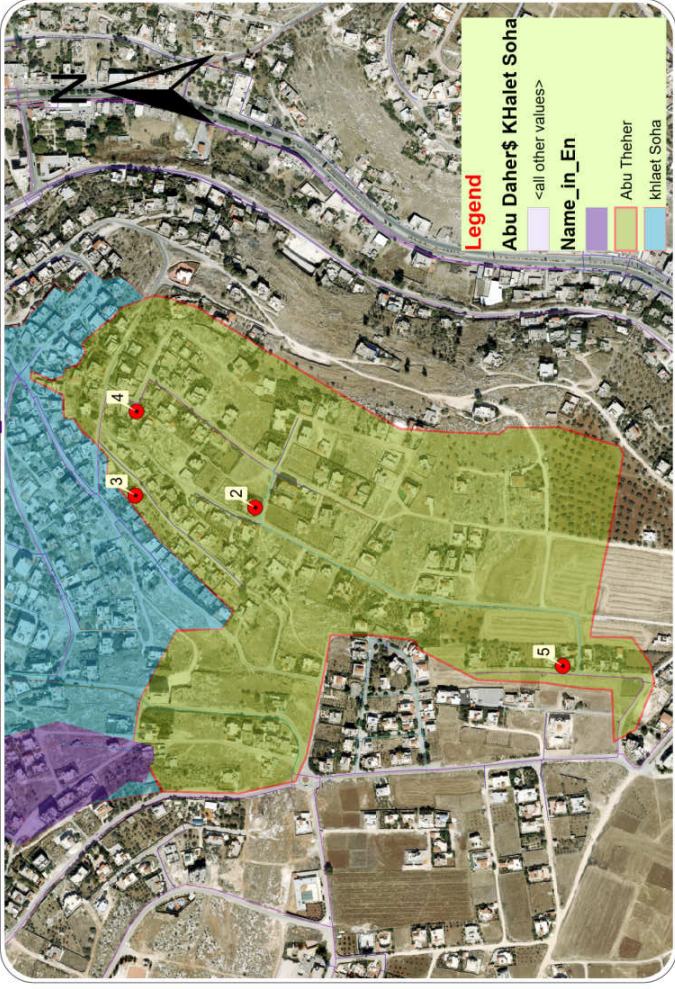
District 1: Al Hadaf -2 (Supplied from Farahty Well)



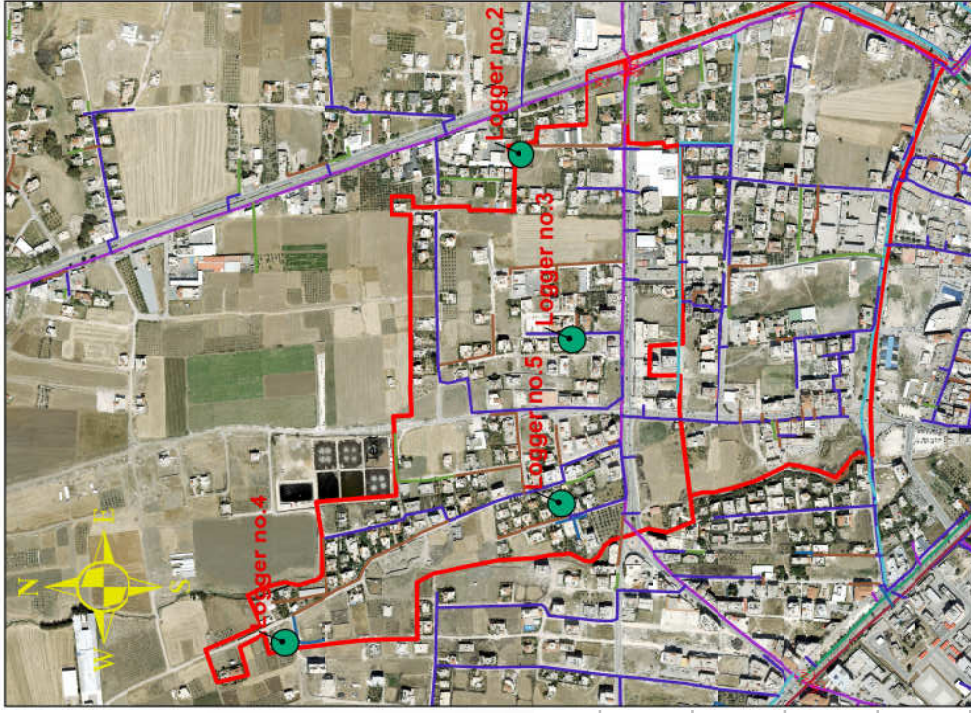
Al Hadaf (AF) -2 (Supplied from Farahty Well)



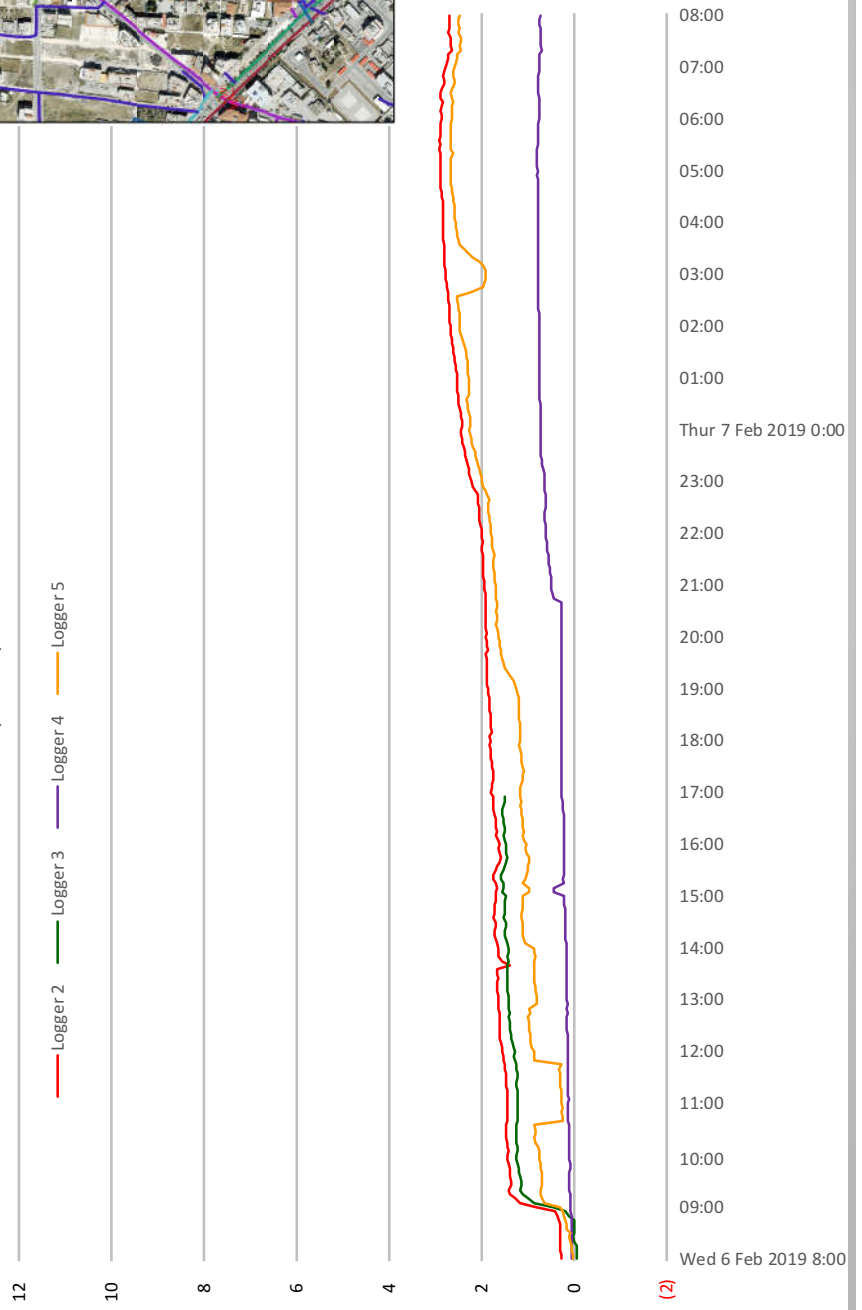
District 1: Abu Dhair



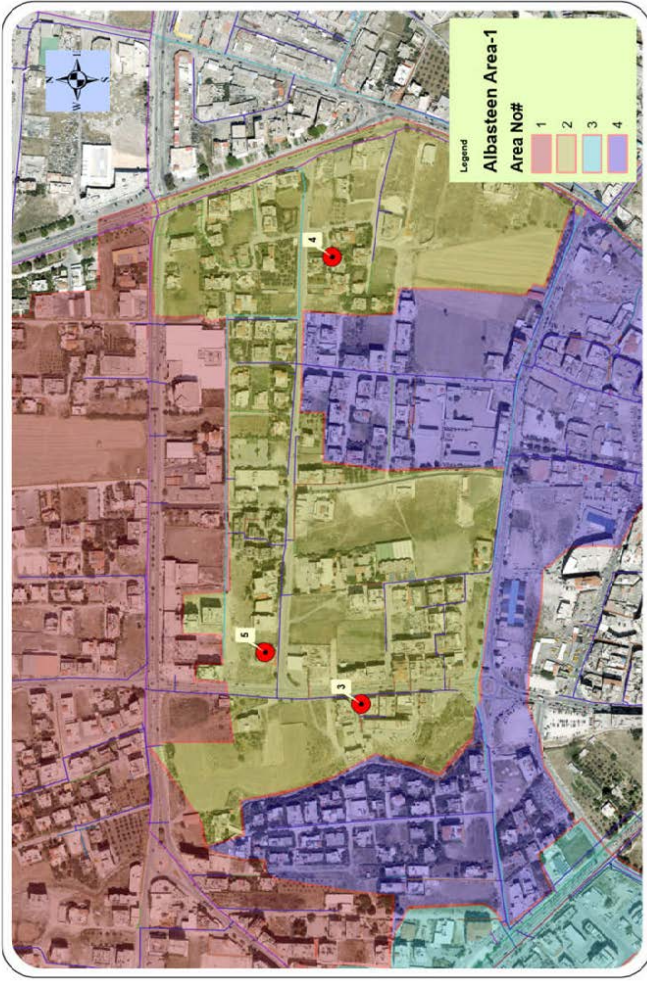
District 1: Al-Basateen-1 (North): BN



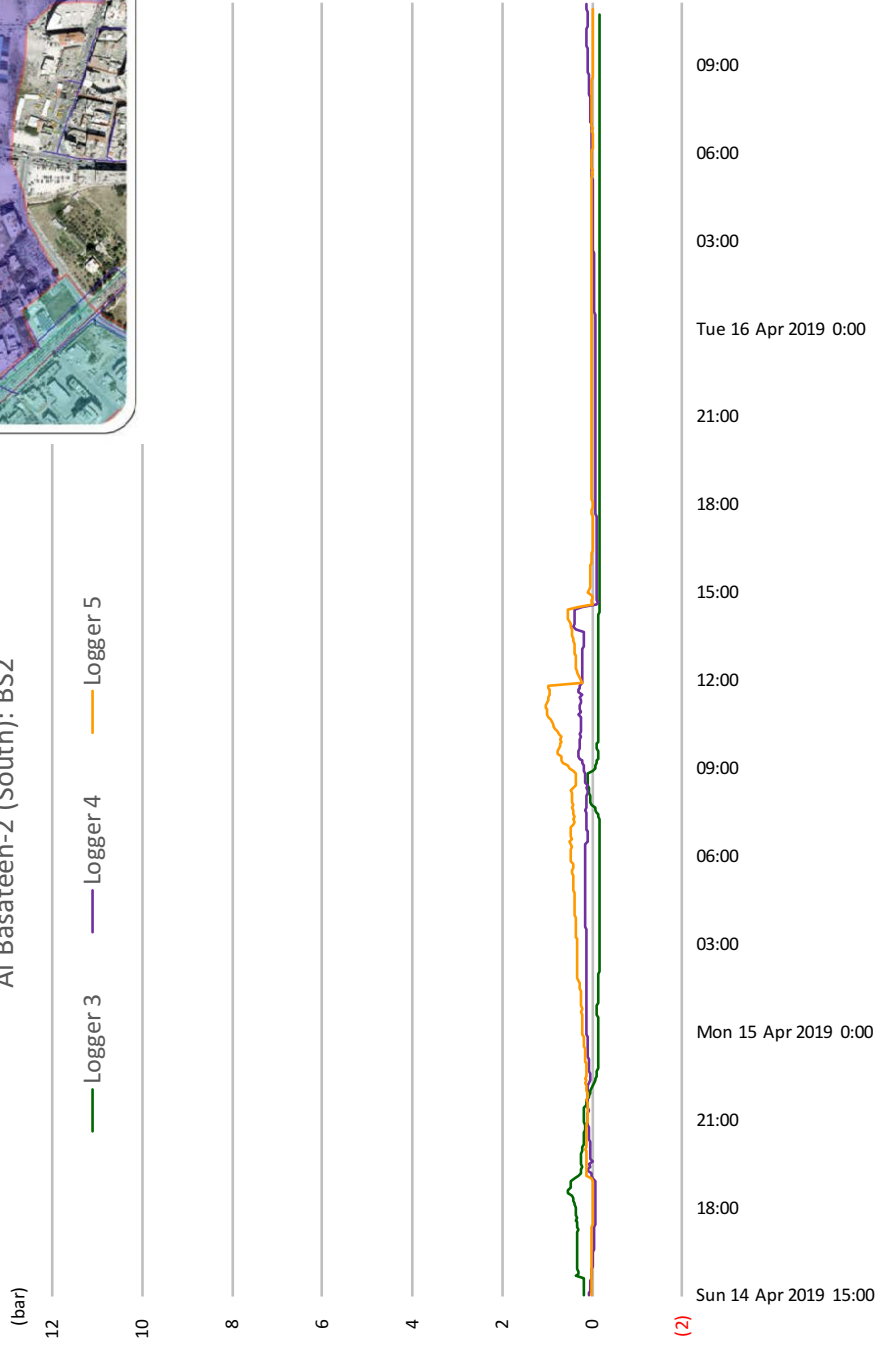
Al Basateen-1 (North): BN1



District 1: Al-Basateen-2 (South): BS-2

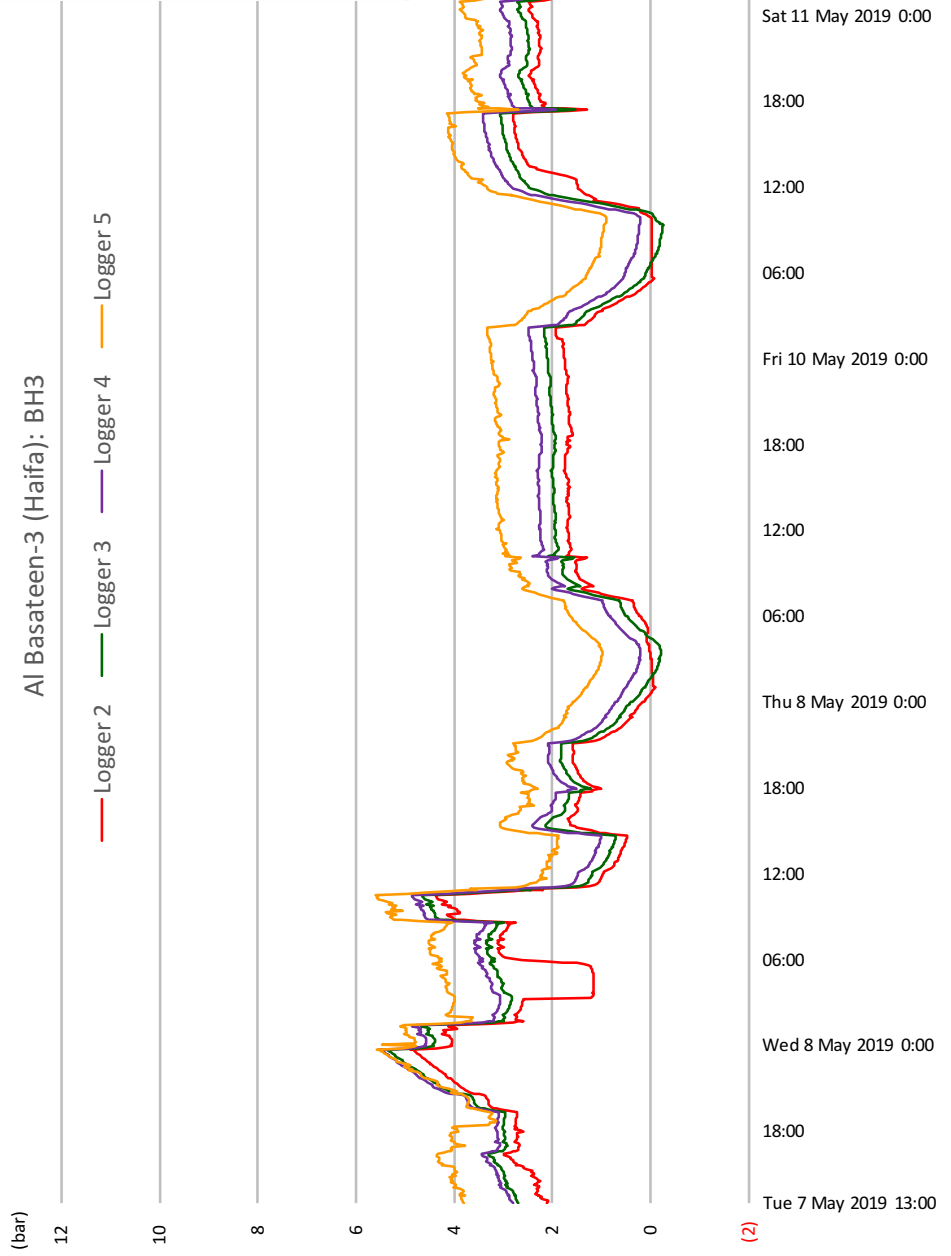


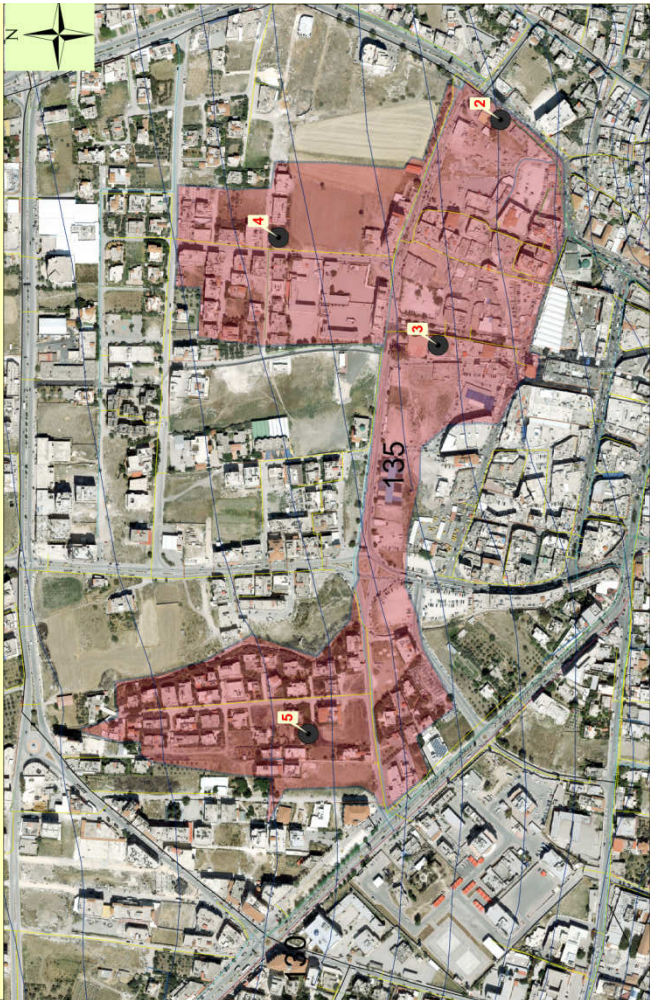
Al Basateen-2 (South): BS2



District 1: Al-Basateen-3 (Haifa St.): BH3

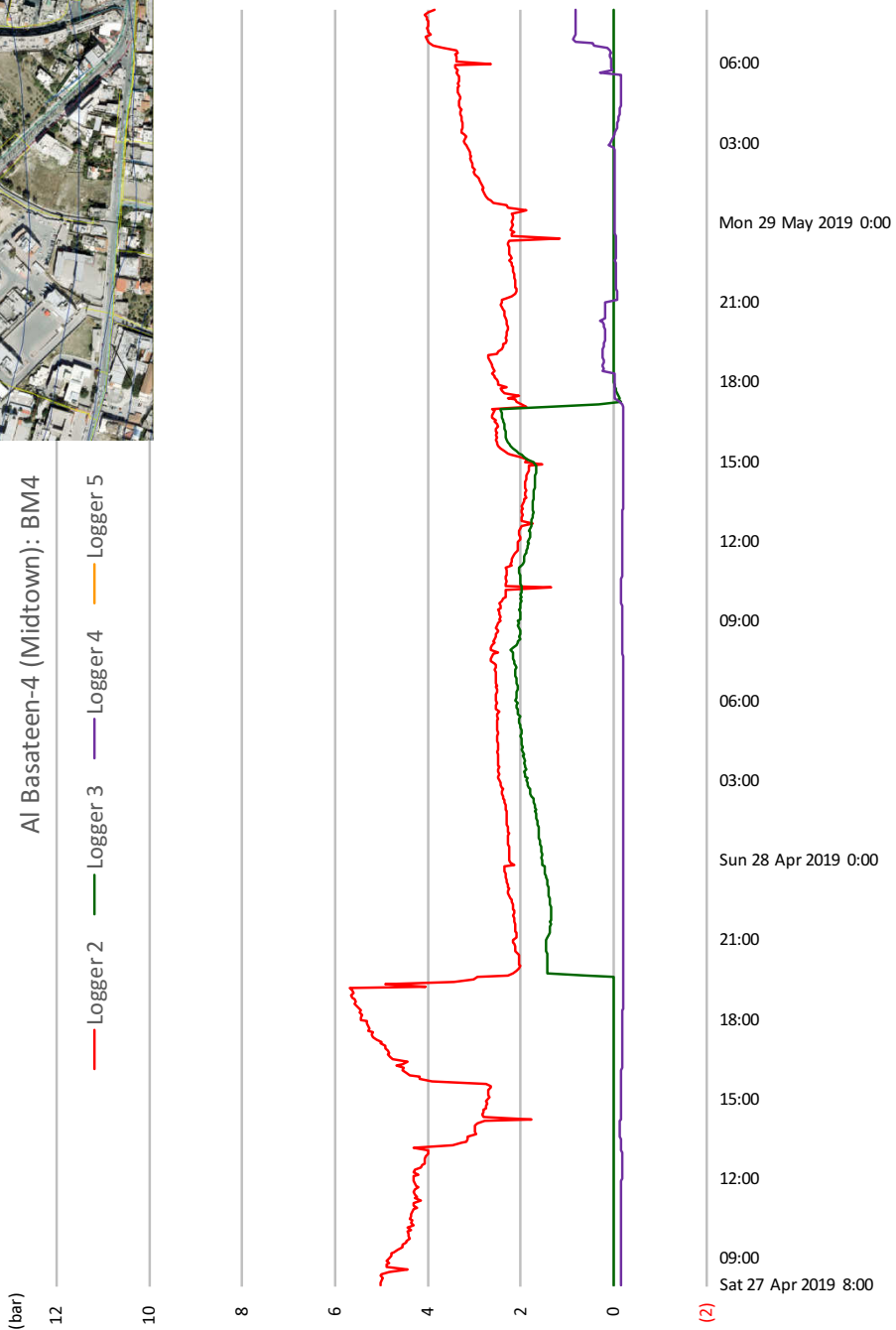
Water Pressure Measurements_Al-basateen no.3



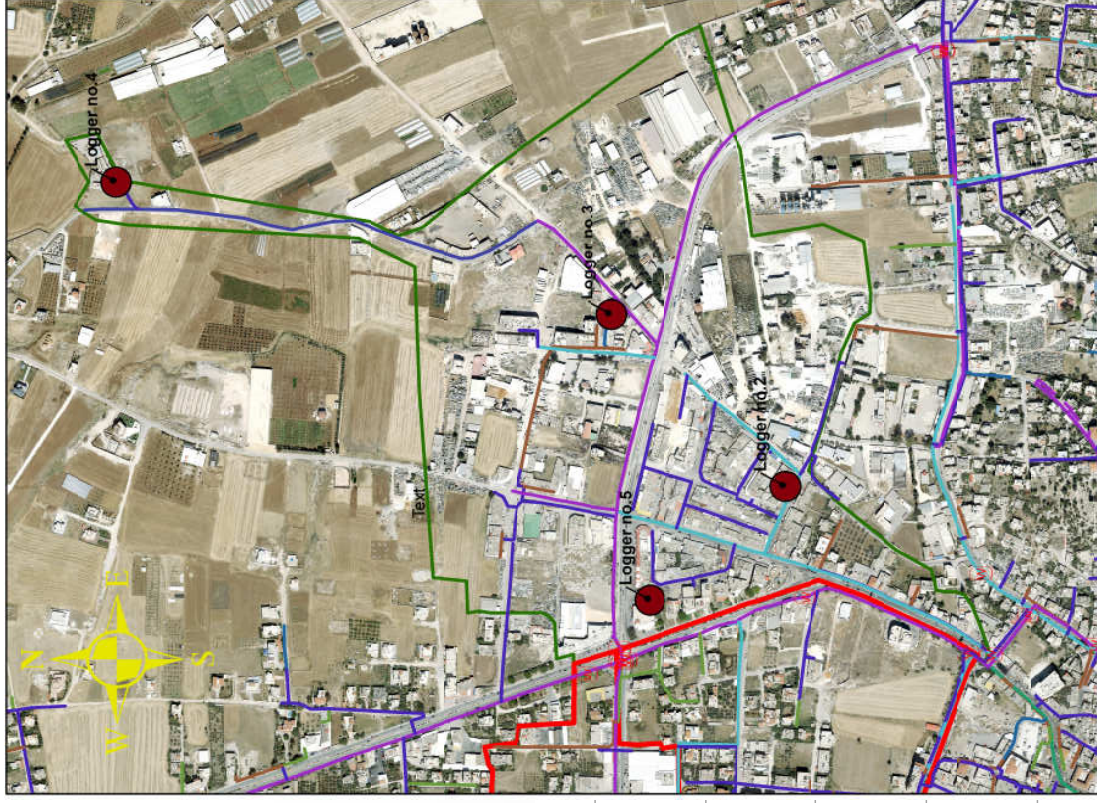


District 1: Al-Basateen-4 (Mid Town): BM4

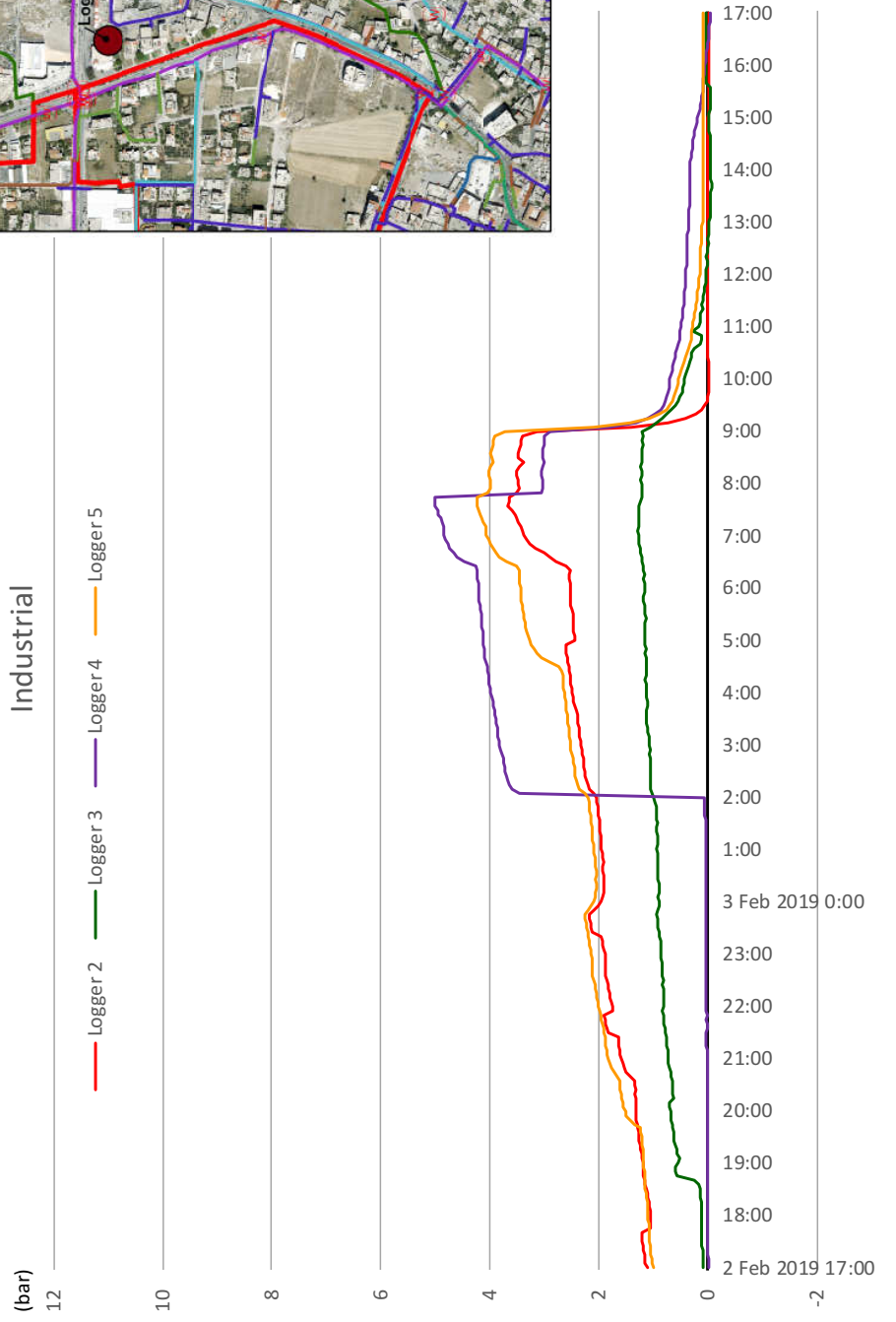
Al Basateen-4 (Midtown): BM4



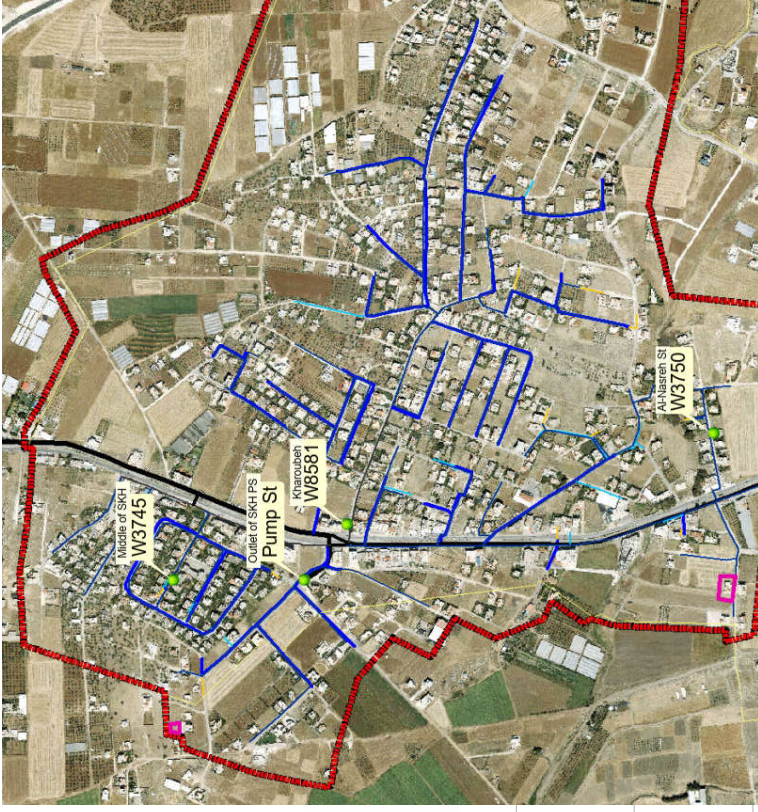
District 1: Industrial



Industrial



District 1: PA1



PA1

(Bar)

12

10

8

6

4

2

0

-2

— Al Nasreh St.

— Middle of SKH

— Kharoubbeh

— Outlet of SKH PS

Wed 25th Oct 2017 12:00

Thu 26th Oct 2017 0:00

Fri 27th Oct 2017 0:00

Sat 28th Oct 2017 0:00

Sun 29th Oct 2017 0:00

Mon 30th Oct 2017 0:00

Tue 31st Oct 2017 0:00

Wed 1st Nov 2017 0:00

06:00

12:00

18:00

06:00

12:00

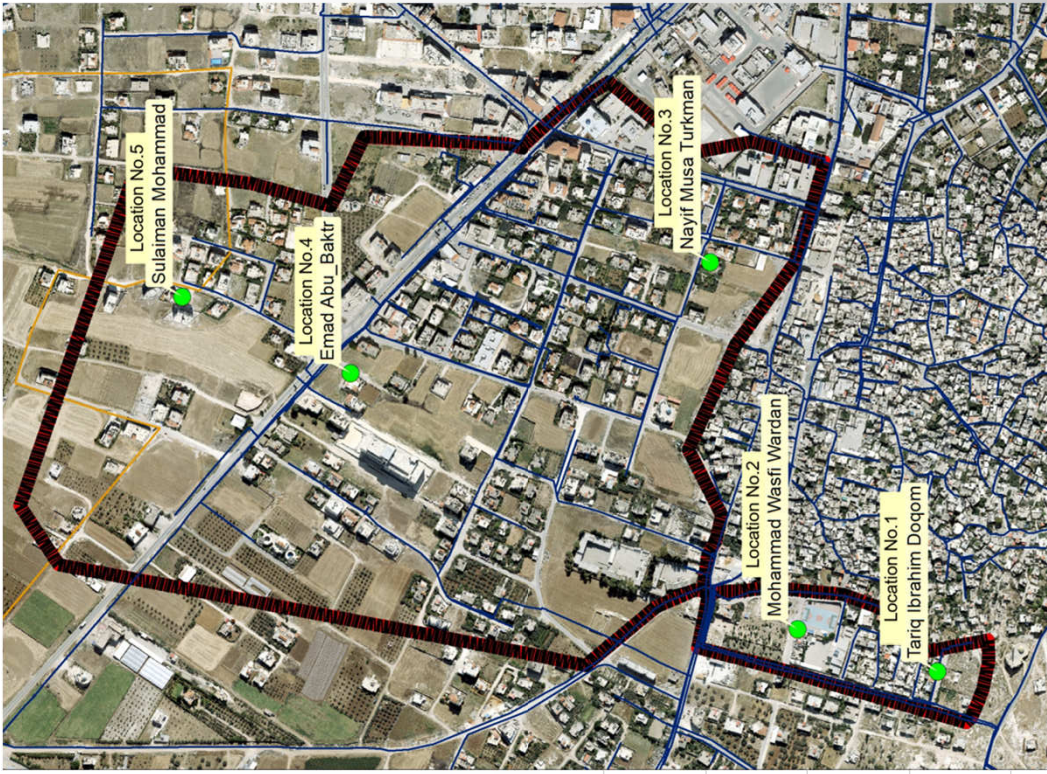
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06:00

12:00

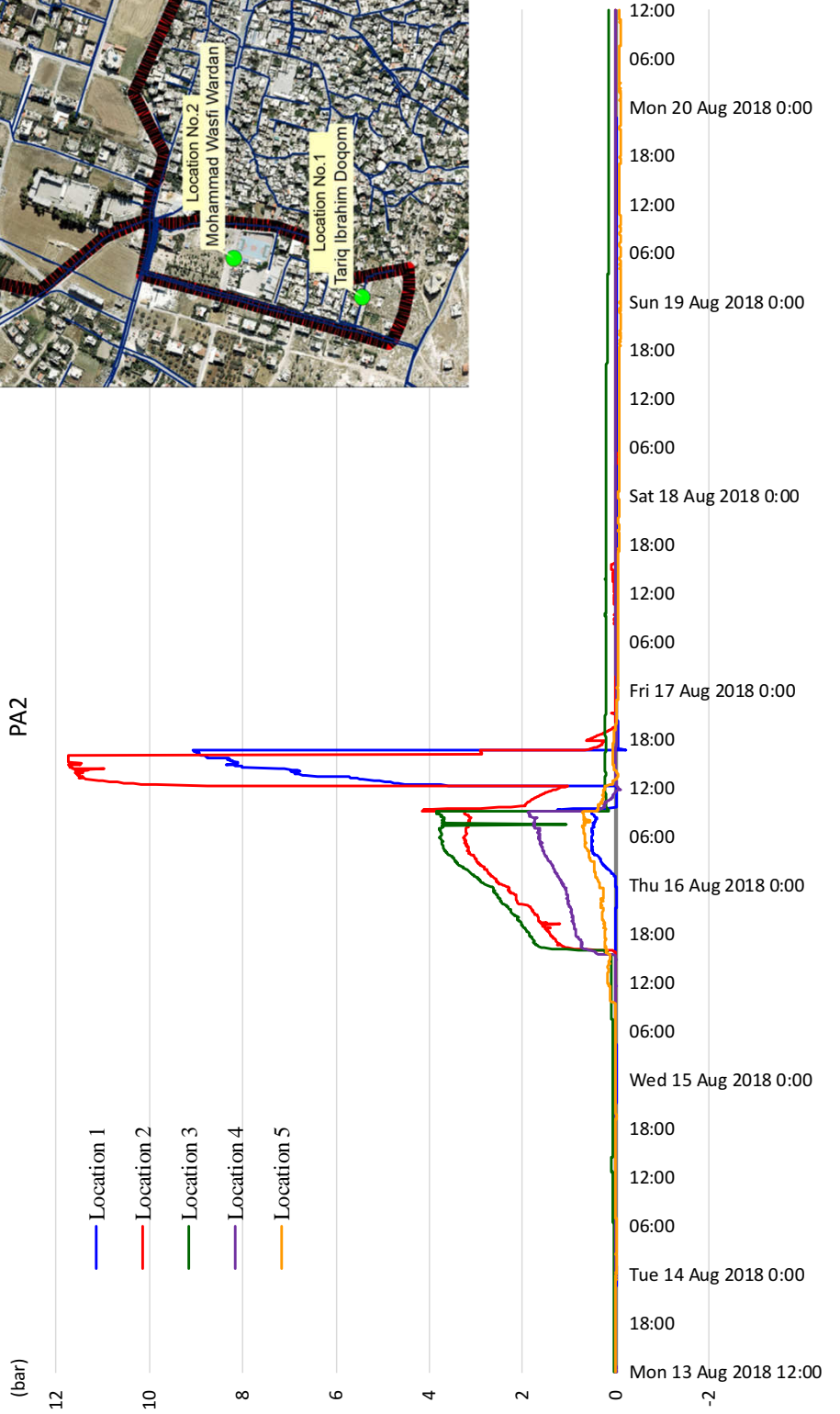
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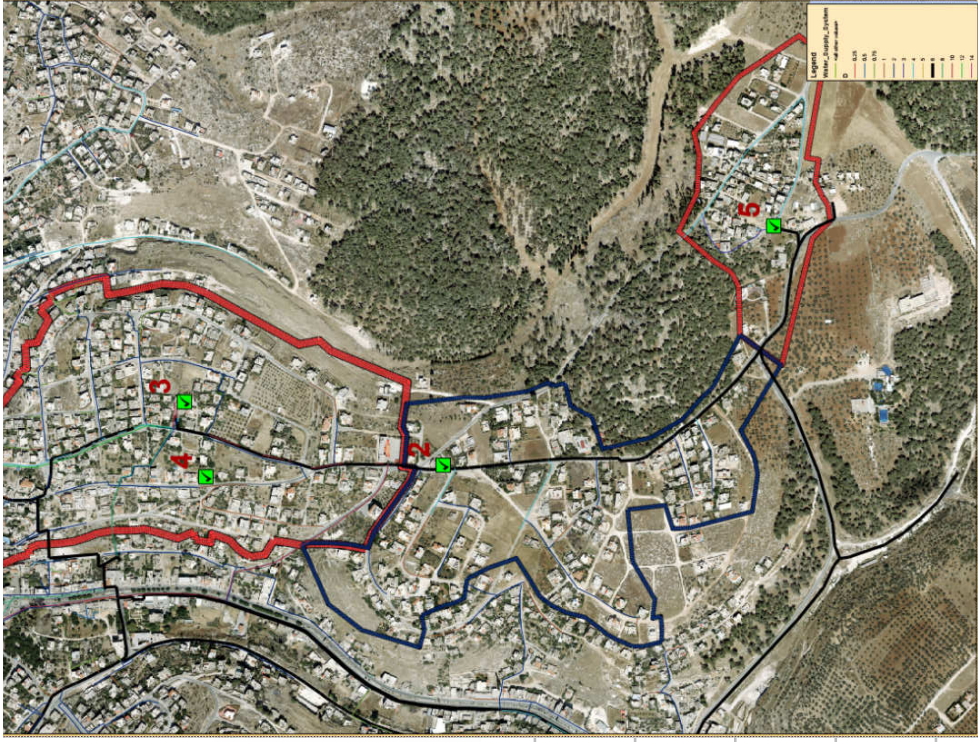


PA2

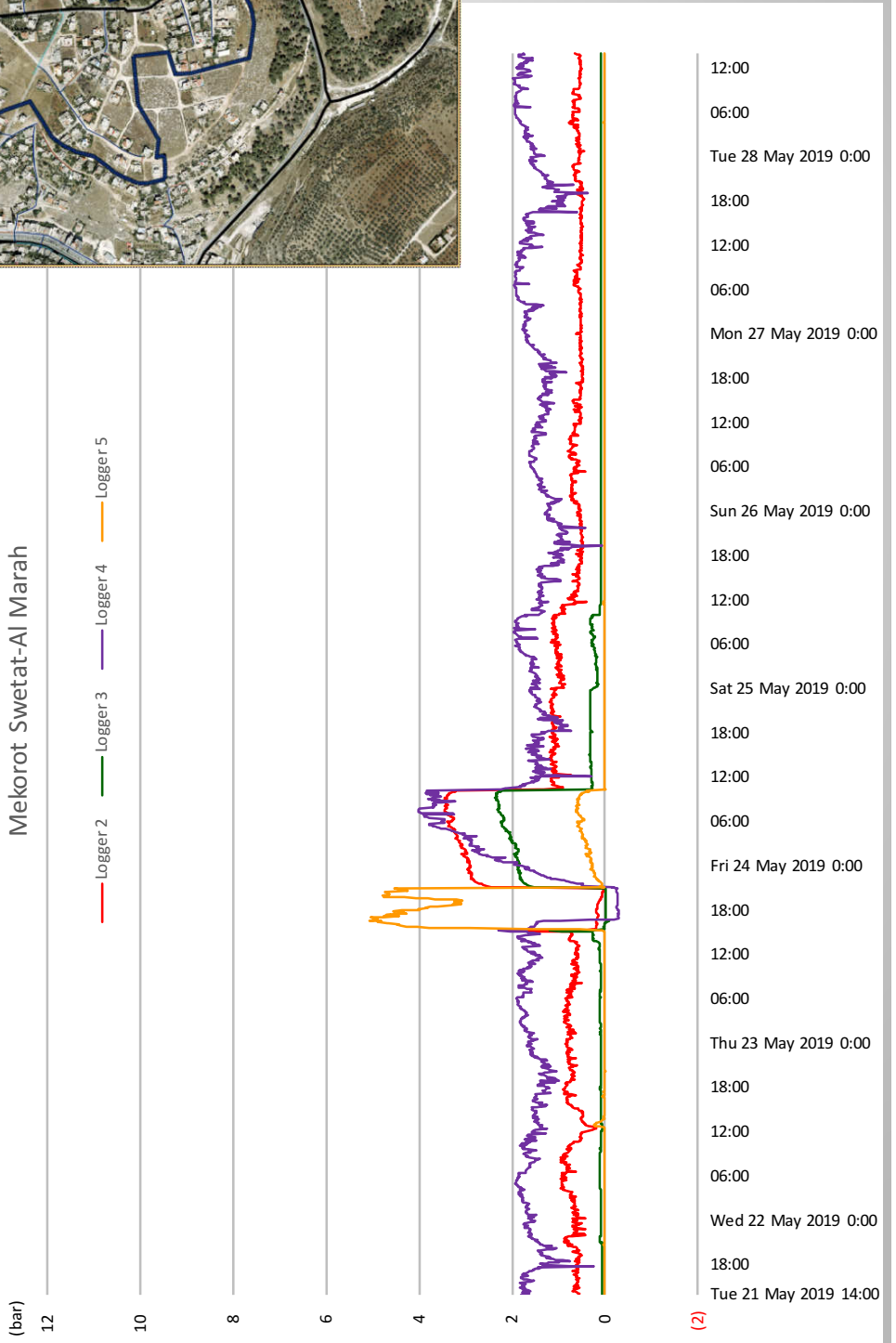
- Location 1
- Location 2
- Location 3
- Location 4
- Location 5



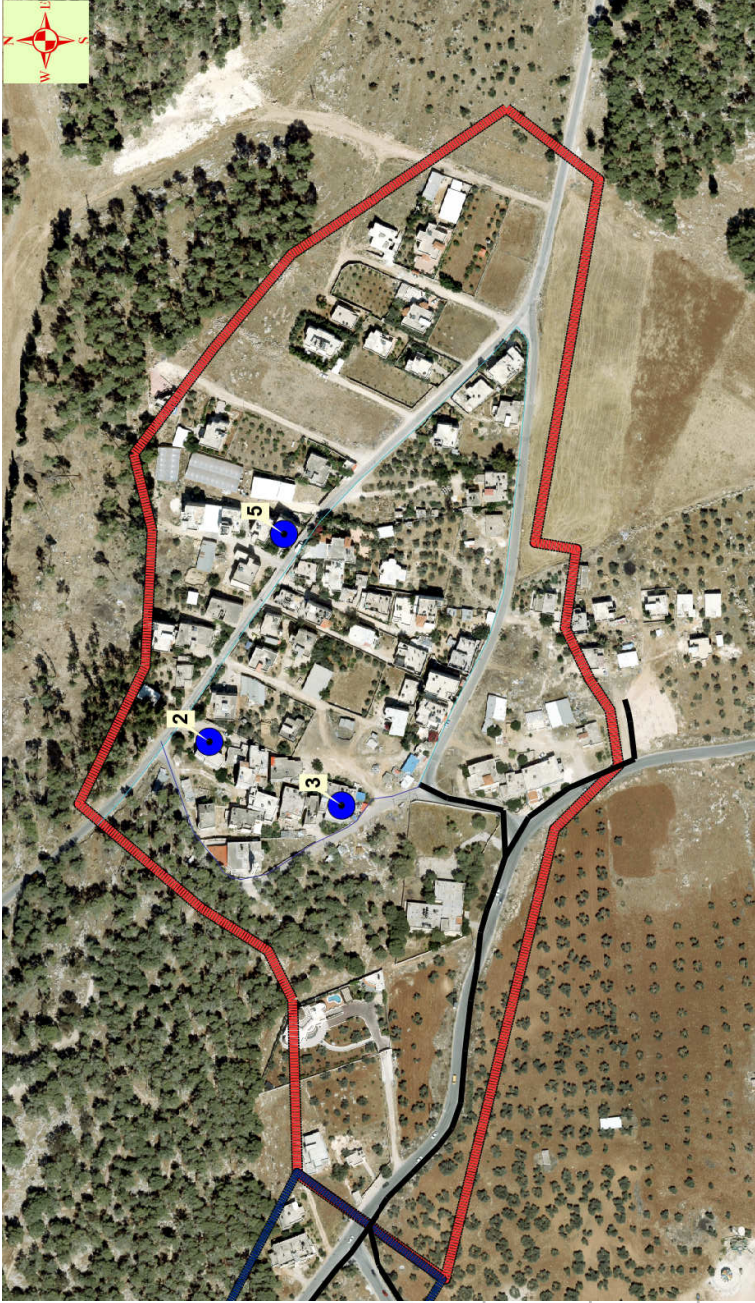
District 2: Measured Water Pressure along 6" Line from WBWD (Swetat) to Al Marah Tank



Mekorot Swetat-Al Marah



District 2: Swetat



(bar)

Swetat

— Logger 2 — Logger 3 — Logger 5

12

10

8

6

4

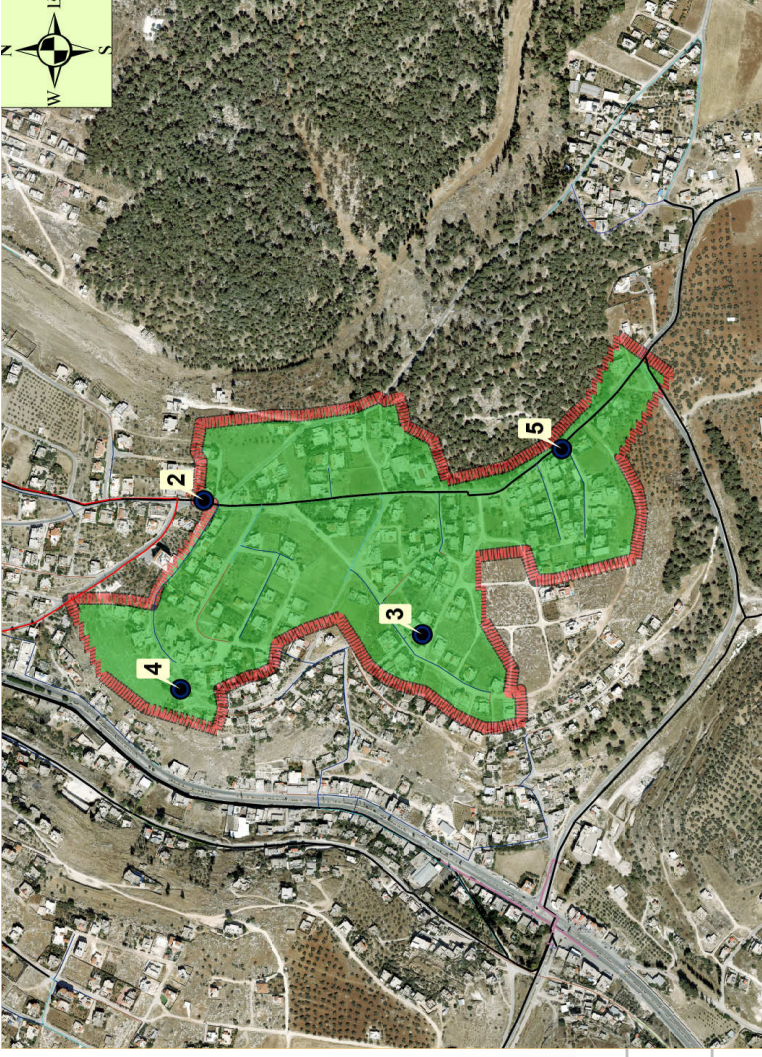
2

0

(2)

06:00
Sun 9 Jun 2019 0:00
18:00
12:00
06:00
Sat 8 Jun 2019 0:00
18:00
12:00
06:00
Fri 7 Jun 2019 0:00
18:00
12:00
06:00
Thu 6 Jun 2019 0:00
18:00
12:00
06:00
Wed 5 Jun 2019 0:00
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Mon 3 Jun 2019 0:00
18:00
Sun 2 Jun 2019 15:00

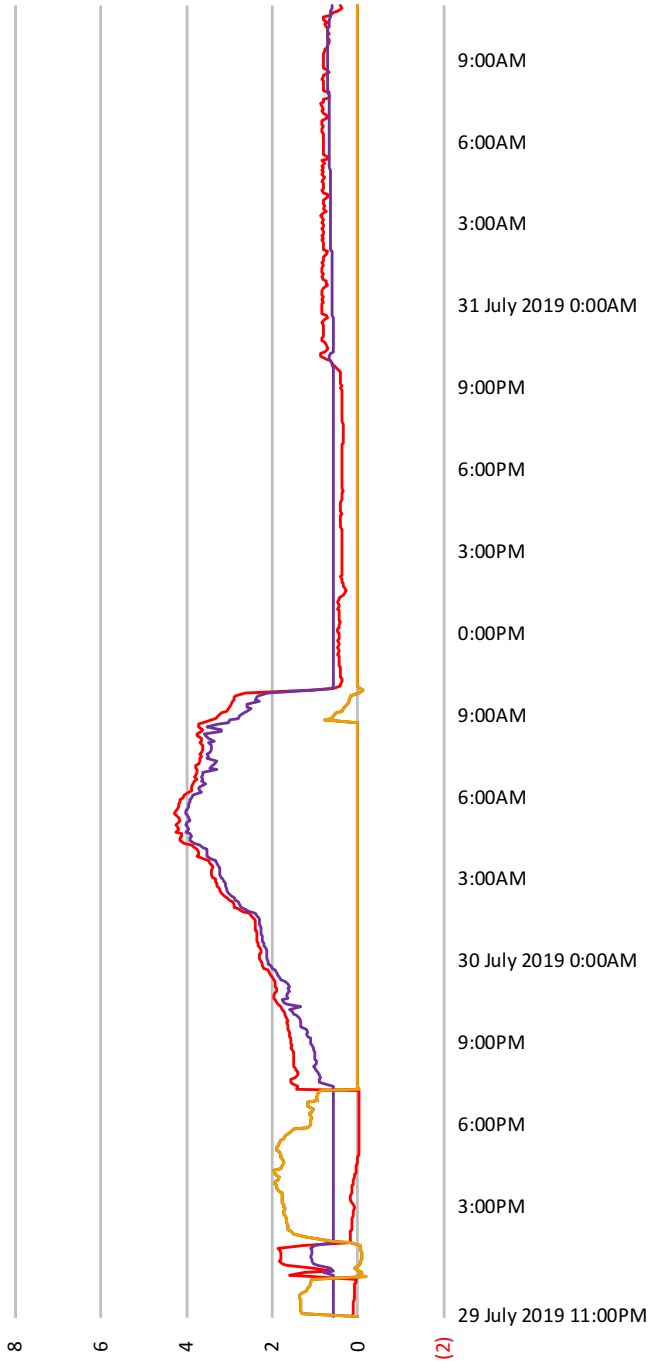
District 2: Marah Al Sa'ad



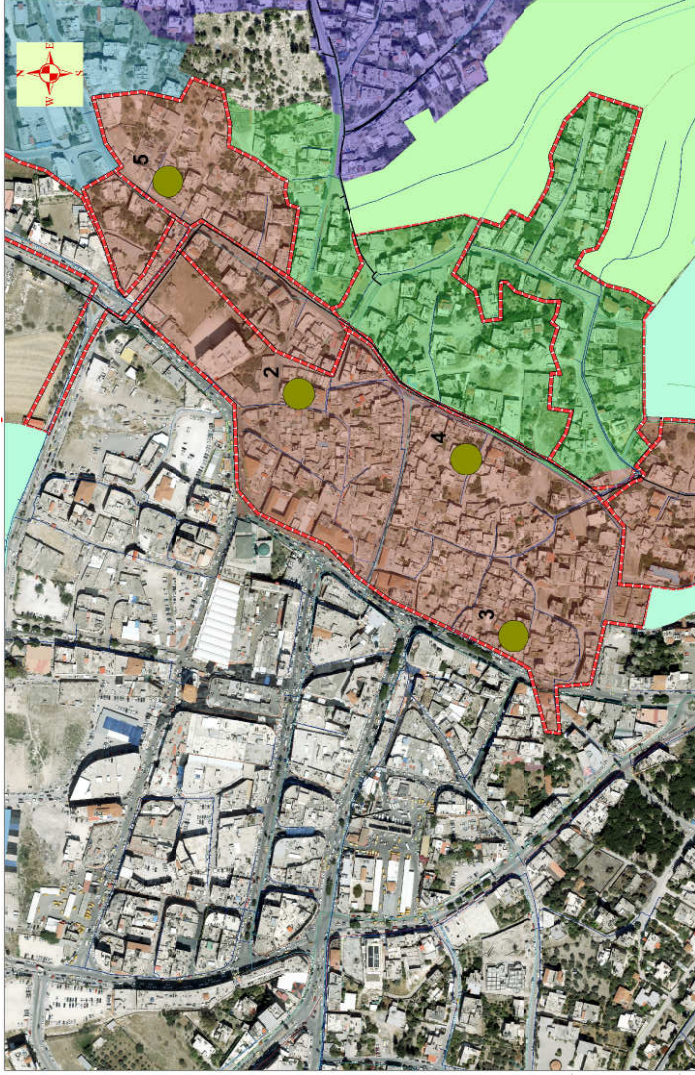
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Marah Al Sa'ad

— Logger 2 — Logger 3 — Logger 4 — Logger 5



District 2: Sibat & Old City



Sibat & Old City



(bar)

12

10

8

6

4

2

0

-2

11 June 2019 3:00PM

12 June 2019 0:00AM

6:00 AM

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13 June 2019 0:00AM

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14 June 2019 0:00AM

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17 June 2019 0:00AM

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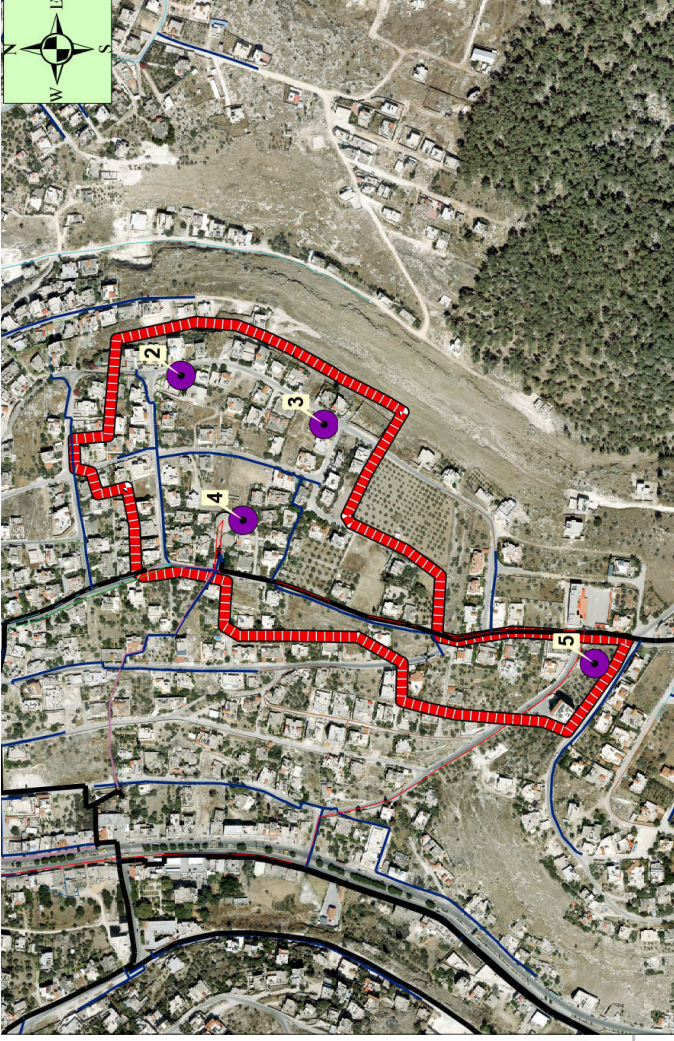
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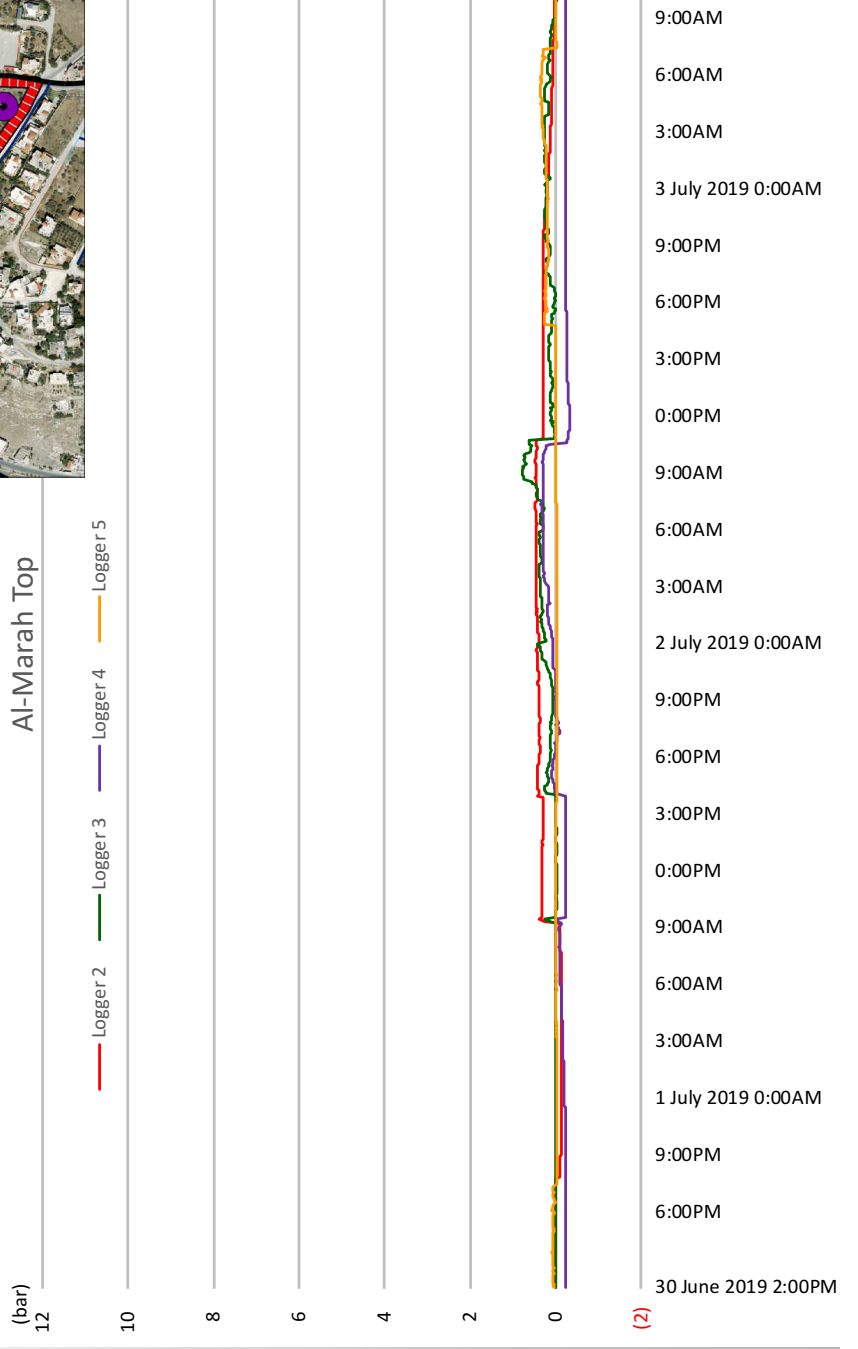
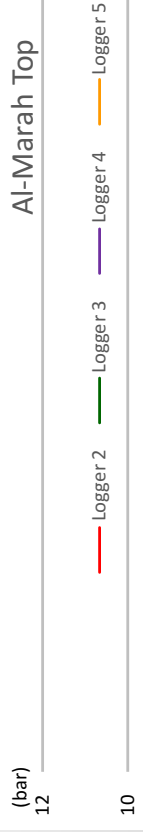
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0:00PM

District 2: Al-Marah (Top)



Al-Marah Top



(2)

District 2: Al-Marrah (Down)



Al-Marrah Down

(bar)

12

10

8

6

4

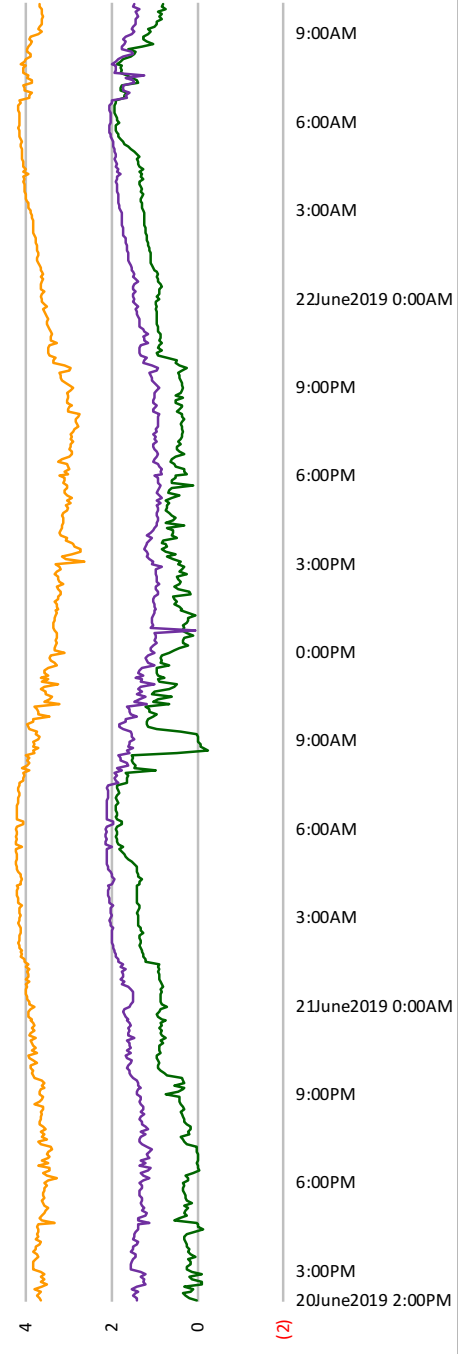
2

0

— Logger 3

— Logger 4

— Logger 5

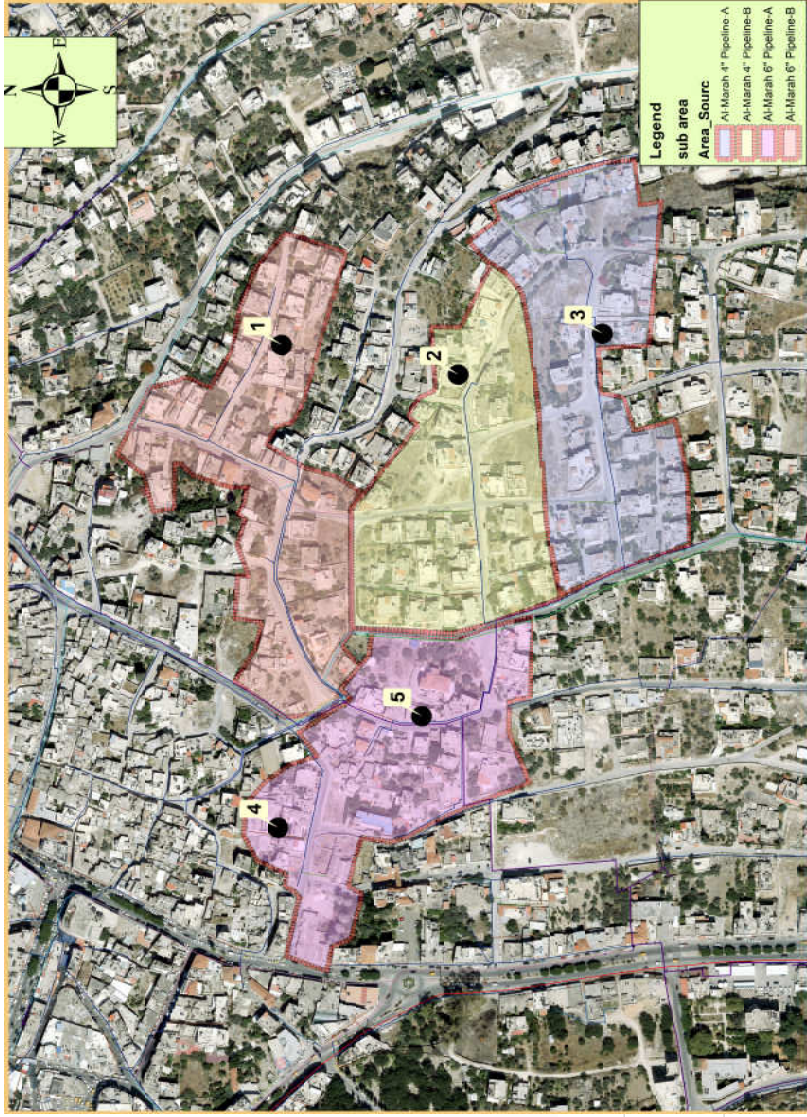


(2)

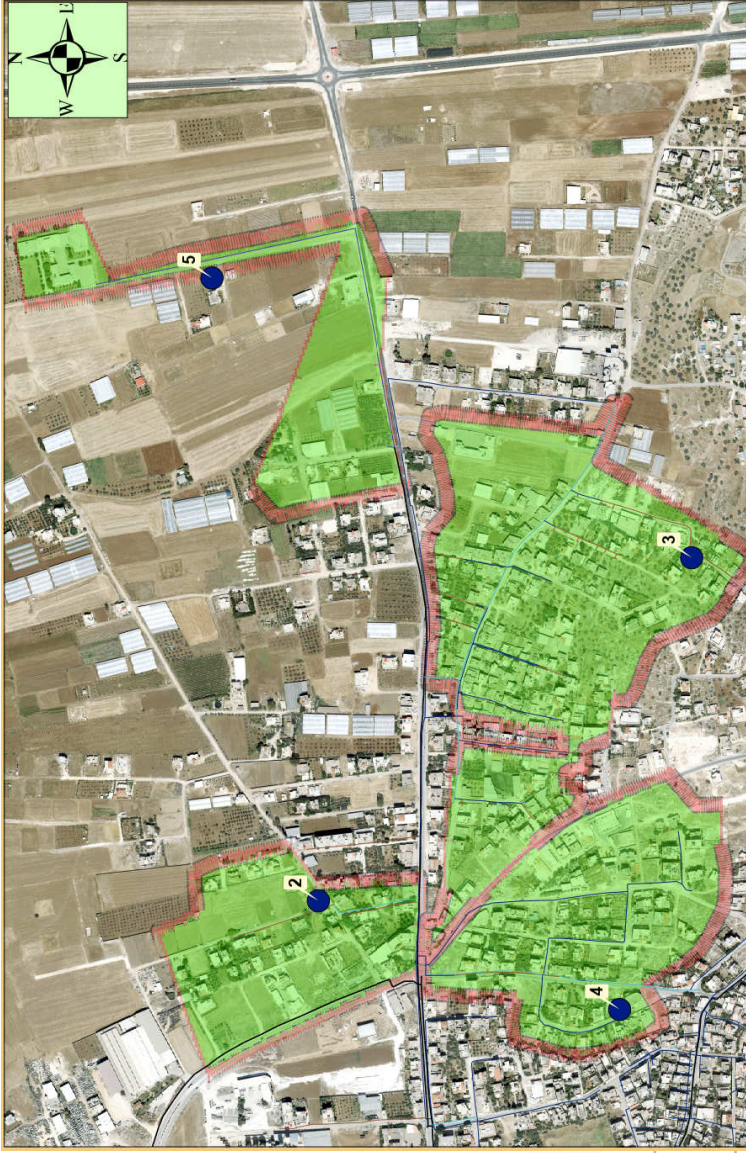
District 2: Al-Marrah 6" & 4" Area

(Bar) Al Marrah 6 inch area (before Anter) & 4 inch area

- Logger 1 : 6" — Logger 2 : 4" — Logger 3 : 4"
- Logger 4 : 6" — Logger 5 : 6"



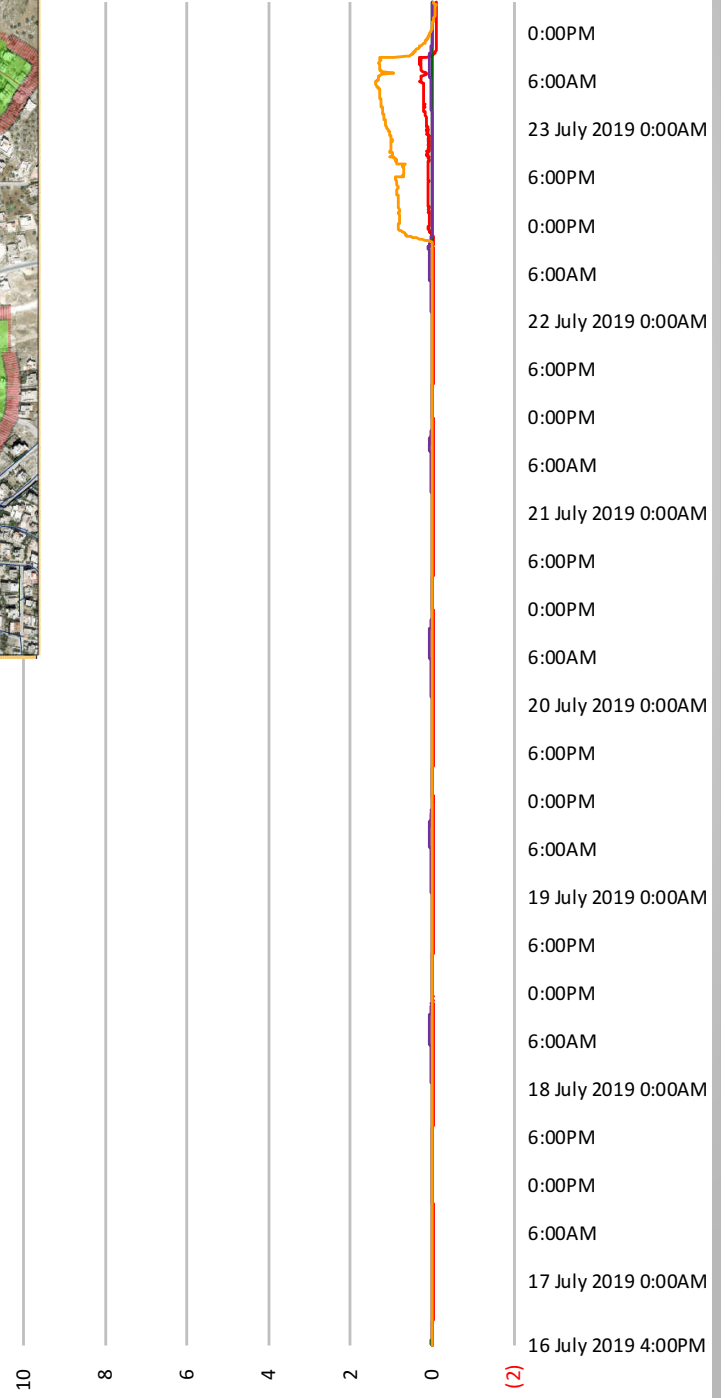
District 2: Almanieh



Almanieh

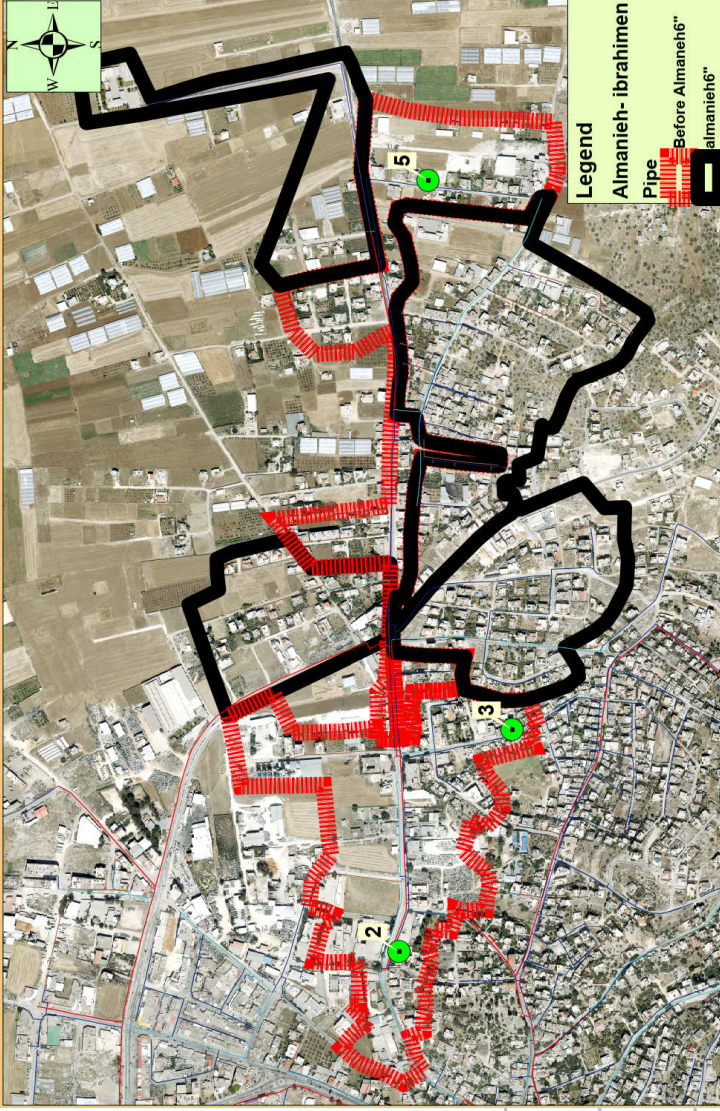
(bar)
12
10
8
6
4
2
0

— Logger 2 — Logger 3 — Logger 4 — Logger 5



District 2: Almanieh-Ibrahimien

Water Pressure Measurement-Before Al-Almania 6in

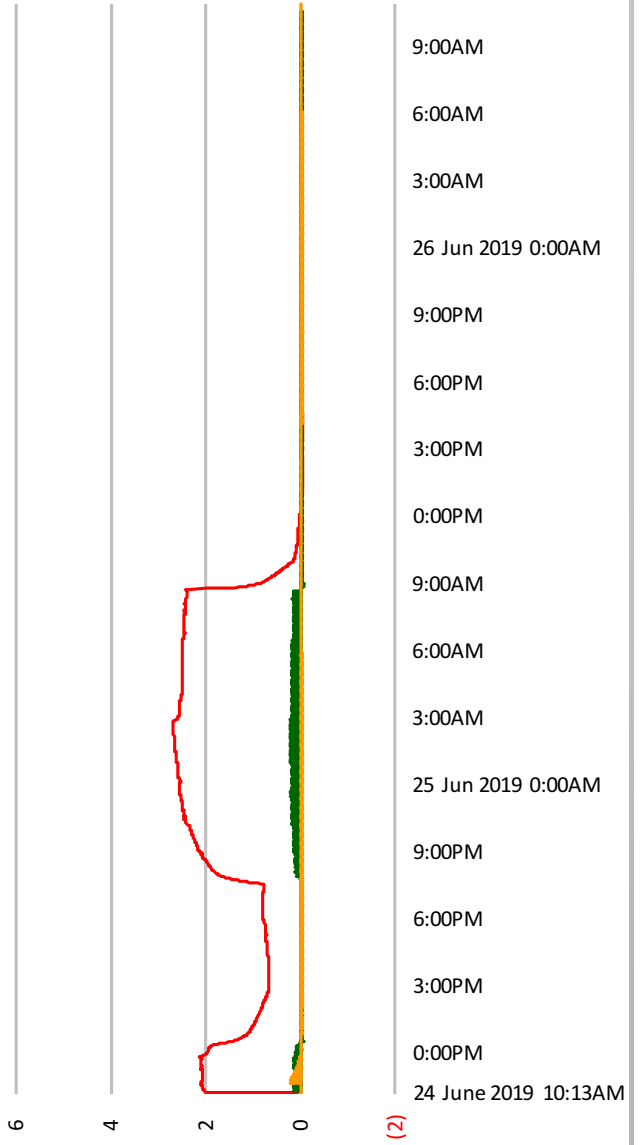


Almanieh-Ibrahimien

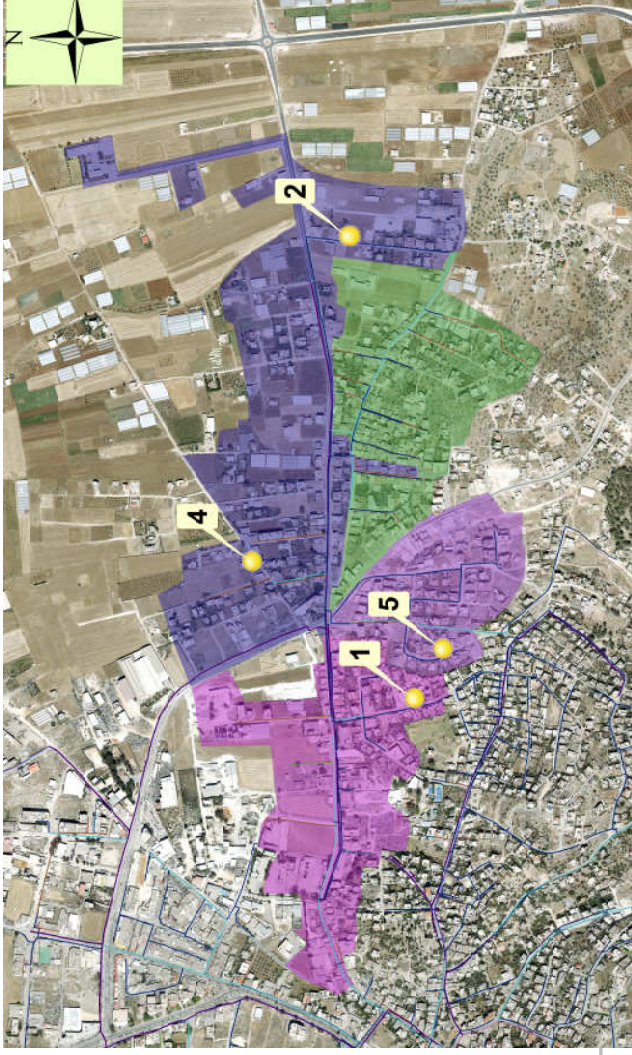
(bar)

12
10
8
6
4
2
0

— Logger 2 — Logger 3 — Logger 5



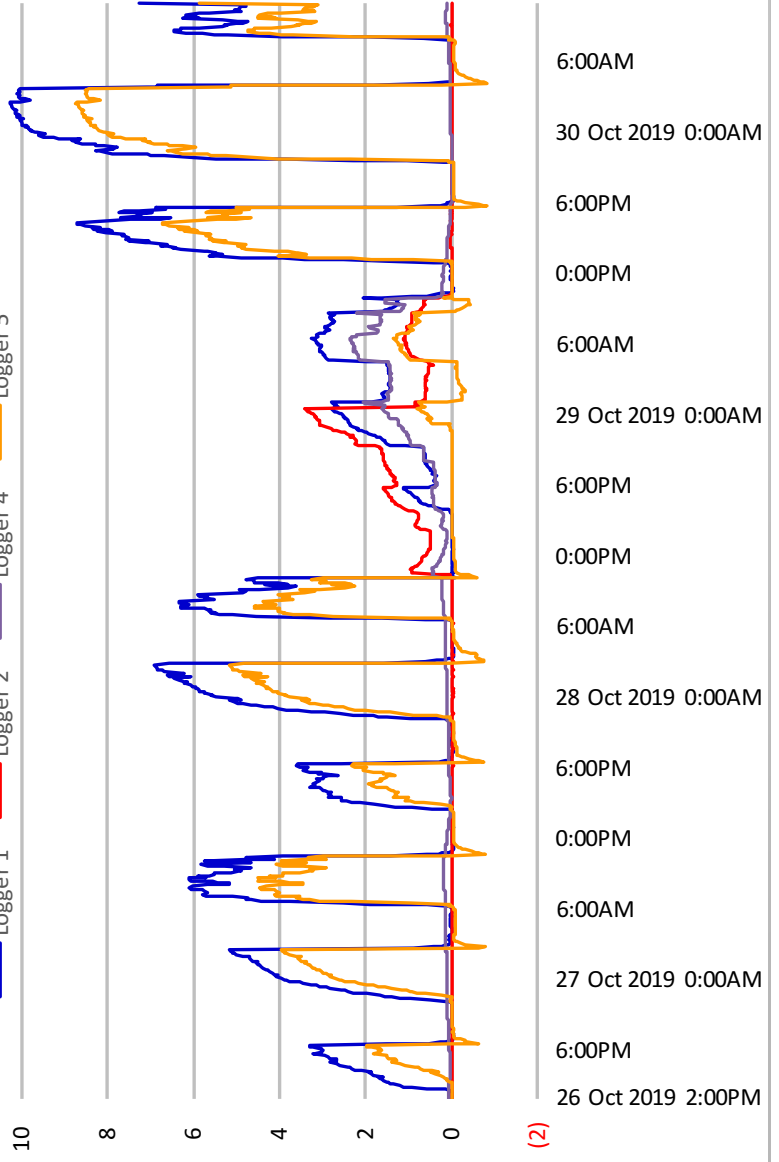
District 2: Almanieh-Ibrahimien (after utilizing Abu Hatab well)



Almanieh and Ibrahimien

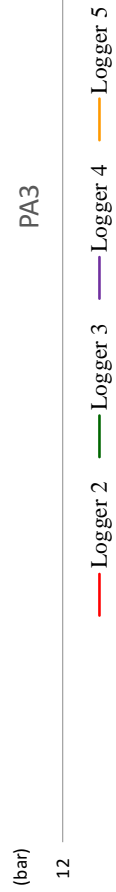
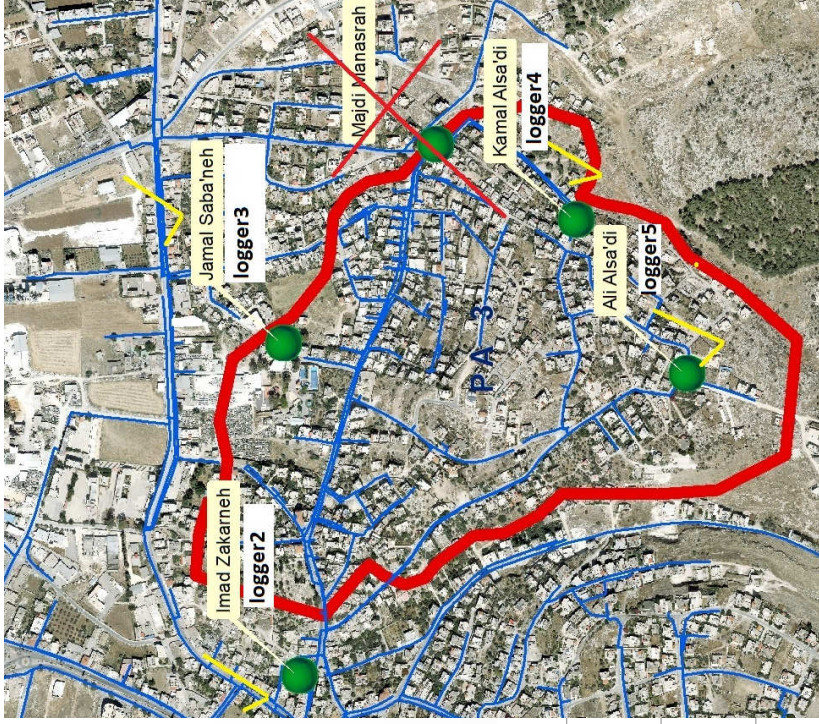
(bar)
12

10 — Logger 1 — Logger 2 — Logger 4 — Logger 5



(2)

District 2: PA3



District 3: Al Sekeh St. (AA-2)



Al Sekeh St. (AA-2)



(bar)

12

10

8

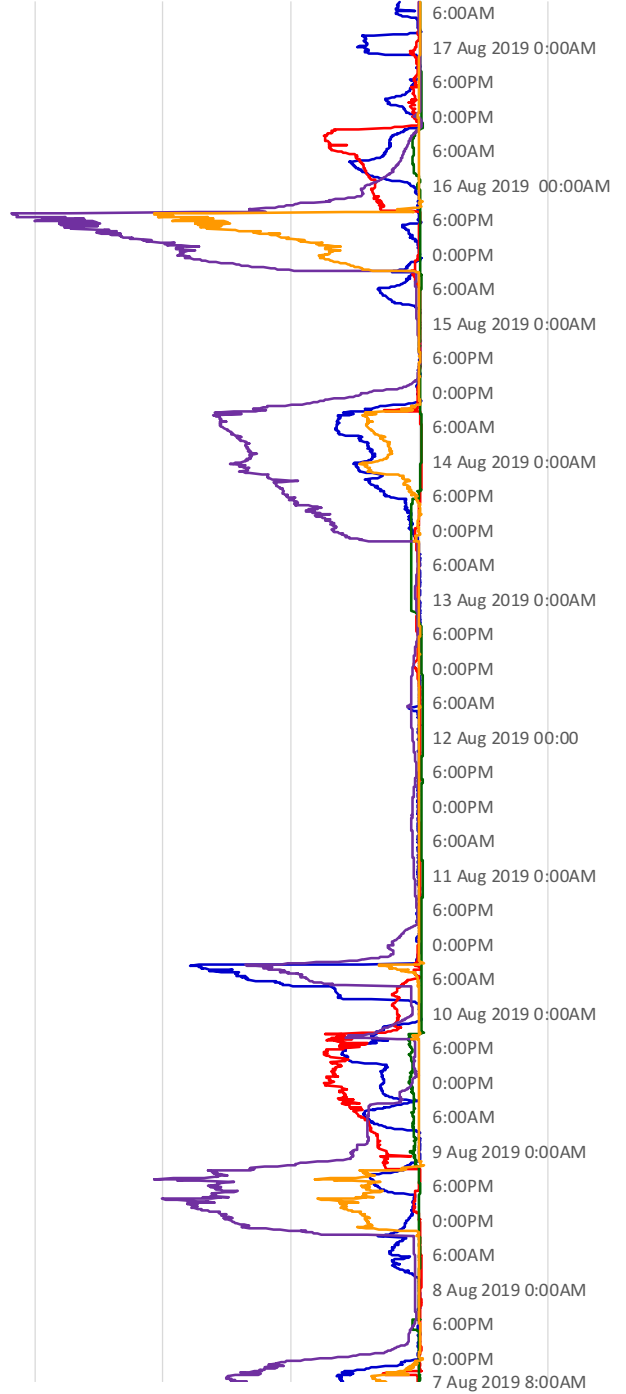
6

4

2

0

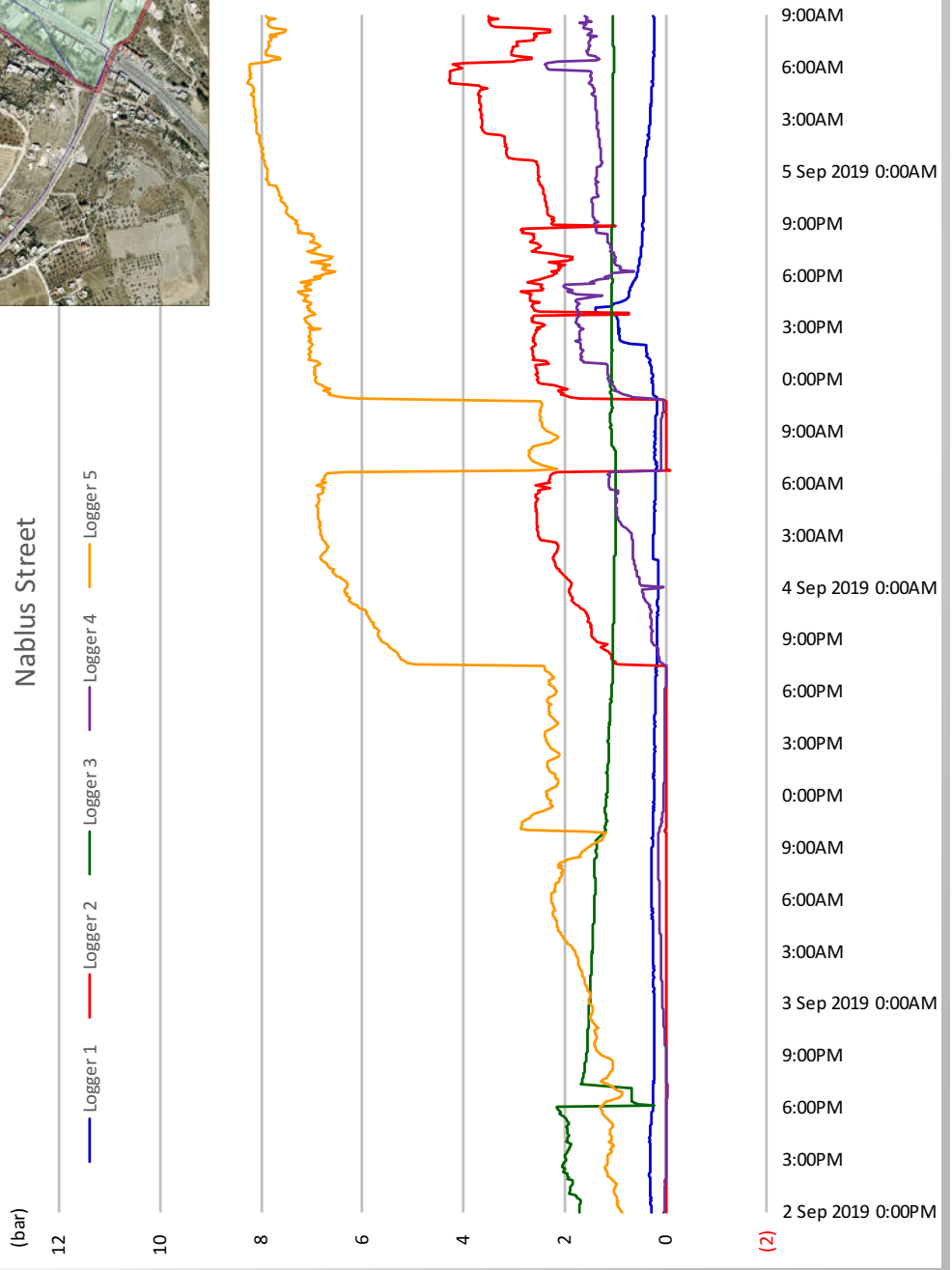
-2



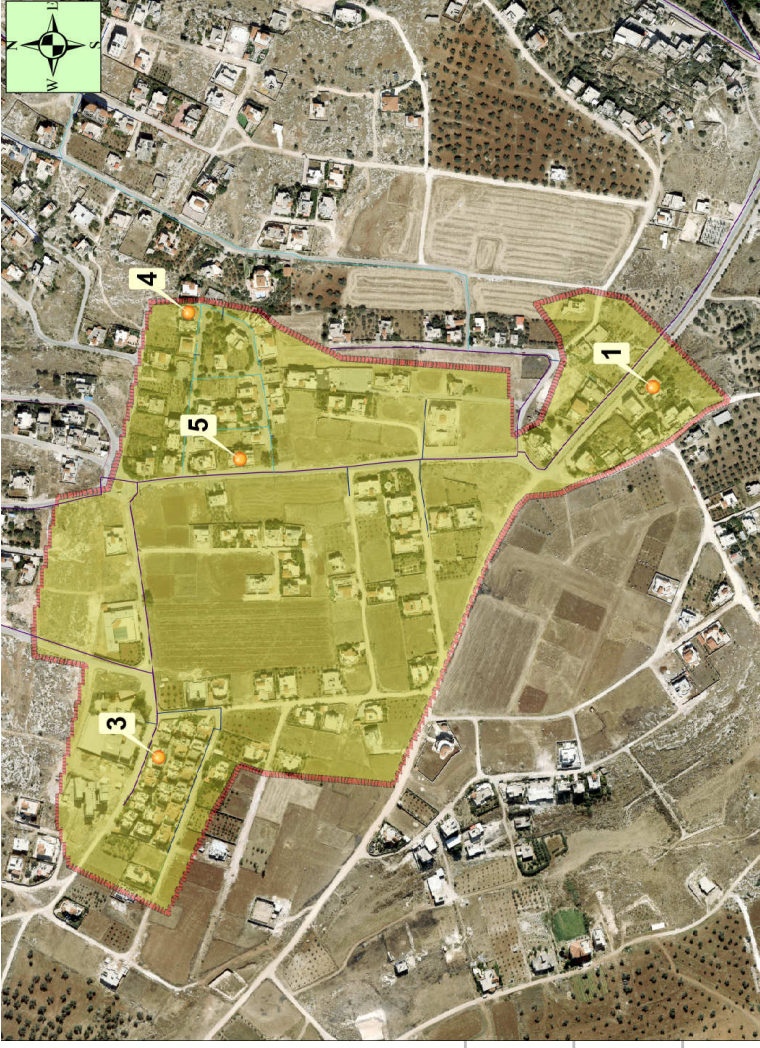
District 3: Nablus St. (AA-7)



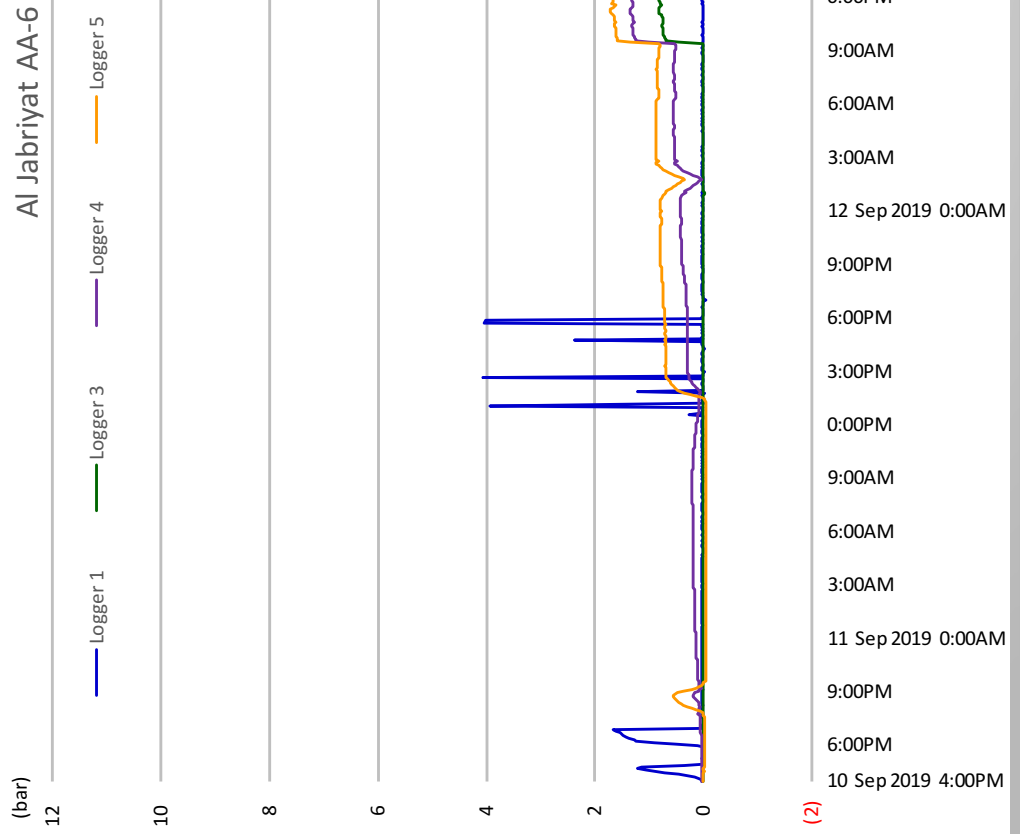
(bar) Nabulus Street
 — Logger 1 — Logger 2 — Logger 3 — Logger 4 — Logger 5



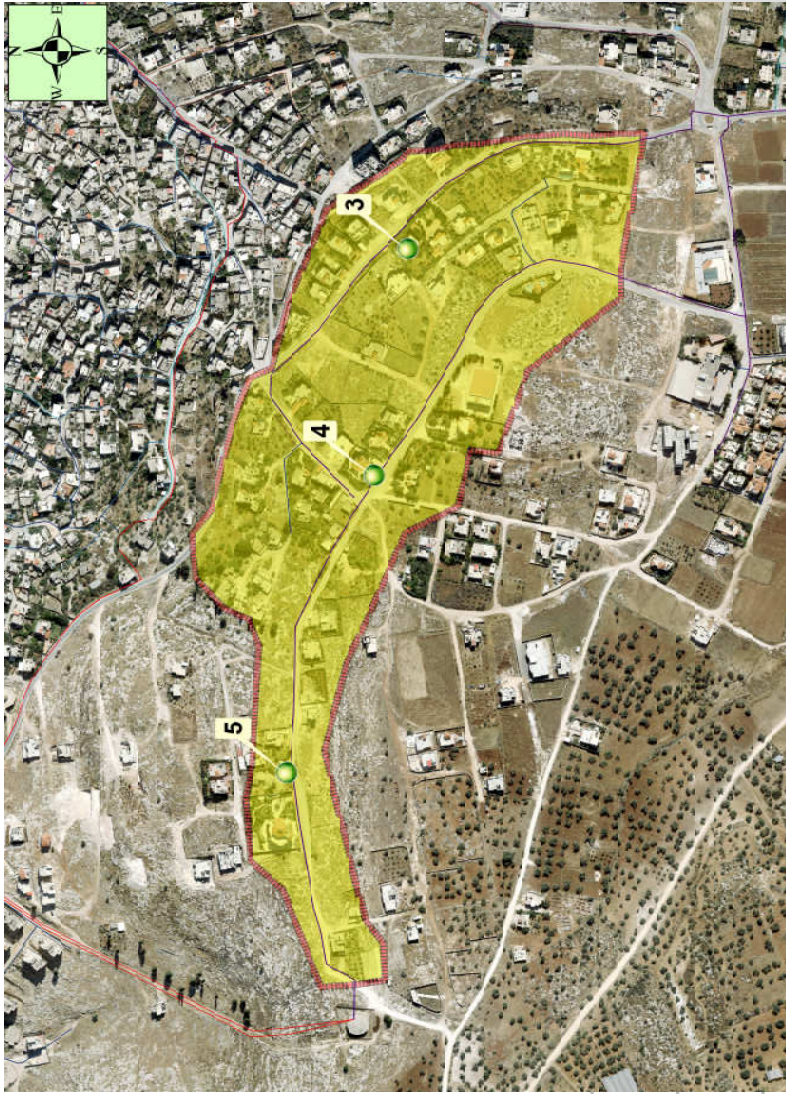
District 3: Al Jabriyat (AA-6)



Al Jabriyat AA-6



District 3: Jarrar (J-1)



Jarrar (J-1)



(bar)

12

10

8

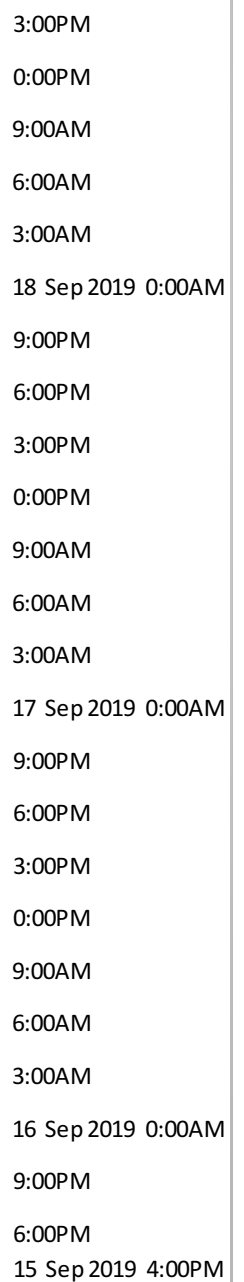
6

4

2

0

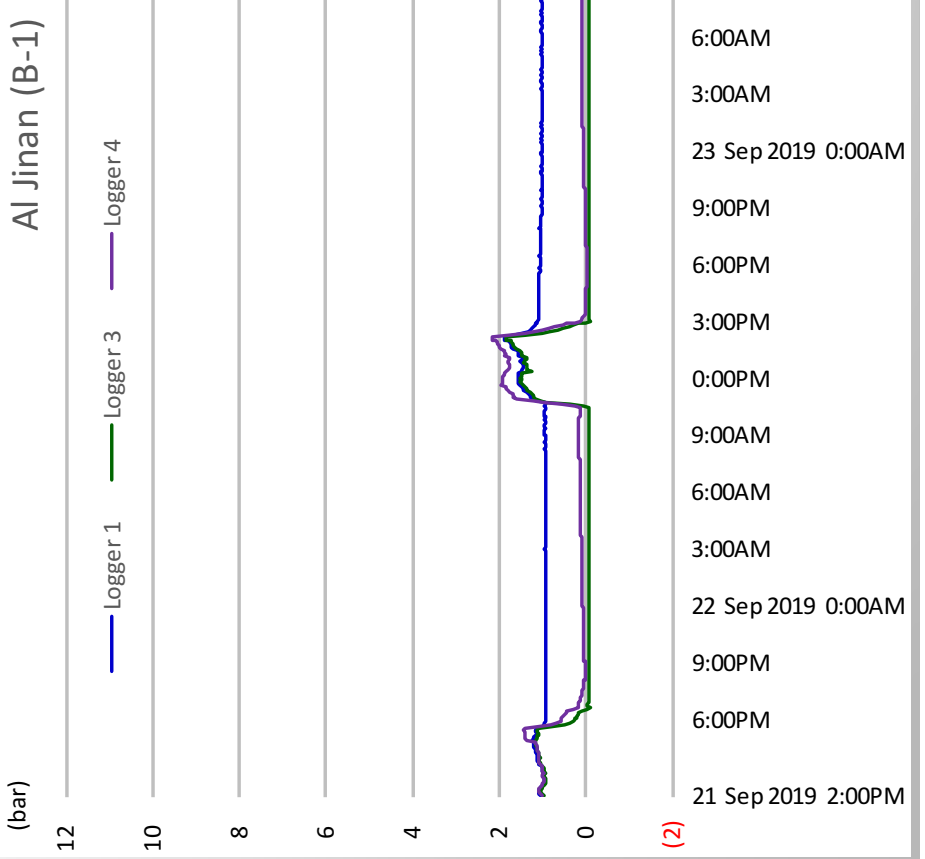
(2)



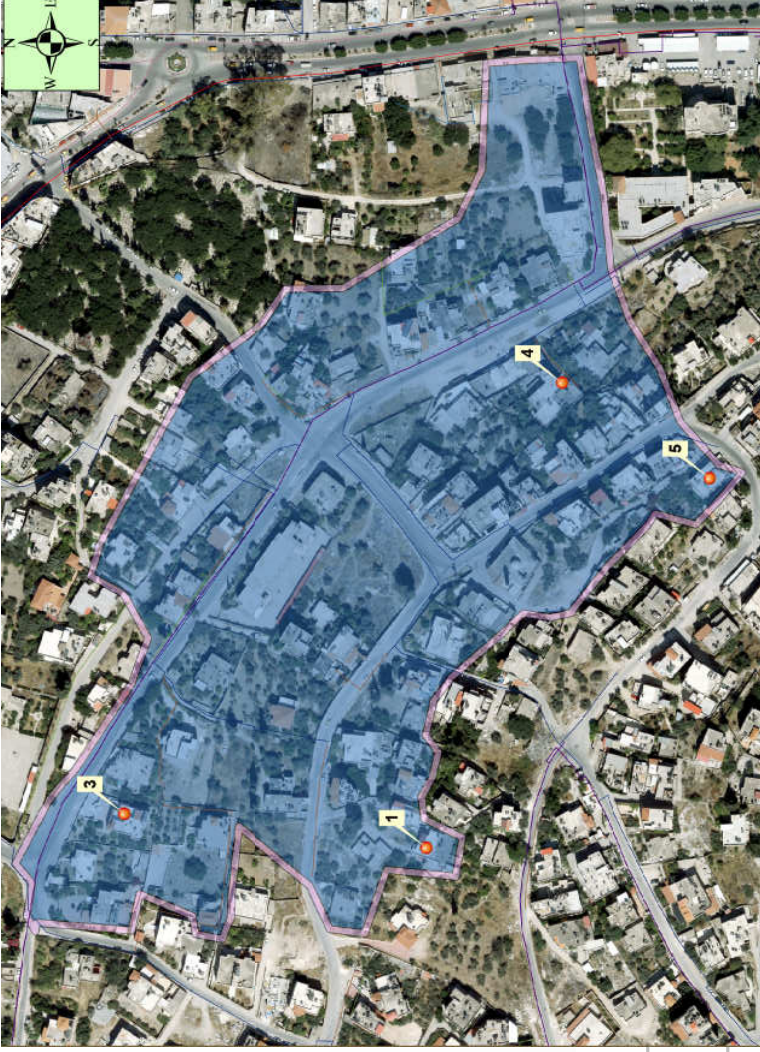
District 3: Al-Jinan (B-1)



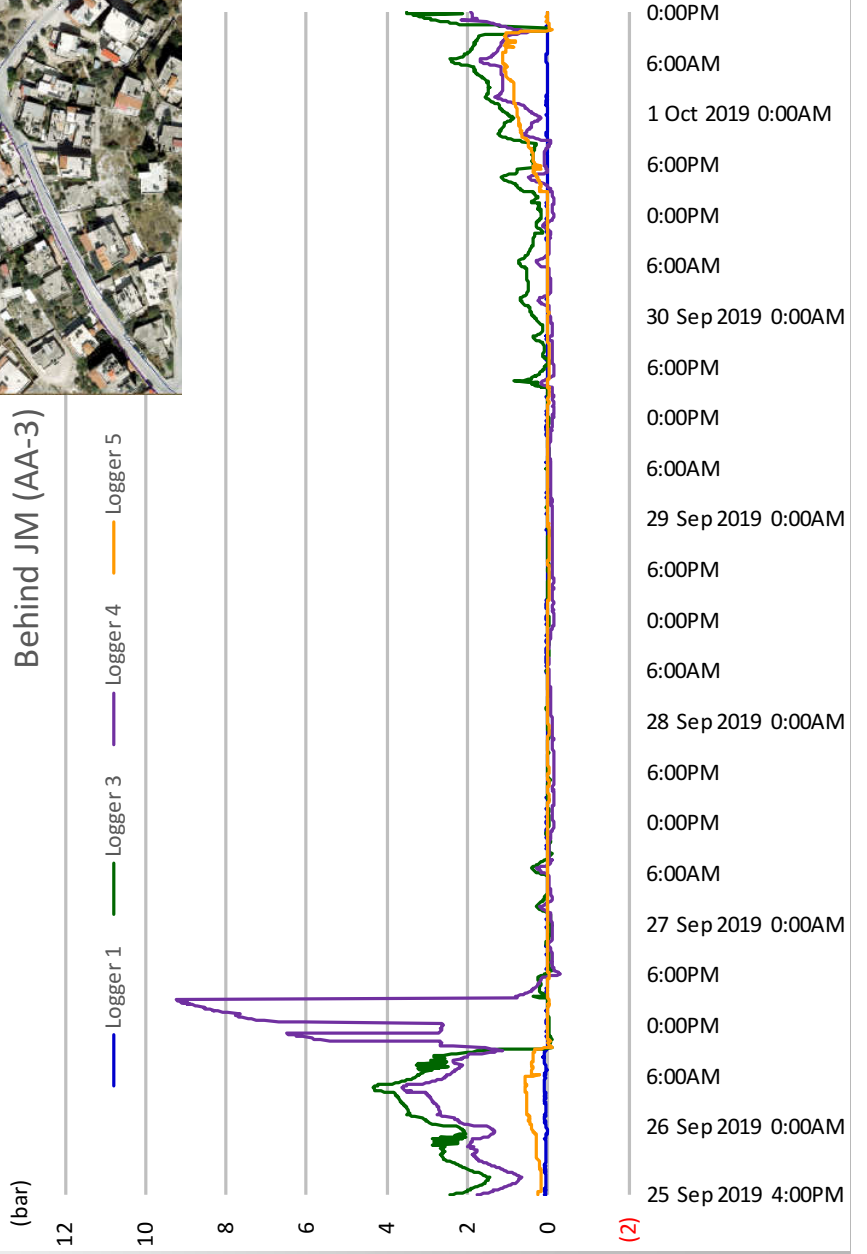
Al Jinan (B-1)



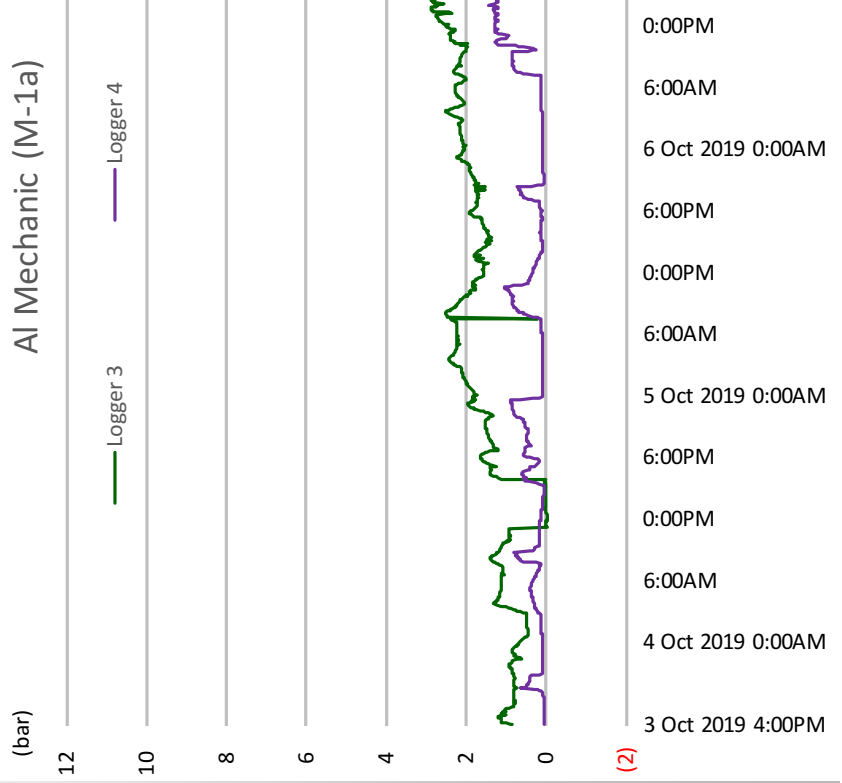
District 3: Behind JM (AA-3)



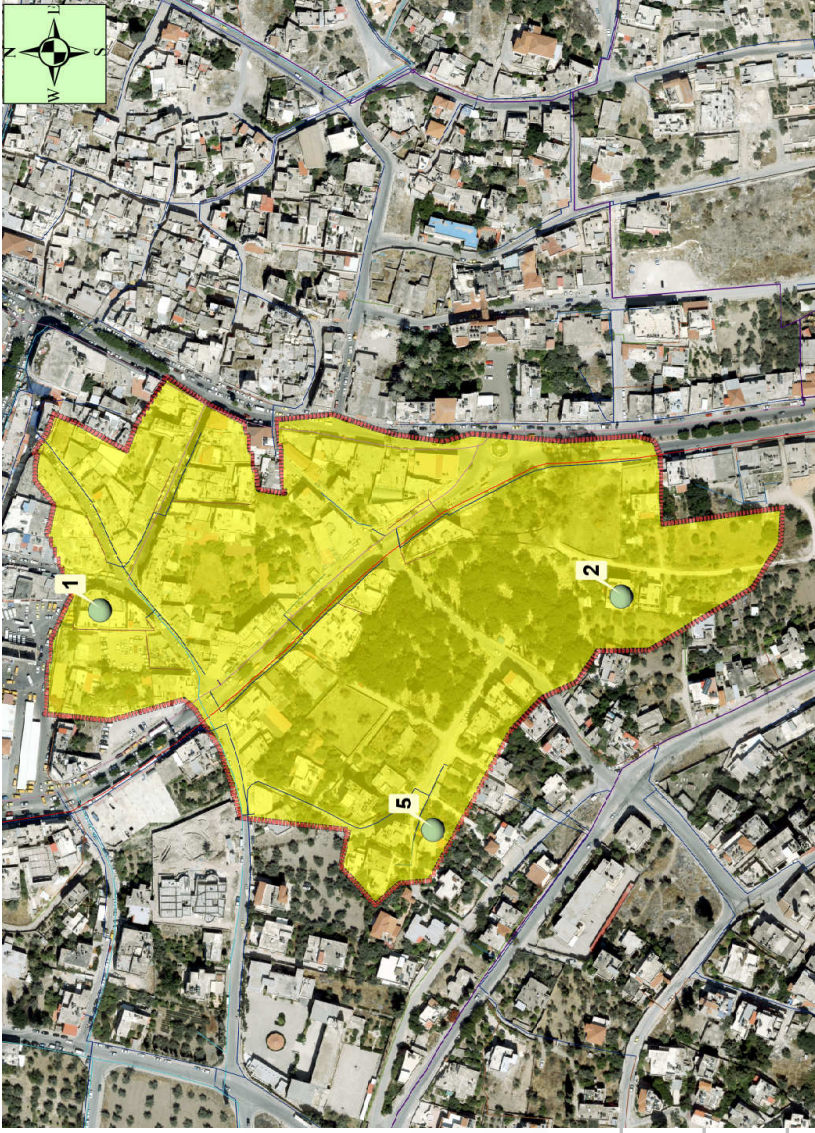
Behind JM (AA-3)



District 3: Al-Mechanic (M-1-a)



District 3: Al-Nabatat (M-1-b)



Al Nabatat (M-1b)

(bar)

12

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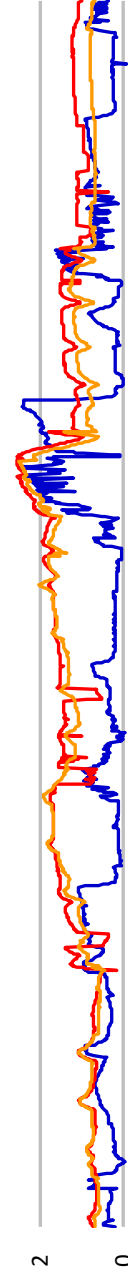
6

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2

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— Logger 1 — Logger 2 — Logger 5



(2)

3 Oct 2019 4:00PM

4 Oct 2019 0:00AM

6:00AM

0:00PM

6:00PM

5 Oct 2019 0:00AM

6:00AM

0:00PM

6 Oct 2019 0:00AM

6:00PM

6:00AM

0:00PM

7 Oct 2019 0:00AM

6:00PM

0:00PM

6:00AM

8 Oct 2019 0:00AM

6:00PM

6:00AM

District 3: Abu Baker St (M-2-b)



Abu Baker Street (M-2b)



(bar)

12

10

8

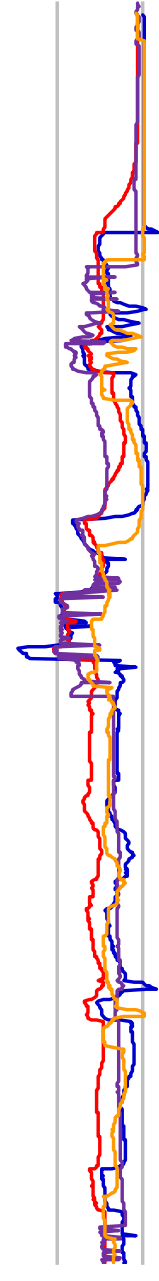
6

4

2

0

(2)



6:00AM

14 Oct 2019 0:00AM

6:00PM

0:00PM

6:00AM

13 Oct 2019 0:00AM

6:00PM

0:00PM

6:00AM

12 Oct 2019 0:00AM

6:00PM

0:00PM

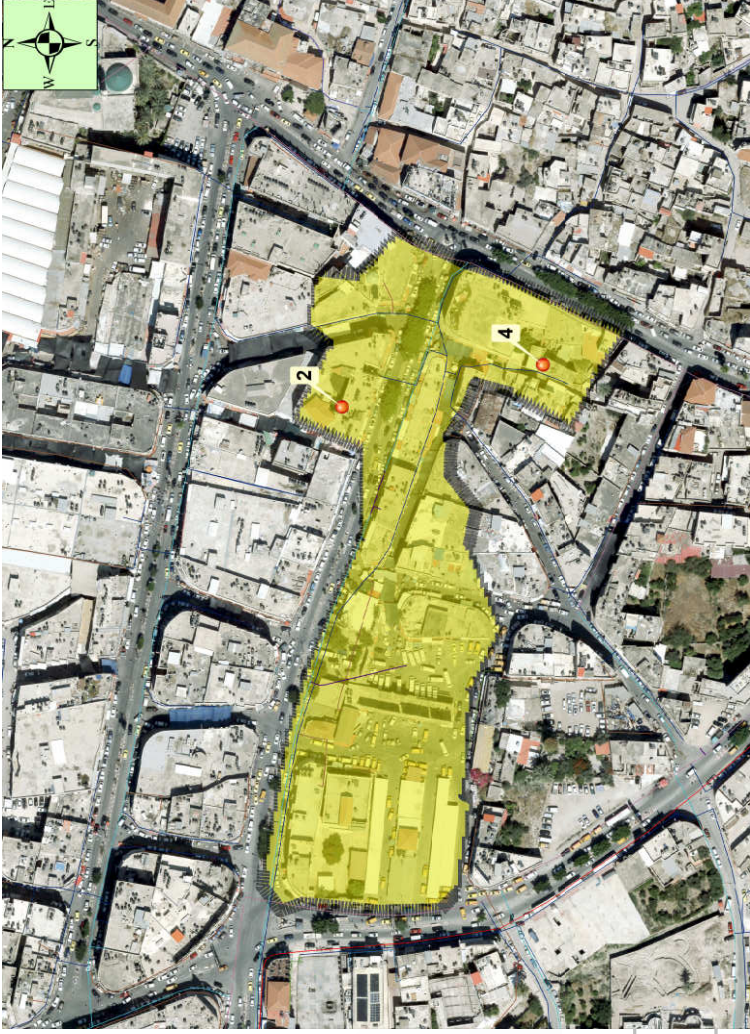
6:00AM

11 Oct 2019 0:00AM

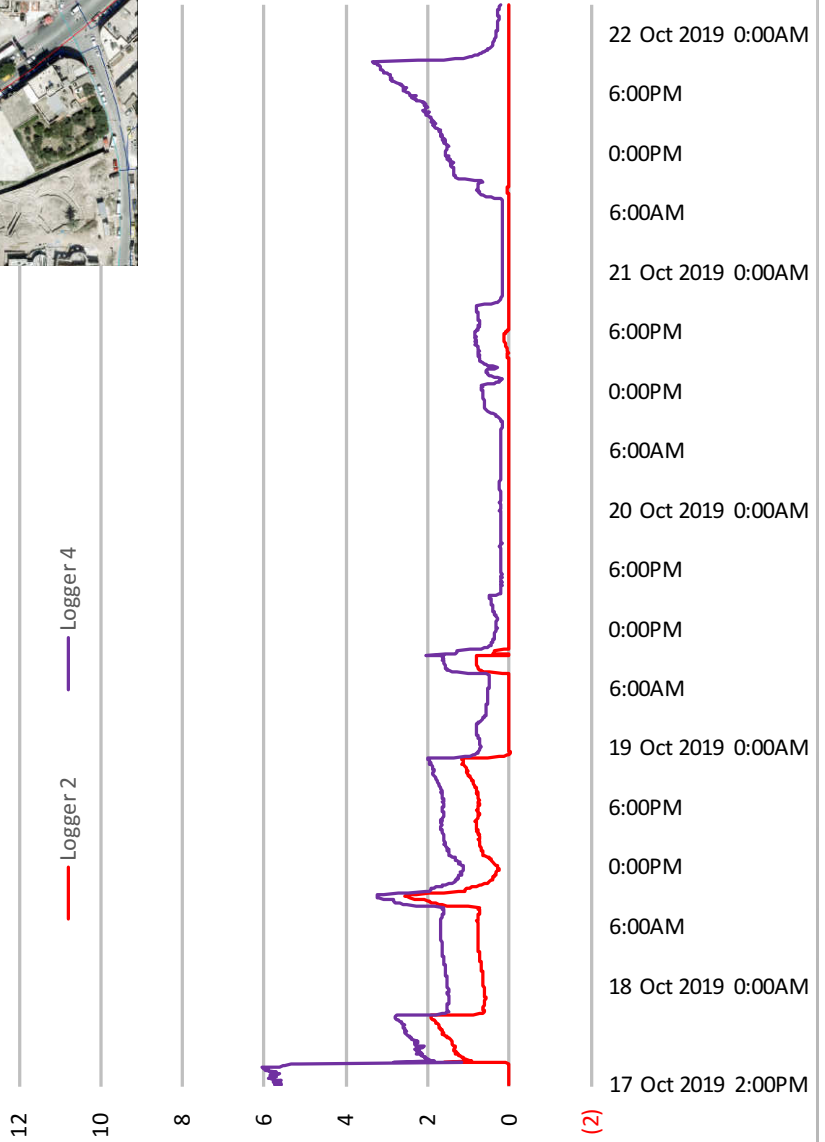
6:00AM

10 Oct 2019 2:00PM

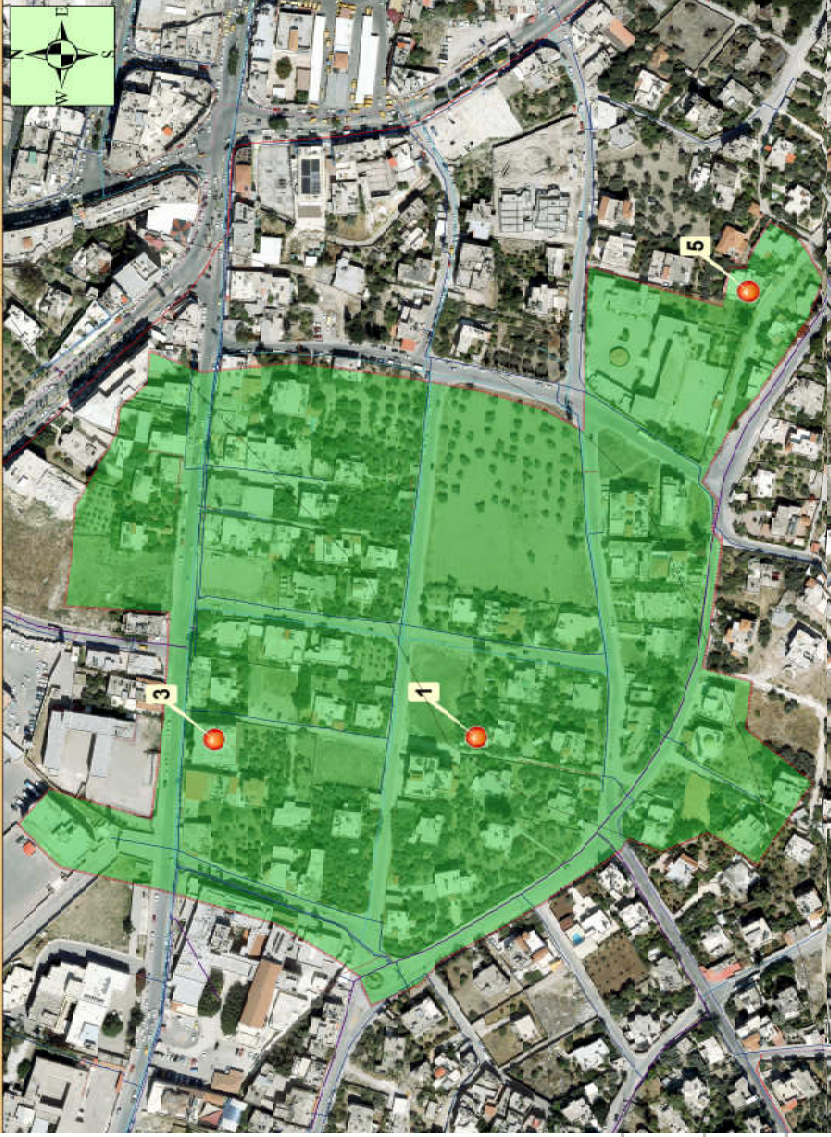
District 3: Al Bared St (M-2-a)



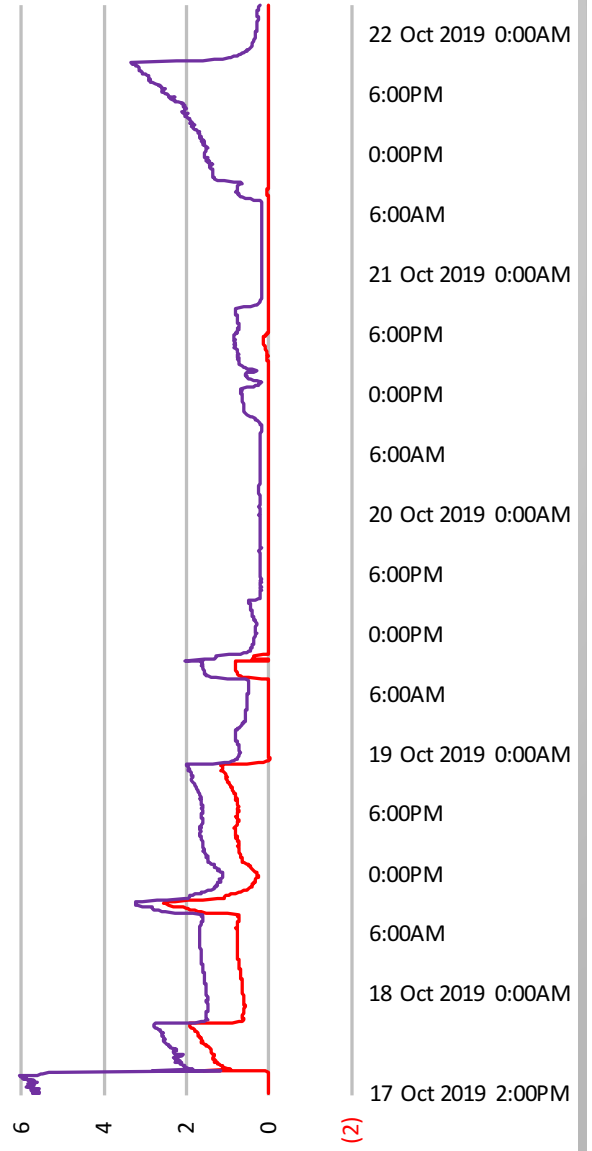
(bar) Al Bared St (M-2a)



District 3: Al Bared St (M-2-a)



(bar) Al Bared St (M-2a)



(2)



DISTRICT SERVICE IMPROVEMENT PLAN AS OF 31ST OCTOBER 2019

3. DISTRIBUTION ZONING & SCHEDULE

المساهمين

بلدية جنين

عبدالهادي محمد حمران
رمزي جعفر
مطيع جبالي
جهاد نظمي علاونة
سامح سويطات
امجد سعدي

امين نصري
عبدالناصر احمد
محمد سلامة
محمود أحمد
فيصل ايوب

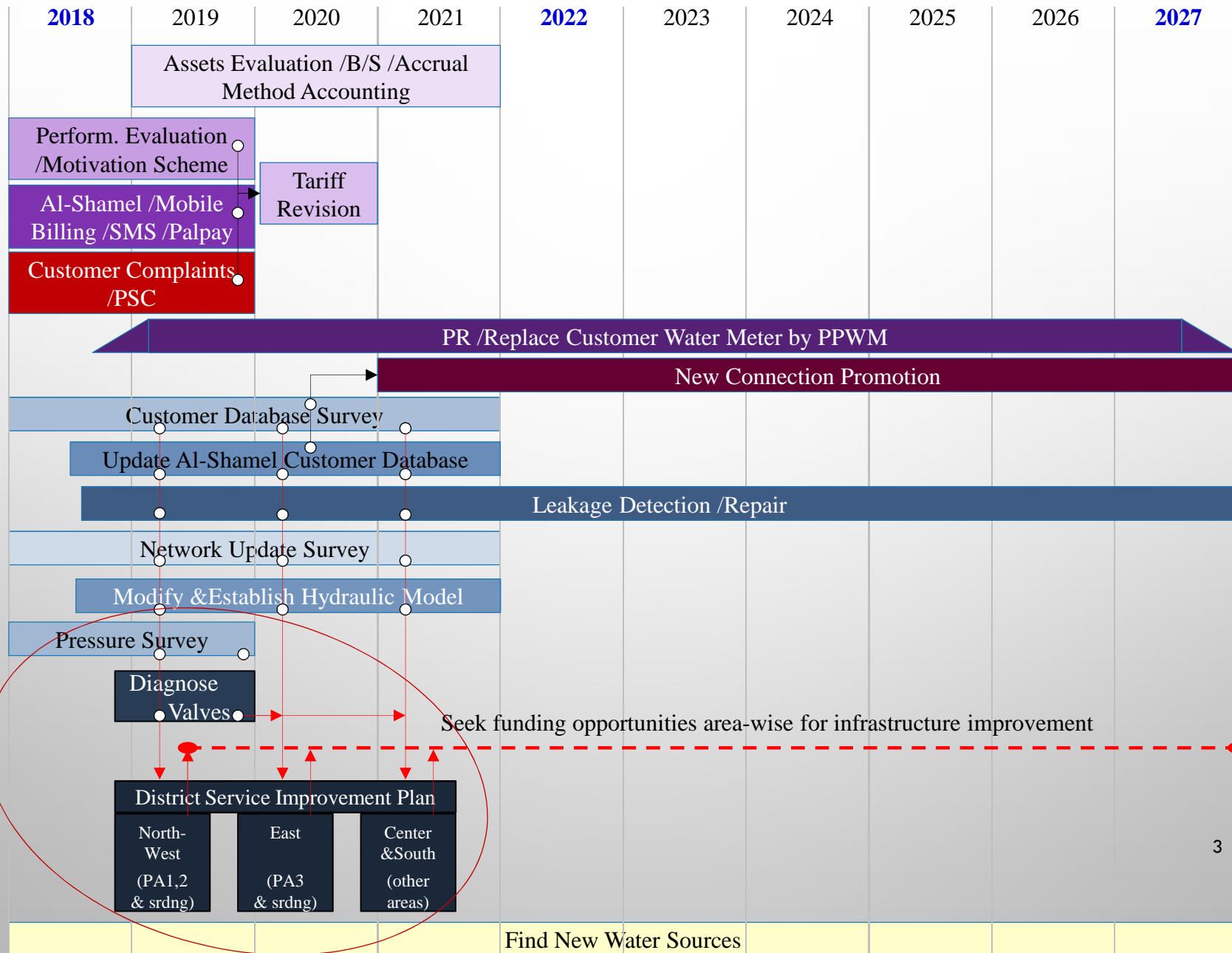
فريق خبراء جايكا

توشيهيكو تماما
ناوته كويكي
سامح صوالحة
عبدالله البزور

District Service Improvement Plan (DSIP)

1. Valve diagnosis survey: diagnosed the functioning status of each main valve;
2. Bordered the area and assessed the degree that each valve could control the distribution;
3. Developed a BOQ with estimated cost to replace malfunctioned valves;
4. Pressure measurement survey in each area;
5. Developed and implemented measures to improve water supply based on #1 & #4;
6. Mapped distribution zones based on #2 and modified the boundaries based on #5 above;
7. Developed a distribution schedule based on current practice.

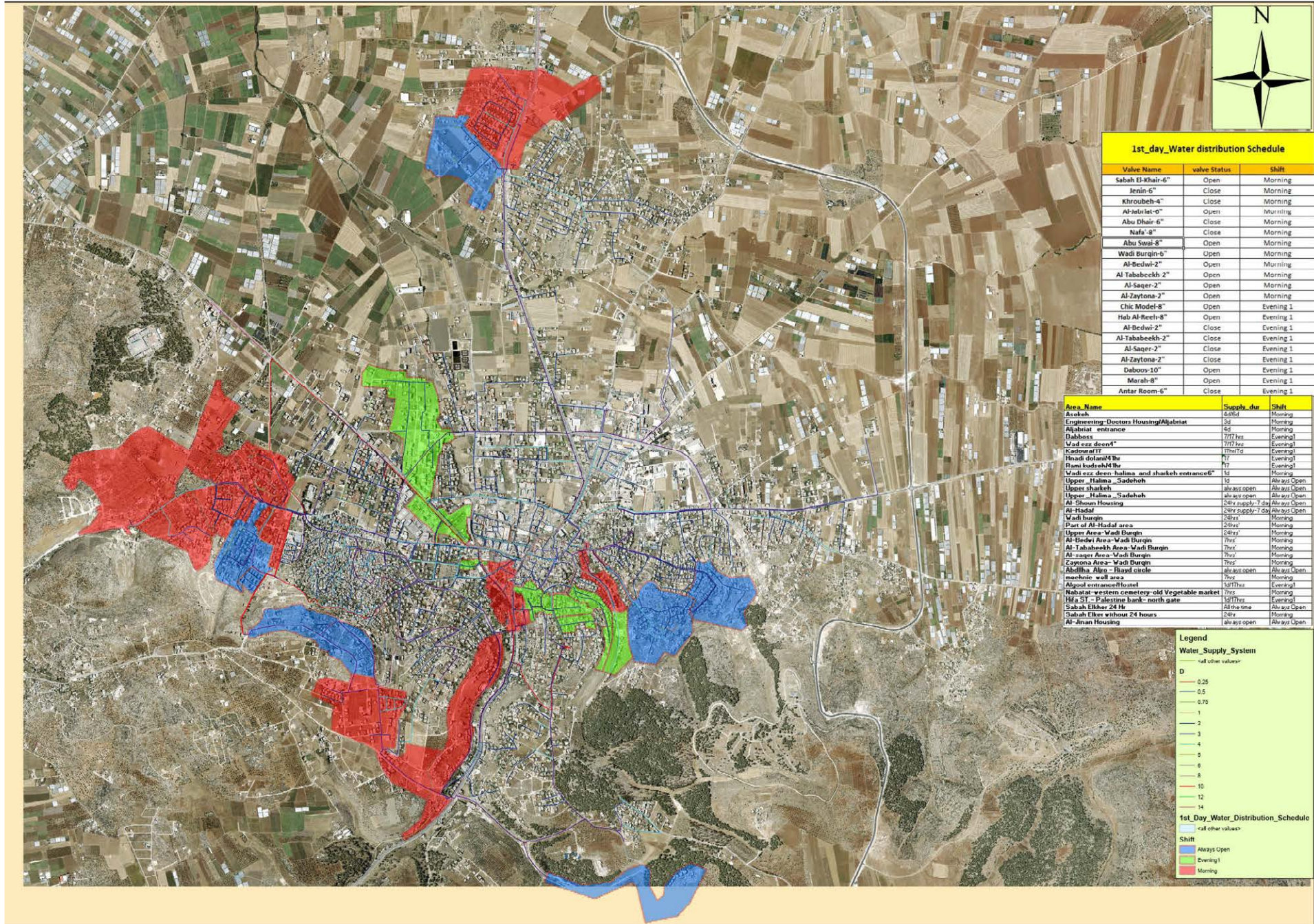
Activities in the Water Service Management Plan 2018-2027 including DSIP



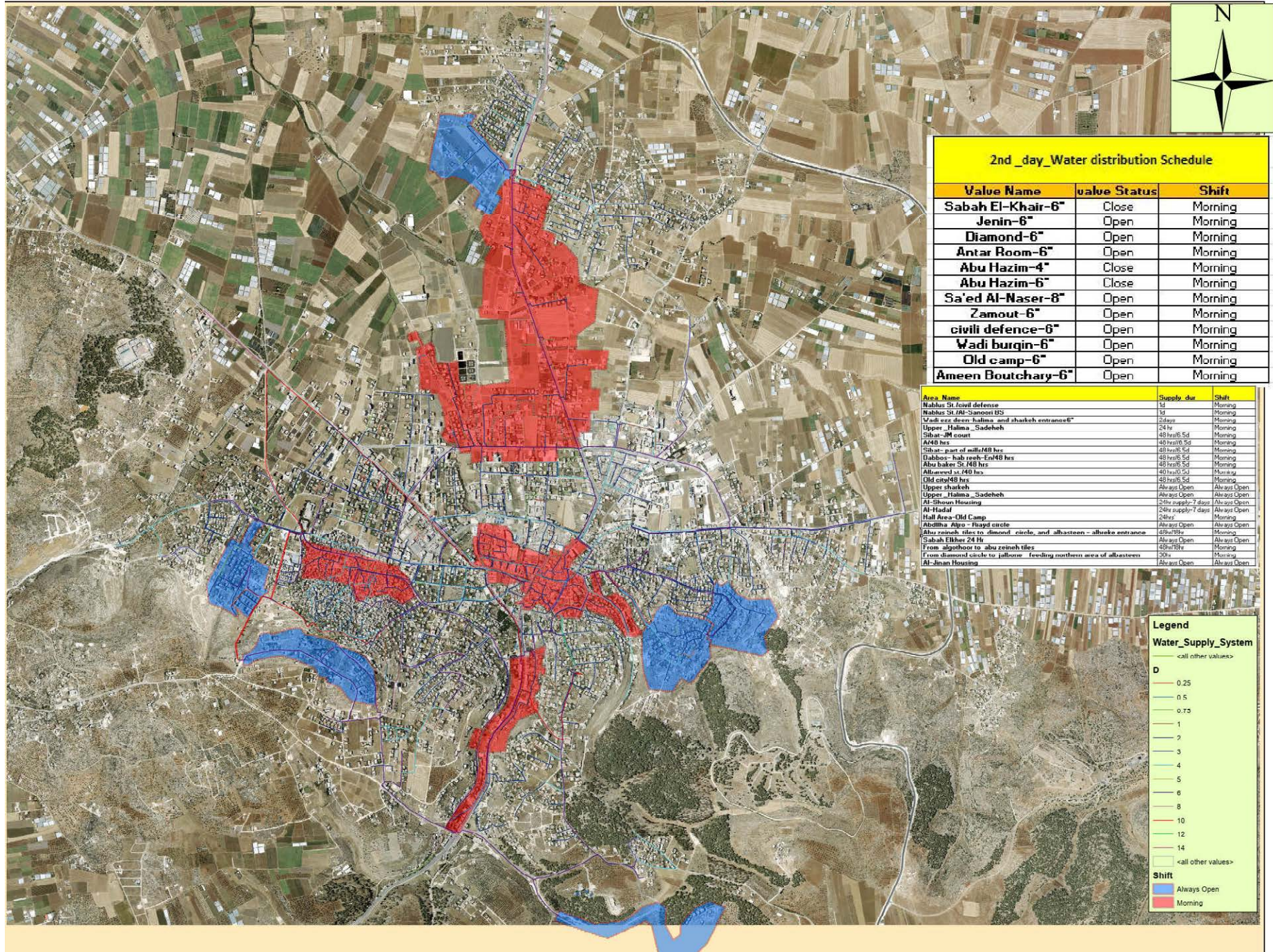
Distribution Zoning and Schedule

1. Tracked the distribution schedule (location, name and time sequence of opening/ closing valves) in morning & evening shifts;
2. Identified the boundary of distribution zone where each valve controls the water supply;
3. Based on the result of water pressure survey, modified the boundary of distribution zones or split a distribution zone into several subzones to increase the supplied water pressure/ quantity by (a) installing new valves; (b) replacing malfunctioning valves; (c) changing the permanently opened/ closed status of valves; or (d) concluding contract with private wells as additional water source.
4. Finalized the distribution zones and schedule (distribution schedule is as of May 2019).

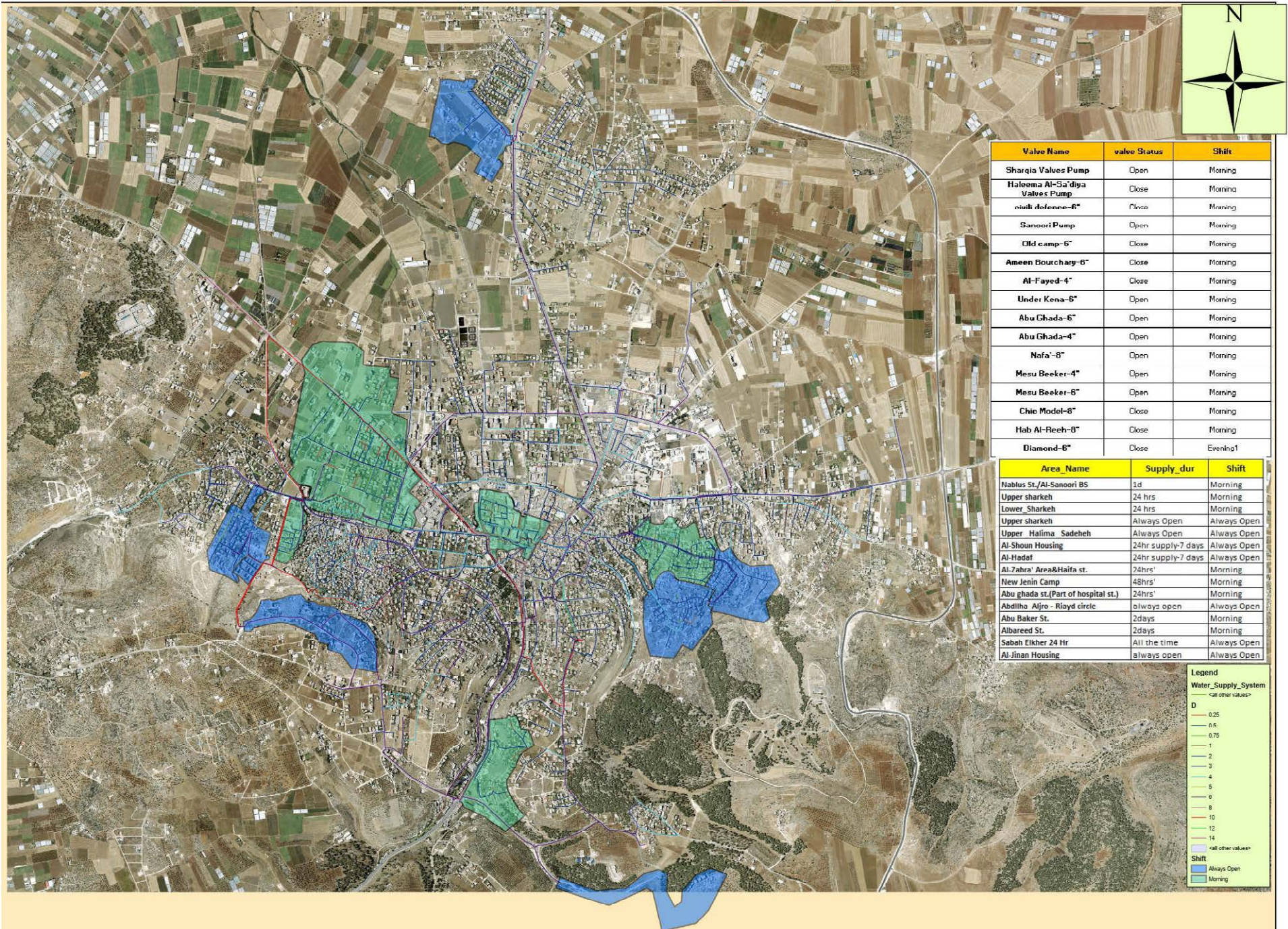
Water Distribution Schedule_1st Day



Water Distribution Schedule_2nd Day



Water Distribution Schedule_3rd Day



Valve Name	valve Status	Shift
Sharqia Valves Pump	Open	Morning
Haleema Al-Sa'diya Valves Pump	Close	Morning
niuli defense-6"	Open	Morning
Sanoori Pump	Open	Morning
Old camp-6"	Close	Morning
Ameen Bourchary-6"	Close	Morning
Al-Fayed-4"	Close	Morning
Under Kena-6"	Open	Morning
Abu Ghada-6"	Open	Morning
Abu Ghada-4"	Open	Morning
Nafa-8"	Open	Morning
Mesu Beeker-4"	Open	Morning
Mesu Beeker-6"	Open	Morning
Chic Model-8"	Close	Morning
Hab Al-Reeh-8"	Close	Morning
Diamond-6"	Close	Evening1

Area_Name	Supply_dur	Shift
Nablius St./Al-Sanoori BS	1d	Morning
Upper sharkeh	24 hrs	Morning
Lower Sharkeh	24 hrs	Morning
Upper sharkeh	Always Open	Always Open
Upper Halima Sadeheh	Always Open	Always Open
Al-Shoun Housing	24hr supply-7 days	Always Open
Al-Hadaf	24hr supply-7 days	Always Open
Al-7ahra' Area&Haifa st.	24hrs'	Morning
New Jenin Camp	48hrs'	Morning
Abu ghada st.(Part of hospital st.)	24hrs'	Morning
Abdilha Alfro - Riyad circle	always open	Always Open
Abu Baker St.	2days	Morning
Albareed St.	2days	Morning
Sabah Eikher 24 Hr	All the time	Always Open
Al-Jinan Housing	always open	Always Open

Legend

Water_Supply_System
 - all other values>

D

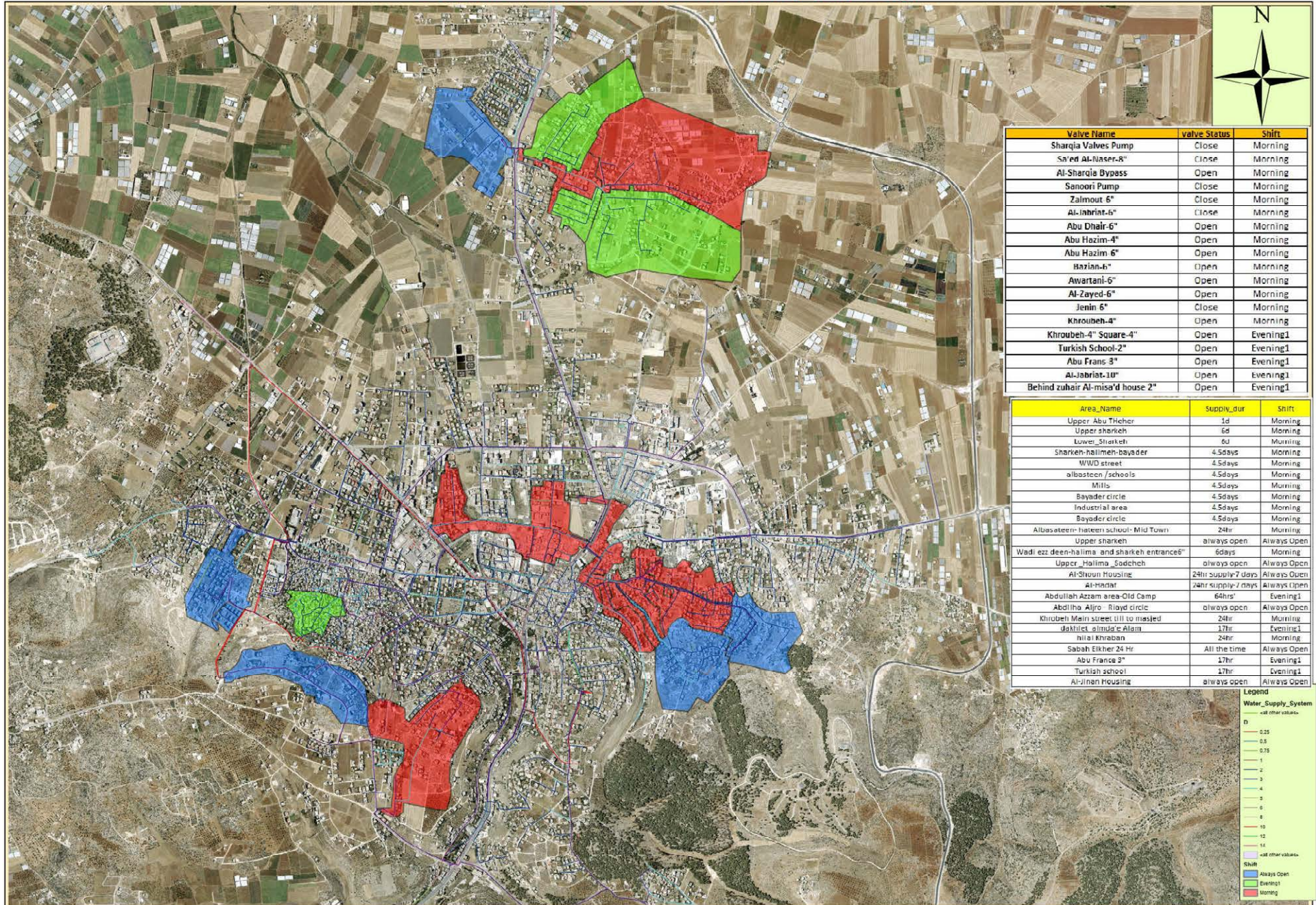
- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 8
- 10
- 12
- 14

- all other values>

Shift

- Always Open
- Morning

Water Distribution Schedule_4th Day



Valve Name	valve Status	Shift
Sharqia Valves Pump	Close	Morning
Sa'ed Al-Naser-R"	Close	Morning
Al-Sharqia Bypass	Open	Morning
Sanoori Pump	Close	Morning
Zalmout 6"	Close	Morning
Al-Jabriet-6"	Close	Morning
Abu Dhair-6"	Open	Morning
Abu Hazim-4"	Open	Morning
Abu Hazim 6"	Open	Morning
Bazian-4"	Open	Morning
Awartani-6"	Open	Morning
Al-Zayed-6"	Open	Morning
Jenin 6"	Close	Morning
Khroubeh-4"	Open	Morning
Khroubeh-4" Square-4"	Open	Evening1
Turkish School-2"	Open	Evening1
Abu Frans 3"	Open	Evening1
Al-Jabriet-10"	Open	Evening1
Behind zuhair Al-misa'd house 2"	Open	Evening1

Area Name	Supply_dur	Shift
Upper Abu Theher	1d	Morning
Upper sharkeh	6d	Morning
Lower Sharkeh	6d	Morning
Sharkeh-halimeh-bayader	4.5days	Morning
WWD street	4.5days	Morning
albasteen /schools	4.5days	Morning
Mills	4.5days	Morning
Bayader circle	4.5days	Morning
Industrial area	4.5days	Morning
Bayader circle	4.5days	Morning
Albasteen- hataan school- Mid Town	24hr	Morning
Upper sharkeh	81ways open	Always Open
Wadi ezz deen-halima and sharkeh entrance6"	6days	Morning
Upper Halima Sadcheh	6days open	Always Open
Al-Shura Housing	24hr supply-7 days	Always Open
Al-Hadaf	24hr supply-7 days	Always Open
Abdullah Azzam area-Old Camp	64hrs	Evening1
Abdillo Aljro Riayd circle	61ways open	Always Open
Khroubi Main street till to masjid	24hr	Morning
Jakhiat almidia Alait	17hr	Evening1
hila khrahan	24hr	Morning
Sabah Elkher 24 Hr	All the time	Always Open
Abu France 3"	17hr	Evening1
Turkish school	17hr	Evening1
Al-Jinan Housing	61ways open	Always Open

Legend

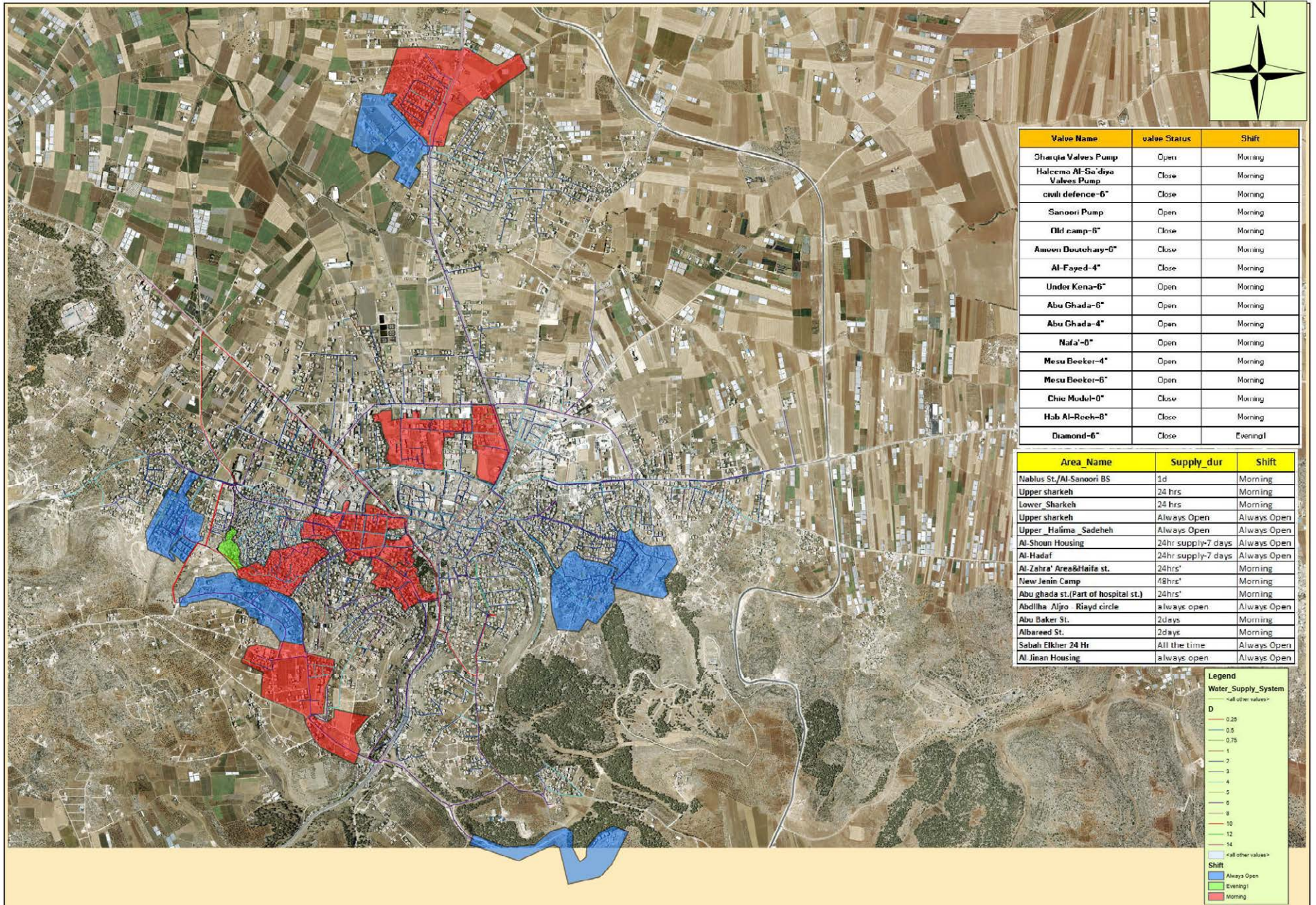
Water_Supply_System

- all other valves
- D
- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 10
- 12
- 14
- all other valves

Shift

- Always Open
- Evening1
- Morning

Water Distribution Schedule_5th Day



Valve Name	valve Status	Shift
Sharqia Valves Pump	Open	Morning
Halceemo Al-Sa'diya Valves Pump	Close	Morning
ciuli defence-6"	Close	Morning
Sanoori Pump	Open	Morning
Old camp-6"	Close	Morning
Amreen Douthayy-0"	Close	Morning
Al-Fayed-4"	Close	Morning
Under Kona-6"	Open	Morning
Abu Ghada-6"	Open	Morning
Abu Ghada-4"	Open	Morning
Nafa'-6"	Open	Morning
Mesu Beeker-4"	Open	Morning
Mesu Beeker-6"	Open	Morning
Chio Modul-0"	Close	Morning
Hab Al-Rooh-6"	Close	Morning
Diamond-6"	Close	Evening!

Area Name	Supply dur	Shift
Nablus St./Al-Sanoori BS	1d	Morning
Upper sharkeh	24 hrs	Morning
Lower Sharkeh	24 hrs	Morning
Upper sharkeh	Always Open	Always Open
Upper Halima Sadeeh	Always Open	Always Open
Al-Shoun Housing	24hr supply-7 days	Always Open
Al-Hadaf	24hr supply-7 days	Always Open
Al-Zahra' Area&Maifa st.	24hrs'	Morning
New Jenin Camp	48hrs'	Morning
Abu ghada st.(Part of hospital st.)	24hrs'	Morning
Abdilha Aljro Riayd circle	always open	Always Open
Abu Baker St.	24days	Morning
Albareed St.	2days	Morning
Sabah Elkher 24 Hr	All the time	Always Open
Al Jinan Housing	always open	Always Open

Legend

Water_Supply_System
 <all other values>

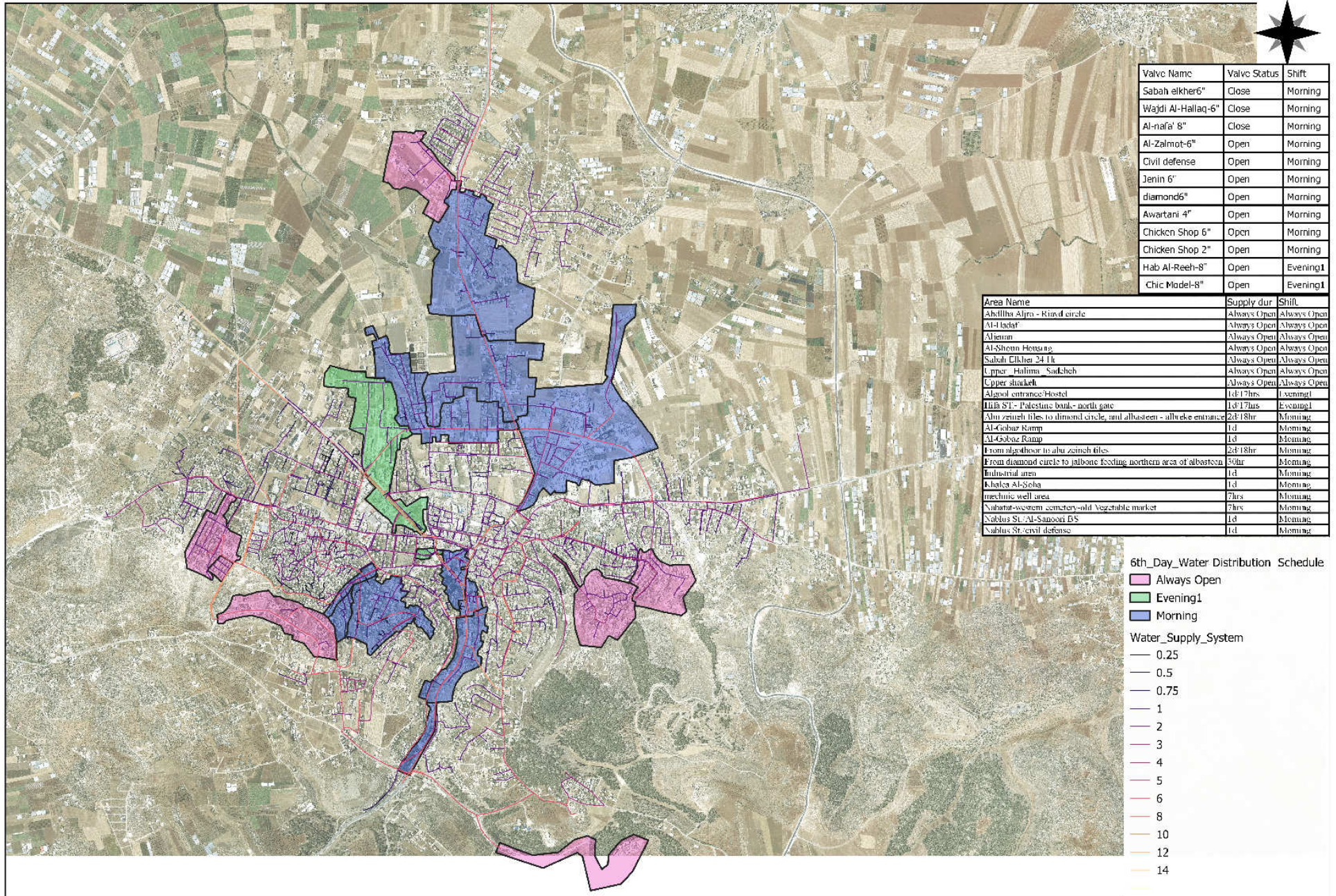
D

- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 10
- 12
- 14
- <all other values>

Shift

- Always Open
- Evening!
- Morning

6th_Day_Water Distribution Schedule_May_2019



Valve Name	Valve Status	Shift
Sabah elkher6"	Close	Morning
Wajdi Al-Hallaq-6"	Close	Morning
Al-nafa' 8"	Close	Morning
Al-Zaimot-6"	Open	Morning
Civil defense	Open	Morning
Jenin 6"	Open	Morning
diamonds6"	Open	Morning
Awaitani 4"	Open	Morning
Chicken Shop 6"	Open	Morning
Chicken Shop 2"	Open	Morning
Hab Al-Reeh-8"	Open	Evening1
Chic Model-8"	Open	Evening1

Area Name	Supply dur	Shift
Abdulla Aljra - kind circle	Always Open	Always Open
Al-ladaf	Always Open	Always Open
Alienun	Always Open	Always Open
Al-Shoum Hostang	Always Open	Always Open
Sabah Elkher 24 It	Always Open	Always Open
Upper Halima Sadcheh	Always Open	Always Open
Upper shakleh	Always Open	Always Open
Algoal entrance/Hostel	14:17hrs	Evening1
Hab S1 - Palestine bank- north gate	13:17hrs	Evening1
Alu zaimh tiles to almond circle, and albaiteen - albuke entrance	23:18hr	Morning
Al-Gohar Ramp	14	Morning
Al-Gohar Ramp	13	Morning
From algeleior to alu zaimh tiles	23:18hr	Morning
From diamond circle to jalbone feeding northern area of albaiteen	30hr	Morning
Industrial area	14	Morning
Khatka Al-Soha	14	Morning
mechic well area	7hrs	Morning
Nabhar-warem cemetery-old vegetable market	7hrs	Morning
Nablus St./Al-Saooori BS	14	Morning
Nablus St./civil defense	14	Morning

6th_Day_Water Distribution Schedule

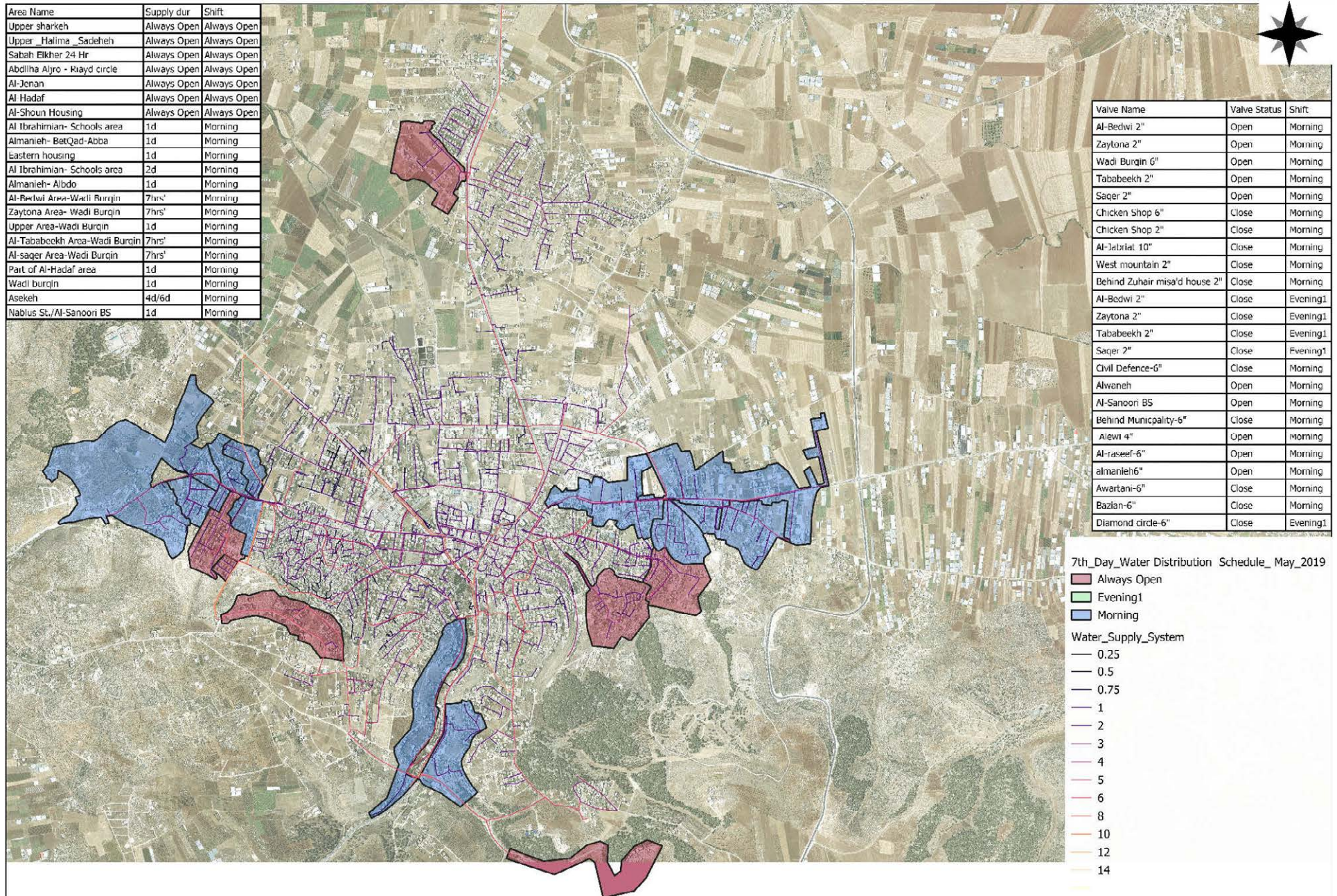
- Always Open
- Evening1
- Morning

Water_Supply_System

- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 12
- 14

7th_Day_Water Distribution Schedule_May_2019

Area Name	Supply dur	Shift
Upper sharkeh	Always Open	Always Open
Upper Halima_Sadeheh	Always Open	Always Open
Sabah Elkher 24 Hr	Always Open	Always Open
Abdilha Aljro - Riyad circle	Always Open	Always Open
Al-Jonan	Always Open	Always Open
Al Hadaf	Always Open	Always Open
Al-Shoun Housing	Always Open	Always Open
Al Ibrahimian- Schools area	1d	Morning
Almanieh- BetQad-Abba	1d	Morning
Eastern housing	1d	Morning
Al Ibrahimian- Schools area	2d	Morning
Almanieh- Albdo	1d	Morning
Al-Bedwi Area-Wadi Burqin	7hrs	Morning
Zaytona Area- Wadi Burqin	7hrs	Morning
Upper Area-Wadi Burqin	1d	Morning
Al-Tababeekh Area-Wadi Burqin	7hrs	Morning
Al-sager Area-Wadi Burqin	7hrs	Morning
Part of Al-Hadaf area	1d	Morning
Wadi burqin	1d	Morning
Asekeh	4d/6d	Morning
Nabius St./Al-Sanoori BS	1d	Morning



Valve Name	Valve Status	Shift
Al-Bedwi 2"	Open	Morning
Zaytona 2"	Open	Morning
Wadi Burqin 6"	Open	Morning
Tababeekh 2"	Open	Morning
Sager 2"	Open	Morning
Chicken Shop 6"	Close	Morning
Chicken Shop 2"	Close	Morning
Al-Jabrial 10"	Close	Morning
West mountain 2"	Close	Morning
Behind Zuhair misa'd house 2"	Close	Morning
Al-Bodwi 2"	Close	Evening1
Zaytona 2"	Close	Evening1
Tababeekh 2"	Close	Evening1
Sager 2"	Close	Evening1
Civil Defence-6"	Close	Morning
Alwaneh	Open	Morning
Al-Sanoori BS	Open	Morning
Behind Municipality-6"	Close	Morning
Alewi 4"	Open	Morning
Al-raseef-6"	Open	Morning
almanieh6"	Open	Morning
Awartani-6"	Close	Morning
Bazian-6"	Close	Morning
Diamond circle-6"	Close	Evening1

7th_Day_Water Distribution Schedule_May_2019

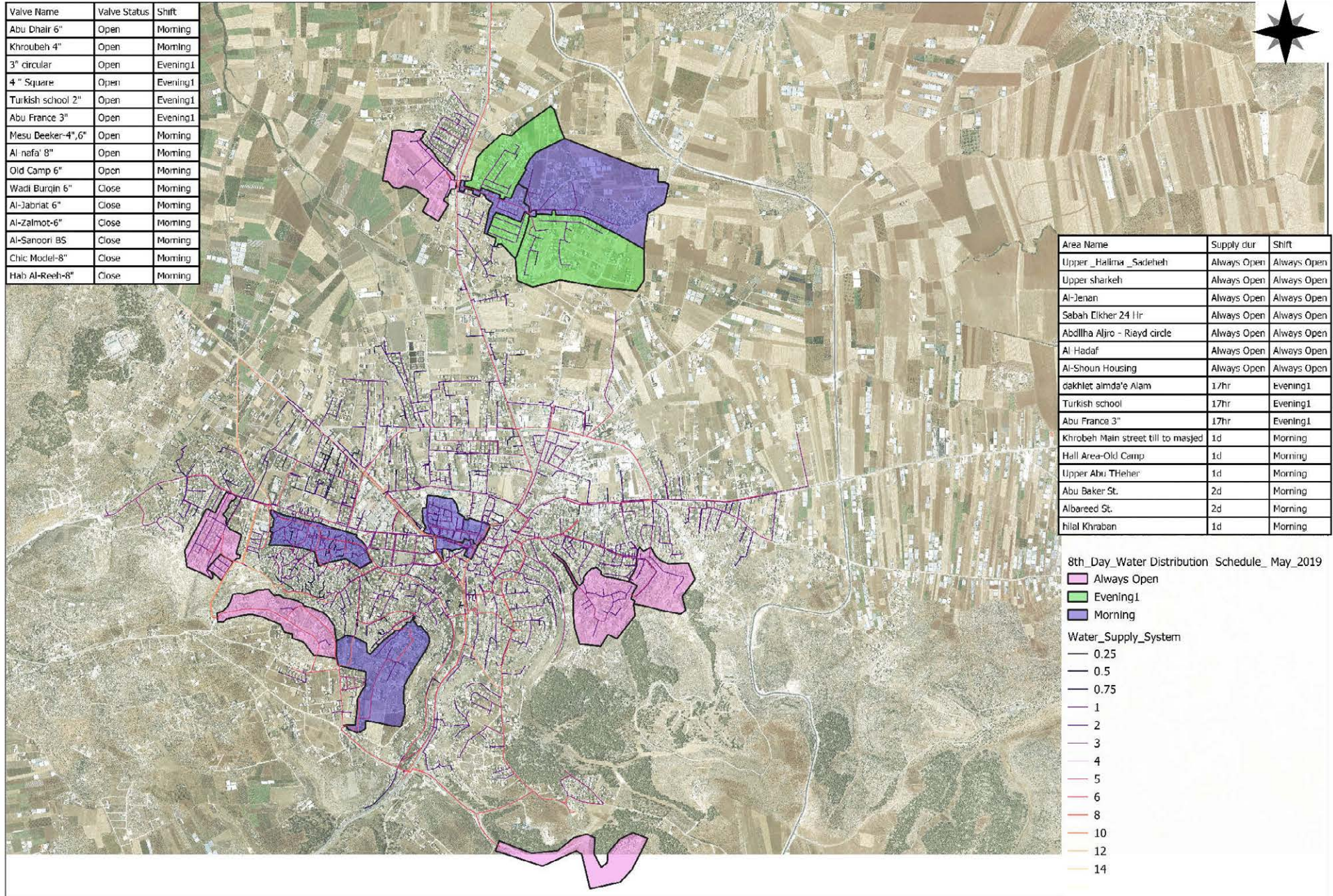
- Always Open
- Evening1
- Morning

Water_Supply_System

- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 10
- 12
- 14

8th_Day_Water Distribution Schedule_May_2019

Valve Name	Valve Status	Shift
Abu Dhair 6"	Open	Morning
Khroubeh 4"	Open	Morning
3" circular	Open	Evening1
4" Square	Open	Evening1
Turkish school 2"	Open	Evening1
Abu France 3"	Open	Evening1
Mesu Deeker-4",6"	Open	Morning
Al nafa' 8"	Open	Morning
Old Camp 6"	Open	Morning
Wadi Burqin 6"	Close	Morning
Al-Jabnat 6"	Close	Morning
Al-Zalmot-6"	Close	Morning
Al-Sanoori BS	Close	Morning
Chic Madel-8"	Close	Morning
Hab Al-Reeh-8"	Close	Morning



Area Name	Supply dur	Shift
Upper_Halima_Sadeh	Always Open	Always Open
Upper sharkeh	Always Open	Always Open
Al-Jenan	Always Open	Always Open
Sabah Elkher 24 Hlr	Always Open	Always Open
AbdIlha Aljro - Riayd circle	Always Open	Always Open
Al Hadaf	Always Open	Always Open
Al-Shoun Housing	Always Open	Always Open
cakhlet almda'e Alam	17hr	Evening1
Turkish school	17hr	Evening1
Abu France 3"	17hr	Evening1
Khroubeh Main street till to masjid	1d	Morning
Hall Area-Old Camp	1d	Morning
Upper Abu THeher	1d	Morning
Abu Baker St.	2d	Morning
Albareed St.	2d	Morning
hilal Khraban	1d	Morning

8th_Day_Water Distribution Schedule_May_2019

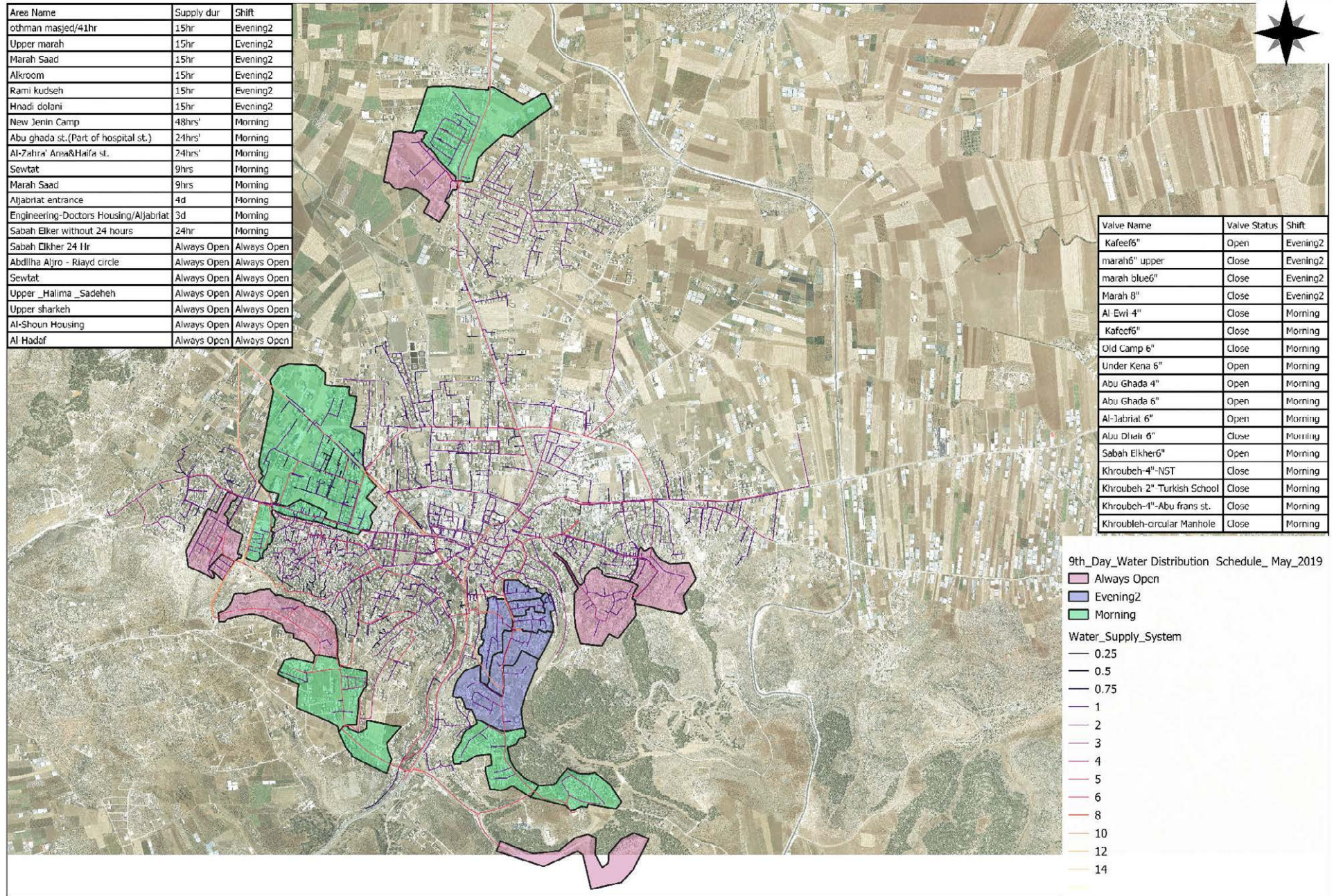
- Always Open
- Evening1
- Morning

Water_Supply_System

- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 10
- 12
- 14

9th_Day_Water Distribution Schedule_May_2019

Area Name	Supply dur	Shift
othman masjid/41hr	15hr	Evening2
Upper marah	15hr	Evening2
Marah Saad	15hr	Evening2
Alkroom	15hr	Evening2
Rami kudseh	15hr	Evening2
Hnadi dolani	15hr	Evening2
New Jenin Camp	48hrs'	Morning
Abu ghada st.(Part of hospital st.)	24hrs'	Morning
Al-Zahra' Area&Haifa st.	24hrs'	Morning
Sewtat	9hrs	Morning
Marah Saad	9hrs	Morning
Aljabriat entrance	4d	Morning
Engineering-Doctors Housing/Aljabriat	3d	Morning
Sabah Elker without 24 hours	24hr	Morning
Sabah Elker 24 Hr	Always Open	Always Open
Abdilha Aljro - Riyad circle	Always Open	Always Open
Sewtat	Always Open	Always Open
Upper_Halima_Sadeheh	Always Open	Always Open
Upper sharkeh	Always Open	Always Open
Al-Shoun Housing	Always Open	Always Open
Al Hadaf	Always Open	Always Open



Valve Name	Valve Status	Shift
Kafeef6"	Open	Evening2
marah16" upper	Close	Evening2
marah blue6"	Close	Evening2
Marah 8"	Close	Evening2
Al Ewi 4"	Close	Morning
Kafeef6"	Close	Morning
Old Camp 6"	Close	Morning
Under Kena 6"	Open	Morning
Abu Ghada 4"	Open	Morning
Abu Ghada 6"	Open	Morning
Al-Jabriat 6"	Open	Morning
Abu Dikri 6"	Close	Morning
Sabah Elker6"	Open	Morning
Khroubeh-4"-NST	Close	Morning
Khroubeh 2" Turkish School	Close	Morning
Khroubeh-1"-Abu frans st.	Close	Morning
Khroubeh-circular Manhole	Close	Morning

9th_Day_Water Distribution Schedule_May_2019

- Always Open
- Evening2
- Morning

Water_Supply_System

- 0.25
- 0.5
- 0.75
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 10
- 12
- 14



DISTRICT SERVICE IMPROVEMENT PLAN AS OF 31ST OCTOBER 2019

4. REPORT ON SUPPLY IMPROVEMENT

المساهمين

بلدية جنين

عبدالهادي محمد حمران
رمزي جعفر
مطيع جبالي
جهاد نظمي علاونة
سامح سويطات
امجد سعدي

امين نصري
عبدالناصر احمد
محمد سلامة
محمود أحمد
فيصل ايوب

فريق خبراء جايكا

توشيهيكو تماما
ناوته كويكي
سامح صوالحة
عبدالله البزور

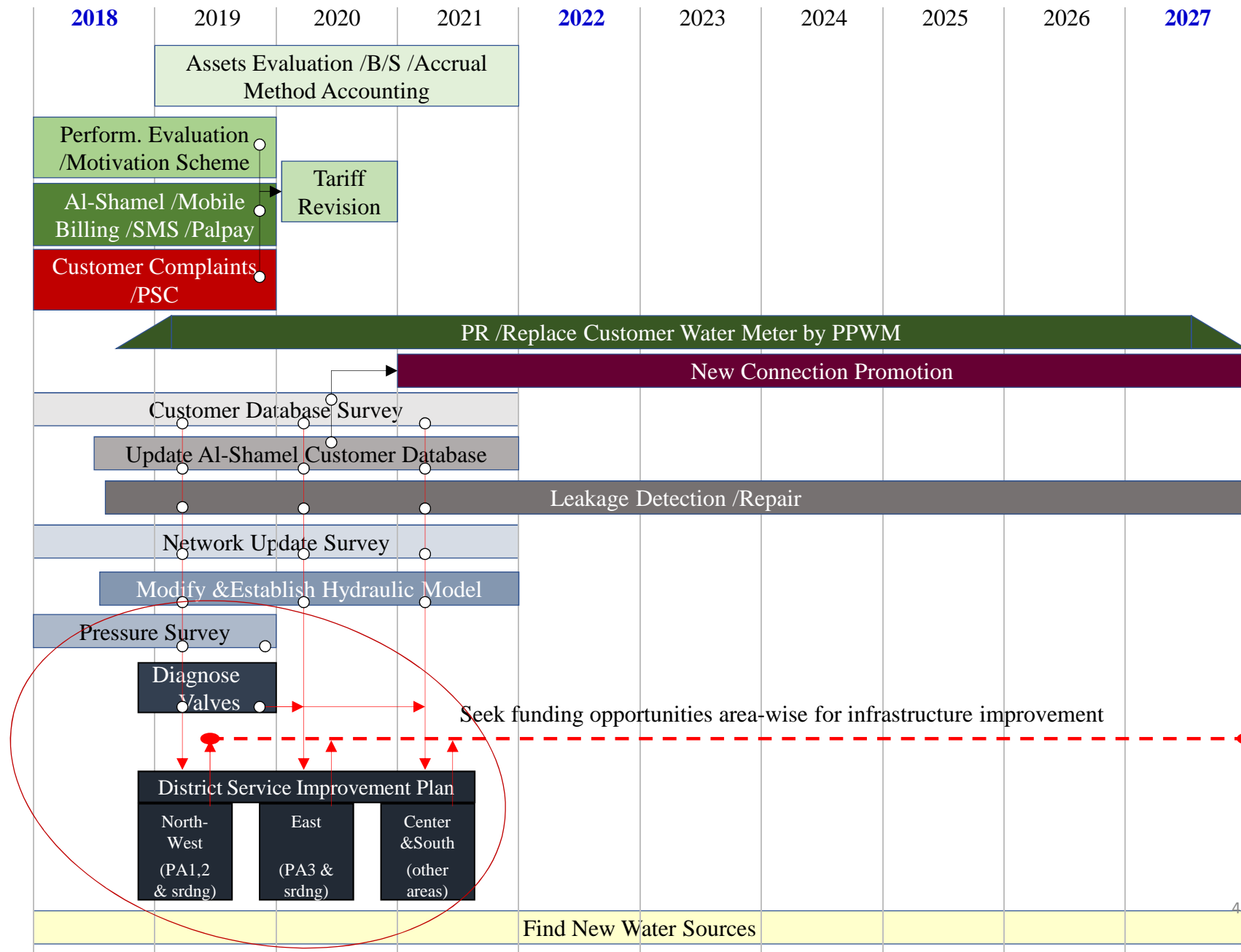
Table of Contents

1. District Service Improvement Plan (DSIP)
2. Activities in the Water Service Management Plan 2018-2027 including DSIP
3. Solutions through DSIP
 - Case #1: Supply improvement in Al Basateen South (BS-2)
 - Case #2: Excavate and expose An-Nafa' 8" gate valves
 - Case #3: Fix leakage along WBWD line before Swetat connection
 - Case #4: Increase the production of Al-Sa'adeh Well
 - Case #5: Modify supply zone boundary of Al Basateen North and Al Basateen Haifa Street
 - Case #6: Separate the distribution zone of Northern Al-Basateen from Al-Nasreh Street Zone
 - Case #7: Utilize Abu Hatab Well as additional water source for eastern area (District 2)
 - Case #8: Utilize Abu Samer Well as additional water source for PA3
 - Case #9: Change supply zone of Al-Batal Ramp

District Service Improvement Plan (DSIP)

1. Valve diagnosis survey: diagnosed the functioning status of each main valve;
2. Bordered the area and assessed the degree that each valve could control the distribution;
3. Developed a BOQ with estimated cost to replace malfunctioned valves;
4. Pressure measurement survey in each area;
5. Developed and implemented measures to improve water supply based on #1 & #4;
6. Mapped distribution zones based on #2 and modified the boundaries based on #5 above;
7. Developed a distribution schedule based on current practice.

Activities in the Water Service Management Plan 2018-2027 including DSIP



SOLUTION THROUGH DSIP CASE #1

SUPPLY IMPROVEMENT IN AL BASATEEN SOUTH (BS-2)

Problem

Very low pressure (almost zero, with no water);
lots of complaints from customers.

Solution

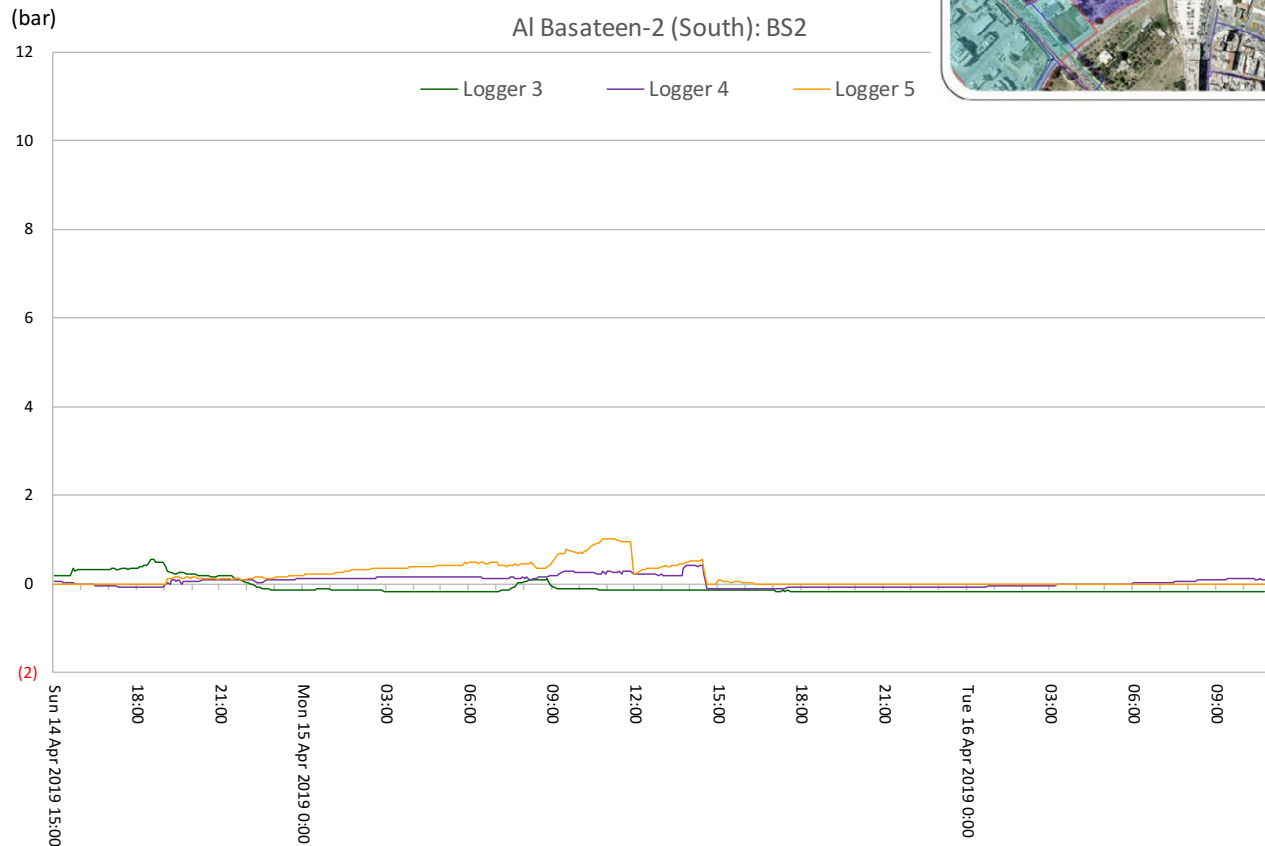
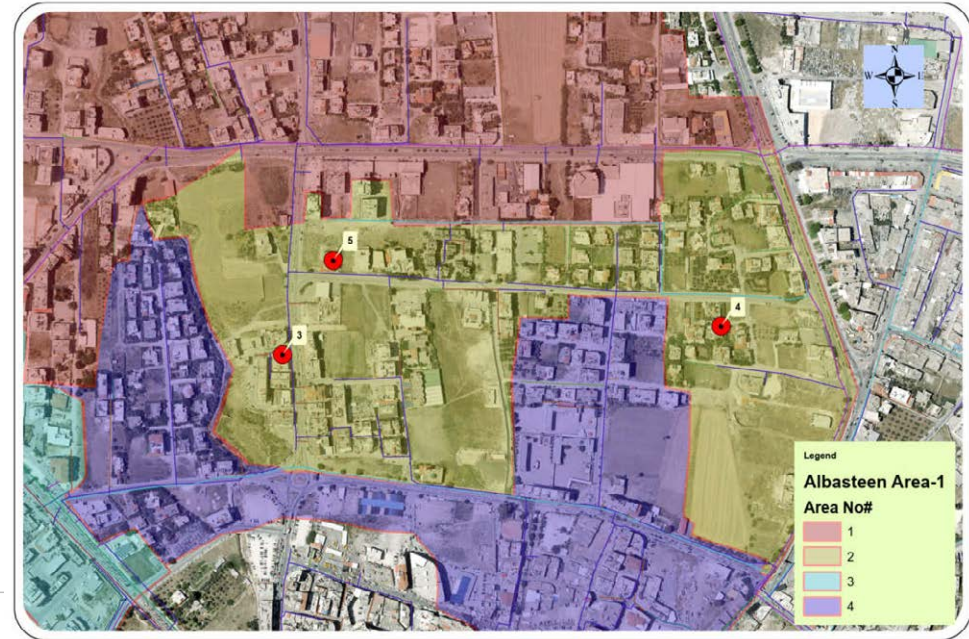
Shift a part of the area to the neighboring Al Basateen
Mid-Town (BM-4) with better water supply.

Result

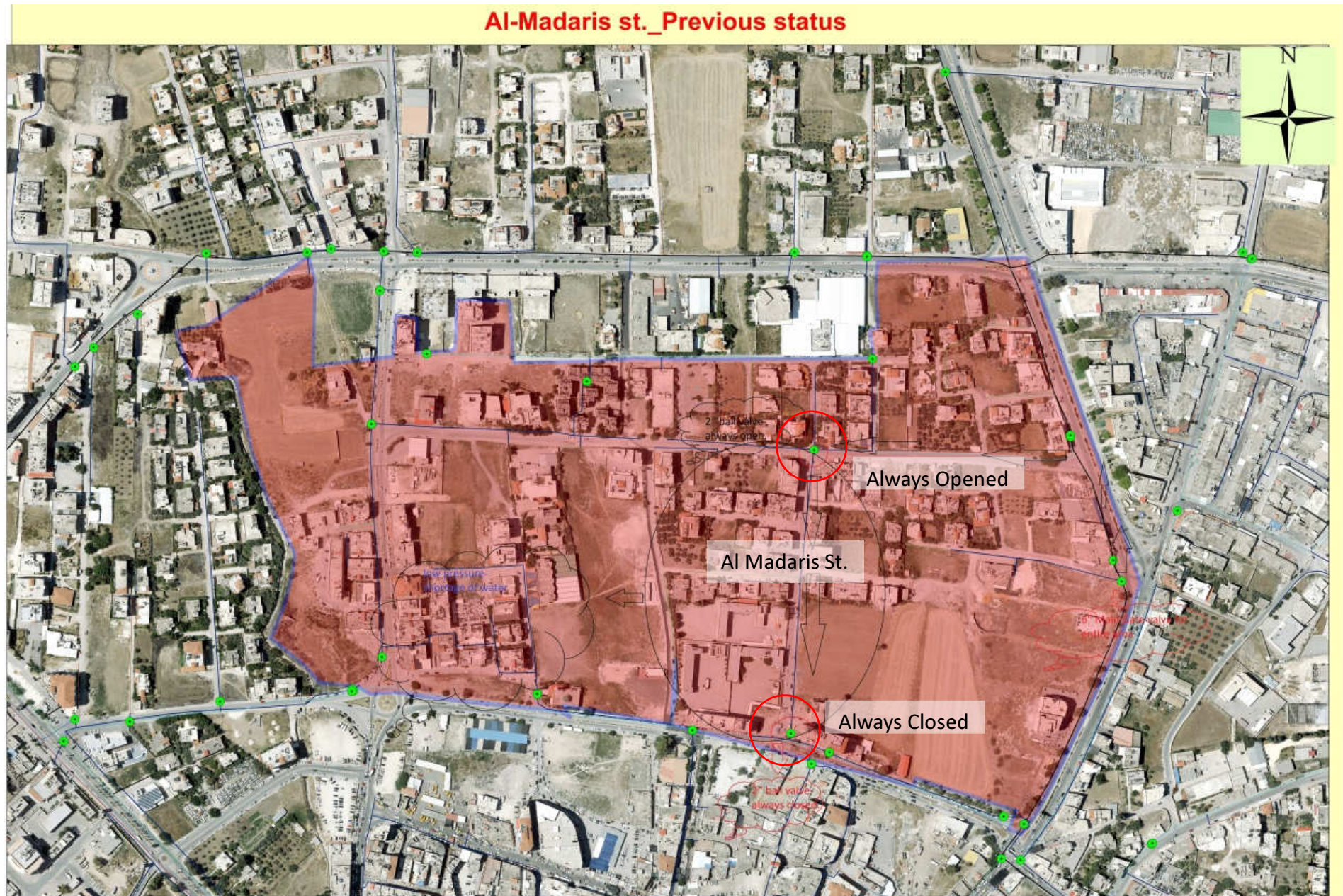
The water supply quantity & pressure in the target area
has been improved significantly.

Result of Pressure Measurement in Al Basateen South (BS-2)

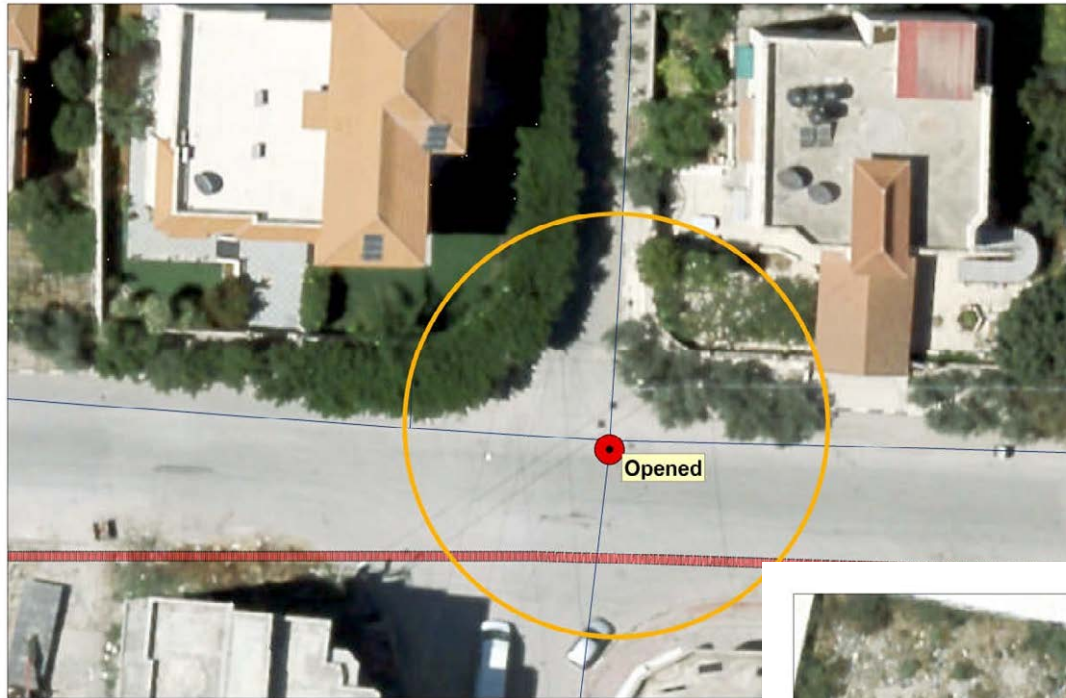
Problem: very low pressure (almost zero, with no water); lots of complaints from customers.



Current Valve Operation in Al Madaris St. Sub Area (1/2)



Current Valve Operation in Al Madaris St. Sub Area (2/2)



(Left) 2" valve along Baghdad St.:
always opened.

(Right) 2" valve near Al-
Nakheel building: always
closed.



Solution

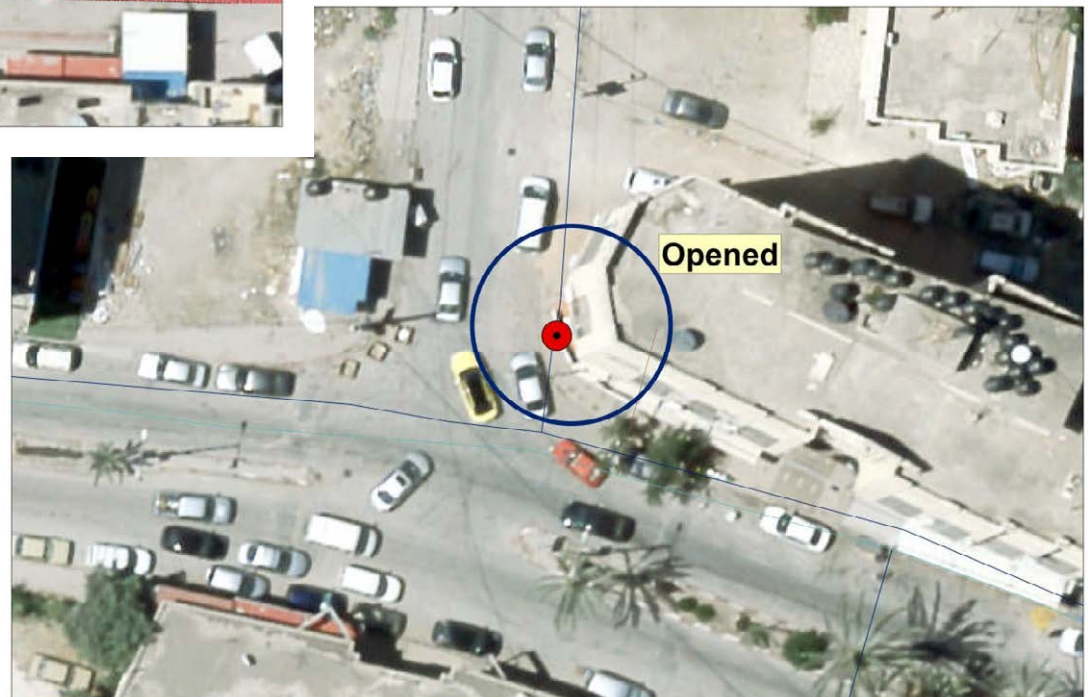
Transferred the sub area from BS-2 to Al Basateen Mid Town (BM-4) by changing valve operation: Closed the 2" valve on Baghdad St.; Opened the 2" valve near Al-Nakheel building.



Changed Valve Operation in Al Madaris St. Sub Area



(Left) 2" valve along Baghdad St.: **Closed**.



(Right) 2" valve near Al-Nakheel building: **opened**.

Site Work by JM Technical Employees



Excavate and expose 2" valve near Al-Nakheel building (valve opened)



Excavate and expose 2" valve along Baghdad St. (valve closed)

SOLUTION THROUGH DSIP CASE #2

EXCAVATE AND EXPOSE AN-NAFA' 8" GATE VALVES

Problem

The main valve on Nablus Street from Al-Mechanic Well was found malfunctioning (affecting the supply to Abu Baker St. - Talal St. and Vegetable Market).

Solution

The valve was excavated and replaced.

Result

The water supply to Abu Baker St. - Talal St. and Vegetable Market has been drastically improved.

Photos Before & After Exposure and Concrete Casting



Site Work by JM Technical Employees



Cutting and Adjusting New Handhole Tube



Welding work

SOLUTION THROUGH DSIP CASE #3

FIX LEAKAGE ALONG WBWD LINE BEFORE SWETAT CONNECTION

Problem

A ground surface leakage was observed along WBWD 6” line between Al-Jalameh and Swetat; and water pressure supplied by WBWD at Swetat connection was measured almost zero in June 2019.

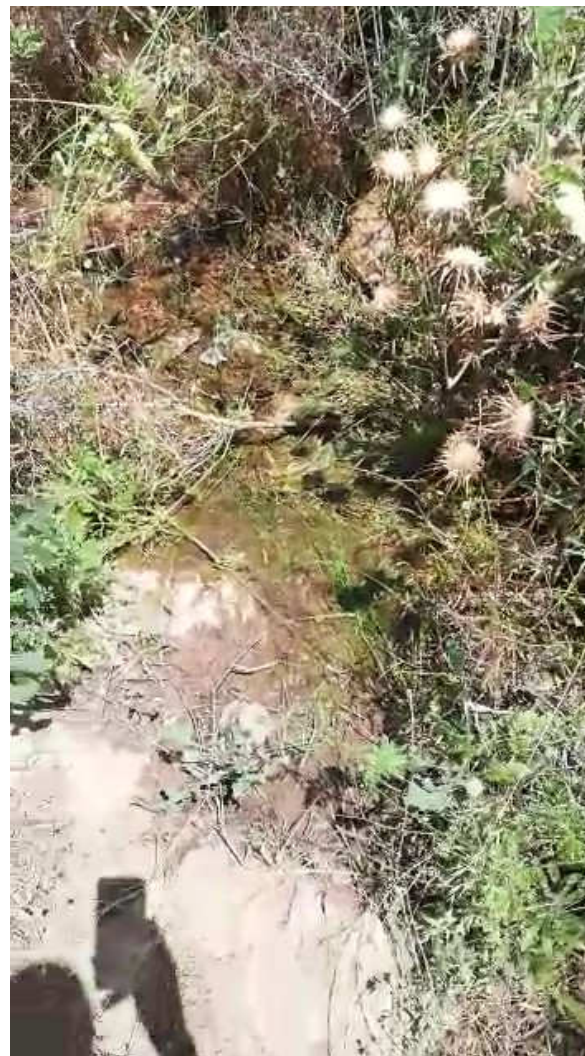
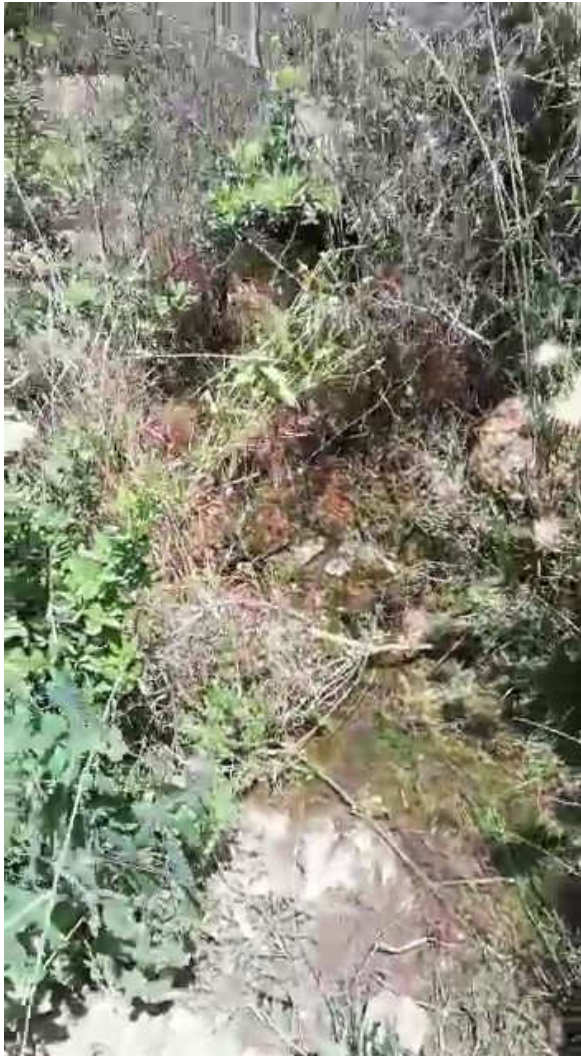
Solution

JET requested PWA to fix the problem in a letter issued on 30th June 2019.

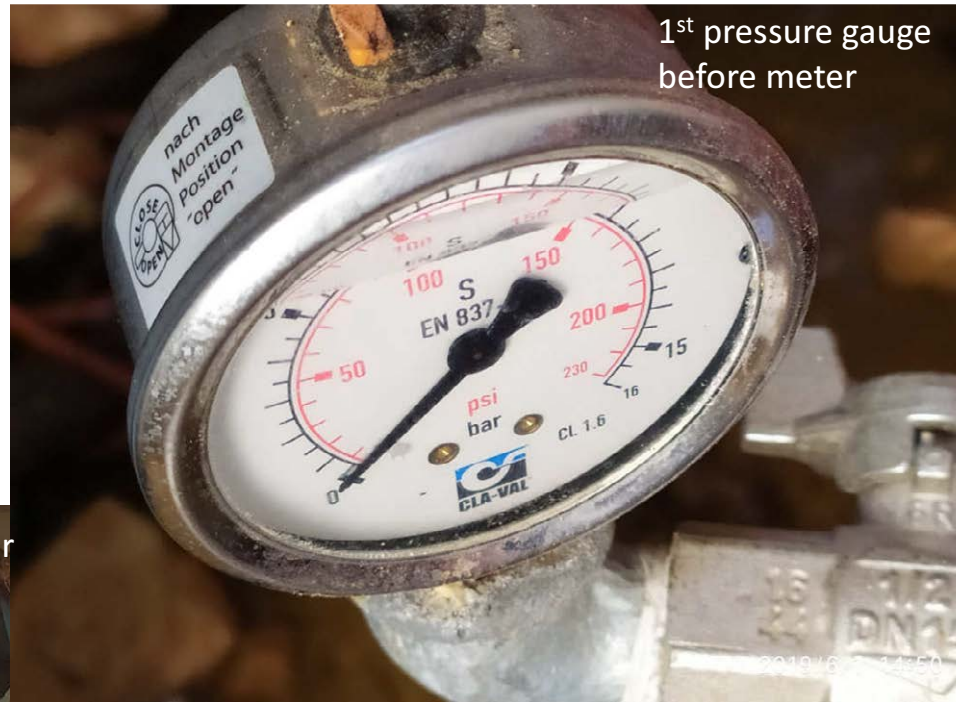
Result

PWA announced the request for EOI on 27th August 2019 on the replacement work of the pipeline.

Leakage along WBWD 6" Line from Al-Jalameh to Swetat
(15th June 2019)



Pressure Gauge at Swetat Connection (1st June 2019)



Pressure Gauge at Swetat Connection (19th June 2019)



1st pressure gauge before meter

2019/6/19 08:59



2nd pressure gauge before meter

2019/6/19 08:59



3rd pressure gauge after meter

2019/6/19 08:58

Official Letter from JET to PWA (11th July 2019)



مشروع تحسين إدارة خدمات المياه في بلدية جنين

التاريخ: 11 حزيران 2019
الرقم: 910-01 سلطة المياه الفلسطينية فريق الخبراء الياباني

حضرة السيد/ معالي الوزير المحترم : م. مازن غنيم
رئيس سلطة المياه الفلسطينية

الموضوع: الصيانة العاجلة للتسرب الواقع بين وصلتي الجملة والسويطات

تحية طيبة وبعد ،

تماشياً مع التعاون الفني مع بلدية جنين ، قمنا بقياس ضغط المياه في وصلة السويطات من الخط الناقل التابع لدائرة مياه الضفة الغربية وكانت قيم الضغط منخفضة جداً (قريبة من الصفر) وذلك خلال الأيام التي تم اختيارها بشكل عشوائي إلا وهي الأول والتاسع عشر من حزيران من العام الحالي.

في هذه الأثناء قامت دائرة مياه الضفة الغربية بإبلاغ بلدية جنين عن وجود تسرب ملحوظ على طول الخط الناقل بين وصلتي السويطات والجملة ؛ الأمر الذي قد يكون سبباً لقيم ضغط المياه المنخفض جداً في وصلة السويطات.

نظر الأهمية وضغط وكمية المياه المزمدة من قبل دائرة مياه الضفة الغربية من خلال وصلة السويطات وتأثيرها الكبير على حياة المواطنين الذين يقطنون في الجزء الشرقي من المدينة ، أود أن أطلب من دائرة مياه الضفة الغربية تنفيذ التالي:

- تحديد موقع التسرب الواقع على طول الخط الناقل بين وصلتي السويطات والجملة ؛ ثم إصلاحه بأقصى سرعة ممكنة .
- تمكين بلدية جنين من الوصول إلى بيانات نظام ال SCADA التابع لدائرة مياه الضفة الغربية ؛ وذلك بهدف فحص تدفق المياه داخل وصلتي الجملة والسويطات بحيث يصبح بإمكان بلدية جنين توظيف هذه البيانات لتحسين توزيع المياه داخل حدود البلدية .

شاكرين معاليكم لجهودكم الكريمة واستجابتكم السريعة .

تقبلوا فائق الاحترام ،

السيد توشيكو تاماما

نائب الرئيس الاستشاري-مشروع تحسين إدارة خدمة المياه في بلدية جنين.

- نسخة / د. محمد أبو غالي المحترم رئيس المشروع /رئيس بلدية جنين .
نسخة / م. عبد الهادي محمد المحترم مدير المشروع/مدير دائرة المياه والصرف الصحي-بلدية جنين.
نسخة / السيد سامر العمري المحترم مدير الدائرة المالية- بلدية جنين .
نسخة / م. رمزي جعفر المحترم مدير قسم المياه- بلدية جنين .
نسخة / م. خيرية سوقي المحترمة نائبة مدير المشروع/مديرة قسم الدراسات والتخطيط/ دائرة المياه والصرف الصحي - بلدية جنين .
نسخة / السيدة ماريوكا تشيبيا المحترمة ممثلة مكتب JICA في فلسطين .
نسخة / السيد هيروتاكا ساتو الرئيس الاستشاري خبير إدارة التزود بالمياه-فريق الخبراء الياباني.

المرفقات :

- (مرفق 1) ساعة ضغط في وصلة السويطات.
(مرفق 2) قياسات الضغط على طول خط ال 6 انش الواصل بين وصلة السويطات وخزان المراح .
(مرفق 3) التسرب الواقع على طول خط ال 6 انش التابع لدائرة مياه الضفة الغربية والواصل بين وصلة الجملة والسويطات.



Project for Strengthening the Capacity of Water
Service Management in Jenin Municipality

Date: July 11th, 2019
Ref. No. PWAJET_01-019

Eng. Mazen Ghuneim
The Head of Palestine Water Authority

Subject: Quick Fixation of Leakage between Al Jalameh and Swetat Connections

Dear Sir,

In line with the technical cooperation with the Jenin Municipality, we measured the water pressure at the Swetat connection from the WBWD transmission line, which showed almost 0 on at-randomly selected days, namely 1st and 19th June 2019.

Meanwhile the WBWD had reported to the Jenin Municipality an observed leakage along the WBWD transmission line between the Al-Jalameh connection and the Swetat connection, and this might be the reason of very low pressure at the Swetat connection.

Since the proper quantity and pressure of water provided by the WBWD via the Swetat connection is critically important for the citizens living in the eastern part of the City, I would like to request WBWD do the following:

- Identify the exact location of the leakage and fix it as soon as possible, along the WBWD transmission line between the Al-Jalameh connection and the Swetat connection;
- Give to the Jenin Municipality access to the WBWD SCADA system to check the flow at the connections of Al-Jalameh and Swetat, so that the Jenin Municipality can utilize the information for better water distribution inside the Municipality.

Your kind attention and quick arrangement would be highly appreciated.

Very truly yours,

Toshihiko Tamama

Deputy Chief Advisor

Project for Strengthening the Capacity of Water Service Management in Jenin Municipality

- CC: Dr. Mohamad Abu Ghali: Project Director /Mayor the Jenin Municipality
Mr. Abdulhadi Mohamad: Project Manager /Director of Water and Wastewater Department of Jenin Municipality
Mr. Samer Omari: Director of Financial Department of Jenin Municipality
Mr. Ramzi Jaffer: Head of Water Section of Jenin Municipality
Ms. Khreh Souqi: Deputy Project Manager /Water and Wastewater Department of Jenin Municipality
Ms. Mariko Chiba: Representative of JICA Palestine Office
Mr. Hirotaka Sato: Chief Advisor /Waterworks Planning Expert of JICA Expert Team

Attachment:

- (Appendix 1) Pressure Gauge at Swetat Connection;
(Appendix 2) Measured Water Pressure along 6" Line from Swetat to Al-Marrah Tank;
(Appendix 3) Leakage along 6" WBWD Line from Al-Jalameh to Swetat

Request for EOI announced by PWA (27th August 2019)



State of Palestine



West Bank Connection Points Ramallah and Jenin Water Supply Project.

CONSULTING SERVICES

Expressions of Interest

PWA/AFD/2019/035EOI-CTD

The Palestinian Water Authority (PWA) has received a financing from Agence Française de Développement ("AFD"), and intends to use part of the funds thereof for payments under the following project: West Bank Connection Points Ramallah and Jenin Water Supply Project. This project aims to upgrade two regional systems: North of Jenin and northwest of Ramallah (Abood area) in order to

1. Provide adequate, reliable and safe water supply with better storage capabilities to help overcome the deficit in the water supply that the area suffers due to undersized, old and deteriorated pipes.
2. Construct main bulk (regional) water systems that improve the management of water distribution systems in the two areas.

The description of the two systems are the following:

- Northwest Ramallah area: the project is located in the northwest area of Ramallah Governorate covering Bani Zeid, An Nabi Saleh, Qarawet Bani Zeid, Kafr Ein, Deir as Sudan, Ajul, Atara, Birzeit and Bani Zeid Al Sharqiyya, Deir Abu Mash'al, Abood, Um Safa, Deir Nidham and Rawabi, Salfit, Kafr Ad Dik, Yasouf, Bruqin, Iskaka, Ammurya and Lubban Al Sharqiyya. A new connection point with Mekorot Company close to Abood will be established to supply this area with about 25 000 m³/day. The project will consist of constructing around 45 km pipeline with diameters ranging from 100 mm to 600 mm, constructing two balancing tanks and one regional reservoir as well as constructing five booster stations.
- Jenin area: the project is located in the northern part of the West Bank (Jenin Governorate) covering Jenin city, Jenin Camp, Jenin Industrial Zone, Beit Qad, Deir Abu Deif, Faqu'a, Jalbun, Deir Ghazaleh, Arrana, Arabuna, Wadi Dabi, Burqin, Al Jalameh, Qabatya and Al Shuhada. This area will be supplied through two connection points (receiving water from the Israeli side) at Al Jalama and Salem with an approximate total quantity of 15 000 m³/day. The project will consist of constructing around 25 km distribution and transmission pipelines with diameters ranging from 200 mm to 600 mm, constructing one regional reservoir and three booster stations.

The Services of the consultant shall consist of the following items:

- For Ramallah, the detailed design has already been realized, but some changes in the scope of the project were requested by PWA. The Consultant will have to check and

update these documents including the modification made in the scope of work. The consultant will also have to review, update and upgrade the ESIA and to prepare the tender documents for construction and assist PWA during the Tender period.

- For Jenin, a design study was started but unfortunately stopped at 30% of progress. So, on this area, the consultant will have to realize the needed studies as Preliminary Design, Detailed Design; Environmental and Social Impact Assessment (ESIA), and the Tender Documents.
- For both projects, Ramallah and Jenin, the Consultant will be in charge of the supervision of the works.

The consultant's assignment has been separated in three phases:

- Phase 1 - Firm part:

For Ramallah: Review, update and finalization of the Detailed Design, Tender documents and the PWA's assistance during the tender period, update and completion of the ESIA

For Jenin: The Preliminary design, Additional Topographical and Geotechnical surveys, Detailed Design, update and completion of ESIA report and Tender documents.

- Phase 2 - 1st Conditional part:

The supervision of Works for Ramallah and the PWA's Assistance during the tender period for Jenin.

- Phase 3 - 2nd Conditional Part:

The supervision of works for Jenin

The Palestinian Water Authority (PWA) hereby invites Applicants to show their interest in delivering the Services described above.

This Request for Expressions of Interest is open to: Consulting firms.

Eligibility criteria to AFD financing are specified in sub-clause 1.3 of the "Procurement Guidelines for AFD-Financed Contracts in Foreign Countries", available online on AFD's website: <http://www.afd.fr>.

The Applicant shall submit only one application, either in its own name or as a member of a Joint Venture (JV). If an Applicant (including any JV member) submits or participates in more than one application, those applications shall be all rejected. However, the same Subconsultant may participate in several applications.

If the Applicant is a JV, the expression of interest shall include:

- a copy of the JV Agreement entered into by all members,

Or

- a letter of intent to execute a JV Agreement, signed by all members together with a copy of the Agreement proposal,

In the absence of this document, the other members will be considered as Subconsultants.

Experiences and qualifications of Subconsultants are not taken into account in the evaluation of the applications.

Interested Applicants must provide information evidencing that they are qualified and experienced to perform those Services. For that purpose, documented evidence of recent and

SOLUTION THROUGH DSIP CASE #4

INCREASE THE PRODUCTION OF AL-SA'ADEH WELL

Problem

Water quantity currently produced at Al Sa'adeh well was 100 m³/hour in June 2019, which is far below the 150 m³/hour required from the contract between JM and Al-Wael.

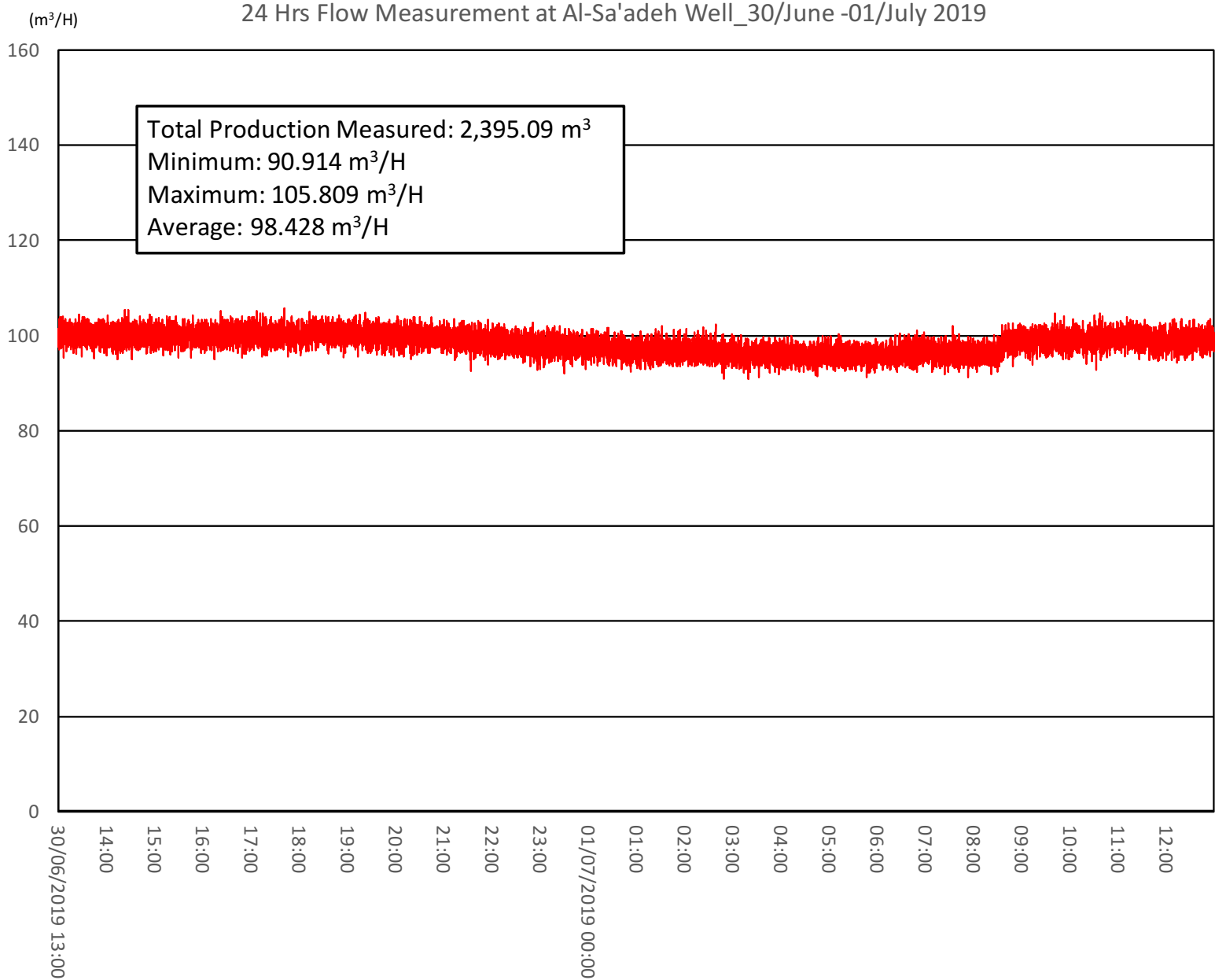
Solution

JET suggested solutions in the letter to Mayor on 3rd July 2019 and proposed to change the payment method of JM to Al-Wael from lump sum to produced volume basis.

Result

Al-Wael replaced the submersible pump with new one, after JM paid a part of its payables; Production has been increased.

Flow Measurement at Al-Sa'adeh Well (30th June – 1st July 2019)



Letter from JET to JM Mayor (3rd July 2019)



مشروع تحسين إدارة المياه في بلدية جنين



Project for Strengthening the Capacity of Water Service Management in Jenin Municipality

Date: July 3rd, 2019
Ref. No. JeninJET_02-019

التاريخ: 3.7.2019
المرجعية: فريق خبراء جايبكا_2_019

حضرة د. محمد ابو غالي المحترم
مدير المشروع التوجيهي
رئيس بلدية جنين

الموضوع: حالة إنتاجية بئر السعادة

تحية طيبة وبعد

بالموازاة مع تطوير خطة تحسين التزود بالمياه، لقد قمنا بقياس إنتاجية بئر السعادة الحالية وهي 100 متر مكعب/الساعة في شهر 6/2019 وهذه الإنتاجية أقل بكثير من الإنتاجية المطلوبة والمتعاقد عليها ما بين شركة الوائل و بلدية جنين والتي تبلغ 150 متر مكعب/الساعة.

و بسبب هذه الإنتاجية الحالية للبئر سنؤدي إلى نقص في التزود بالمياه في مناطق كثيرة في منطقة الخدمة لبلدية جنين، لذلك أود أن أنصحكم بالحلول الآتية:

- أن يطلب من شركة الوائل بتقديم تقرير في آلية رفع إنتاجية البئر إلى الإنتاجية المتعاقد عليها
- أن يتم توظيف شركة ثالثة لتشخيص القدرة التشغيلية للبئر وتحديد المشاكل إن وجدت، على سبيل المثال فحص الانسداد الحاصل في المصفاة الموجودة داخل البئر وذلك بإدخال كاميرا خاصة للفحص (bore hole camera)

تعاونكم المعتاد وتتسابقكم السريع سيكون موضع تقدير كبير.
المخلص لكم،

T. Tamama

توشي هيكو تاماما
نائب مدير المشروع
مشروع تحسين إدارة المياه في بلدية جنين

نسخة إلى:

السيد عبد الهادي محمد: مدير المشروع/مدير دائرة المياه والصرف الصحي
السيد سامر العمري: مدير الدائرة المالية
السيد رمزي جعفر: رئيس قسم المياه
السيدة ماريكو جيبا: ممثلة مكتب جايبكا/فلسطين
السيد ساتو هيروتاكا: رئيس خبراء فريق جايبكا/خبير تخطيط أعمال المياه
مرفق: نتيجة فحص إنتاجية بئر السعادة

Dr. Mohamad Abu Ghali
Project Director
The Mayor of Jenin Municipality

Subject: Water Production Status from Al-Sa'adeh Well

Dear Sir,

In line with the development of the District Water Supply Improvement Plan (DSIP), we measured the water quantity currently produced from the Al Sa'adeh well to be 100 m³/hour in June 2019, which is far below the 150 m³/hour required from the contract between the Jenin Municipality and the Al-Wael Company.

Since this causes /will cause a considerable shortage of water in the vast areas of the Municipality, I would like to recommend you take the following countermeasures:

- To request that the Al-Wael Company submit a report on how to increase the production of the well to the agreed level;
- To hire a third-party company to diagnose the functionality of the well and to identify the problems if any, of which scope may include inspecting the clogged status of the well screen by using a bore-hole camera.

Your kind attention and usual and quick arrangement would be highly appreciated.

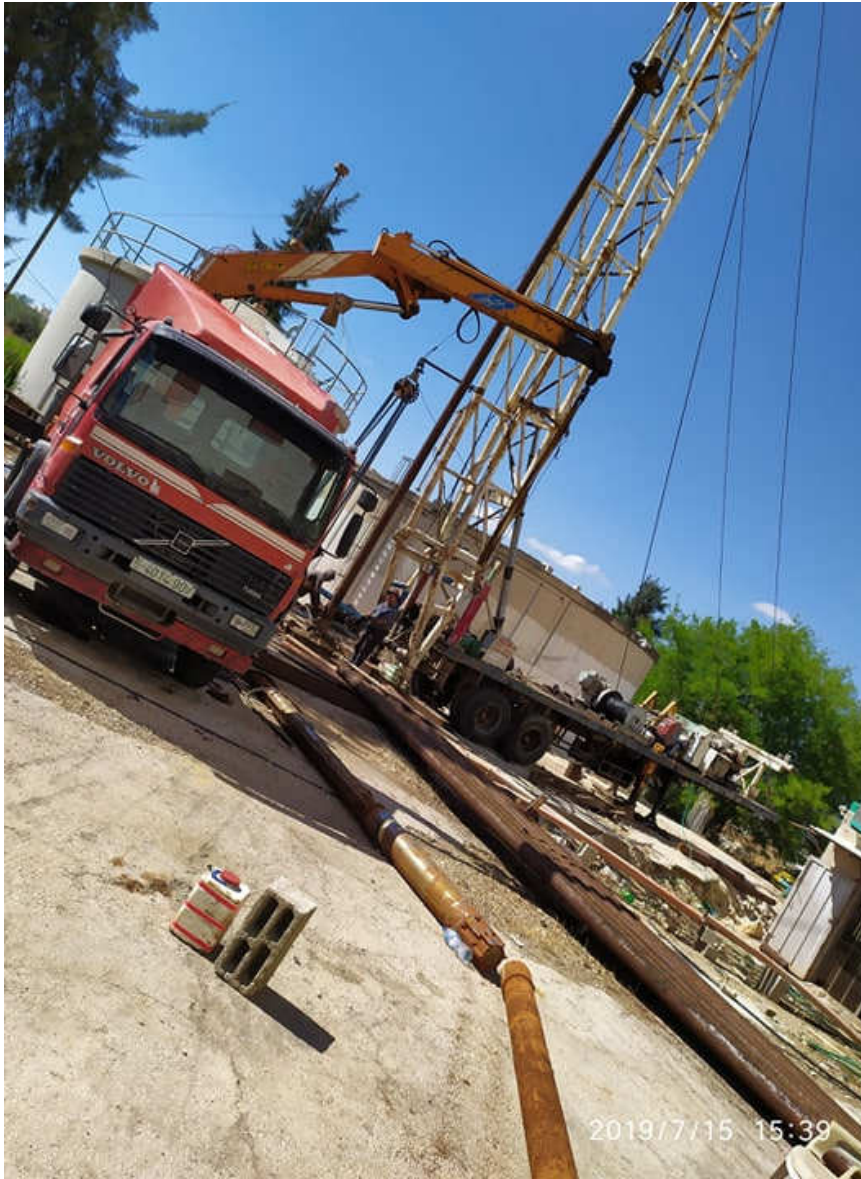
Very truly yours,

Toshihiko Tamama
Deputy Chief Advisor
Project for Strengthening the Capacity of Water Service Management in Jenin Municipality

CC: Mr. Abdulhadi Mohamad: Project Manager /Director of Water and Wastewater Department of Jenin Municipality
Mr. Samer Omari: Director of Financial Department of Jenin Municipality
Mr. Ramzi Jaffer: Head of Water Section of Jenin Municipality
Ms. Mariko Chiba: Representative of JICA Palestine Office
Mr. Hirotaka Sato: Chief Advisor /Waterworks Planning Expert of JICA Expert Team

Attachment: Measurement result of water production from the Al-Sa'adeh Well.

Replacement of Submersible Pump (15th – 18th July 2019)



Flow Measurement at Al-Sa'adeh Well (20th July – 21st July 2019)

After replacement of submersible pump: flow still not stable during this period.



SOLUTION THROUGH DSIP CASE #5

MODIFY SUPPLY ZONE BOUNDARY OF AL BASATEEN NORTH & AL BASATEEN HAIFA STREET

Problem

Low pressure and shortage of water supply in northern Al-Basateen (western edge of Al Basateen-1(North) near Al-Dakhilia roundabout).

Solution

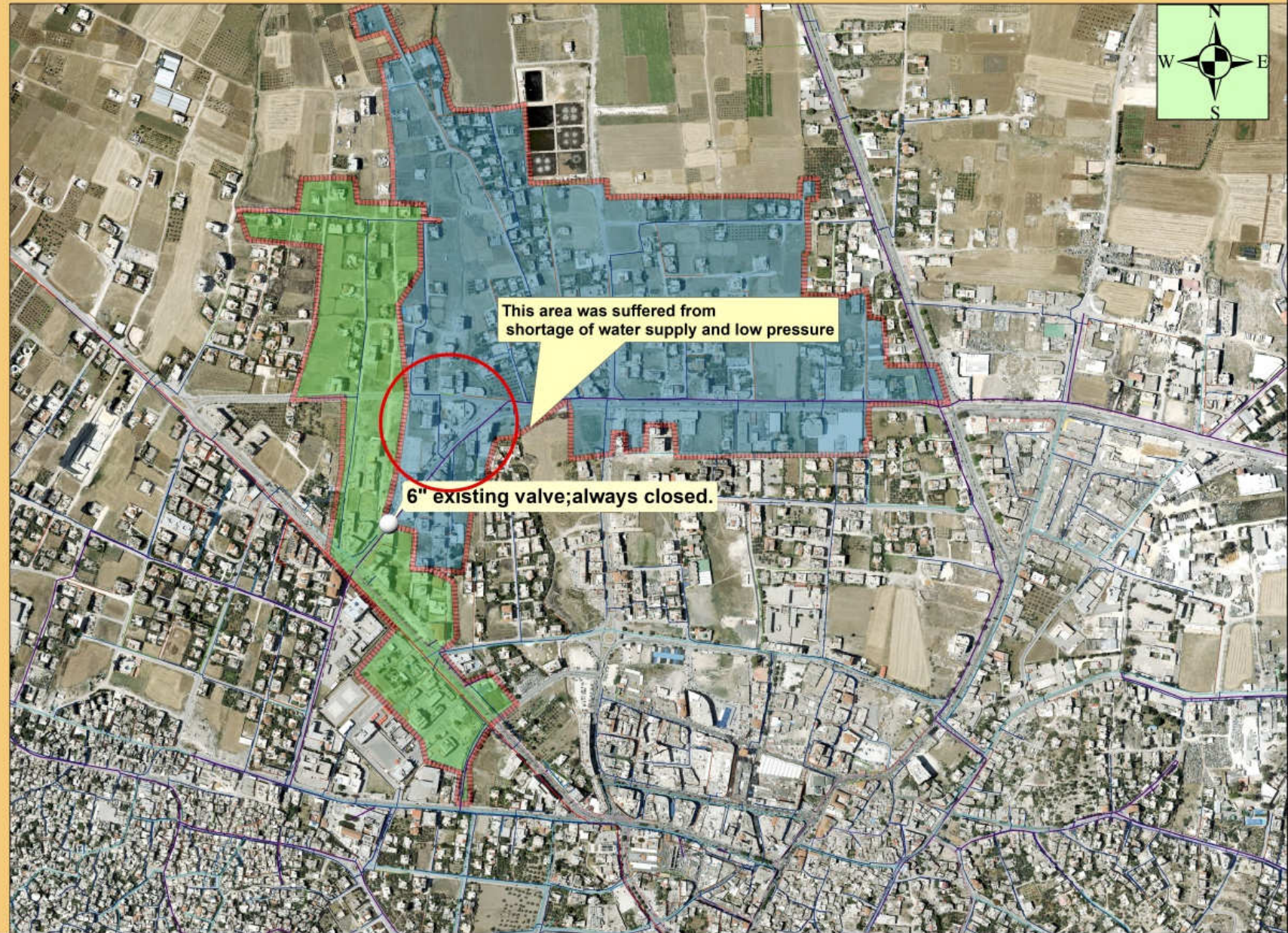
Changed the status of related valve (from permanent closure to permanently being opened) and installed a new valve in order to improve the water supply.

Result

Supplied water quantity & pressure has been drastically improved in Al-Basateen-1 (North).

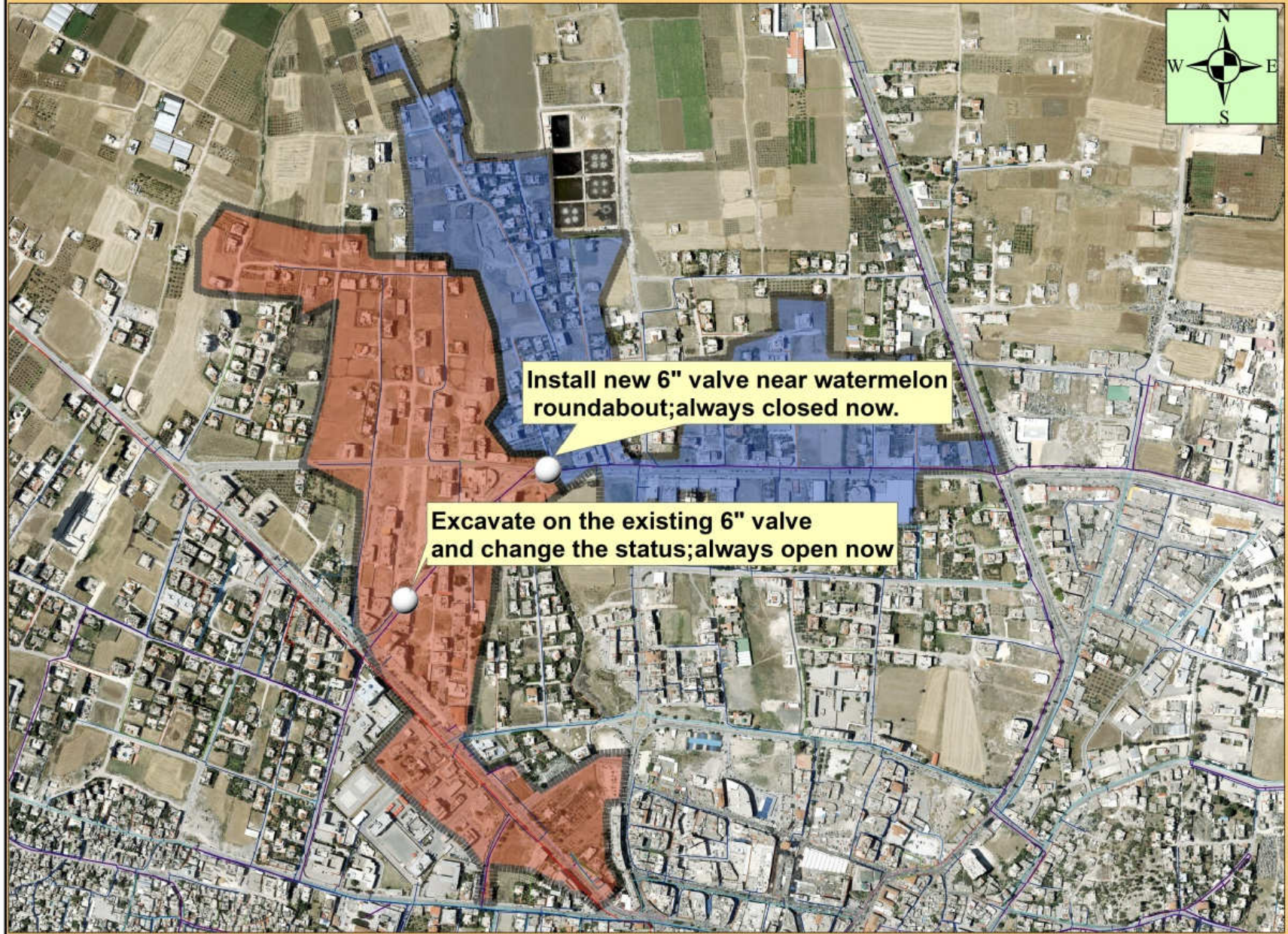
Previous Supply Zones in Northern Al-Basateen area

Northern Al-Basateen & Al-Basateen Haifa st/Previous supply zones



Supply Zones after Modification

Northern Area&Al-Basateen Haifa St. Supply Zones/Current Status



Steps for Supply Zone Modification

- Excavated to expose the existing 6" gate valve near Al-Dakhilia roundabout (always closed) and changed its status to be always opened, in order to supply water from Al-Mechanic well to this area.

(The existing 6" valve was buried and closed, which did not allow Northern Al-Basateen zone to be supplied from Al-Mechanic well together with Al-Basateen Haifa St. zone. Note that the latter zone is featured by its better water supply than the part of Northern Al-Basateen zone.)



- Installed new 6" gate valve near Watermelon roundabout in order to modify two supply zones, so that Northern Al-Basateen is supplied from Al-Mechanic well.

Installation of New 6" Valve



SOLUTION THROUGH DSIP CASE #6

SEPARATE THE DISTRIBUTION ZONE OF NORTHERN AL-BASATEEN
FROM AL-NASREH STREET ZONE

Problem

Low water pressure and shortage of water supply at Al-Basateen-1 (North) Subzone.

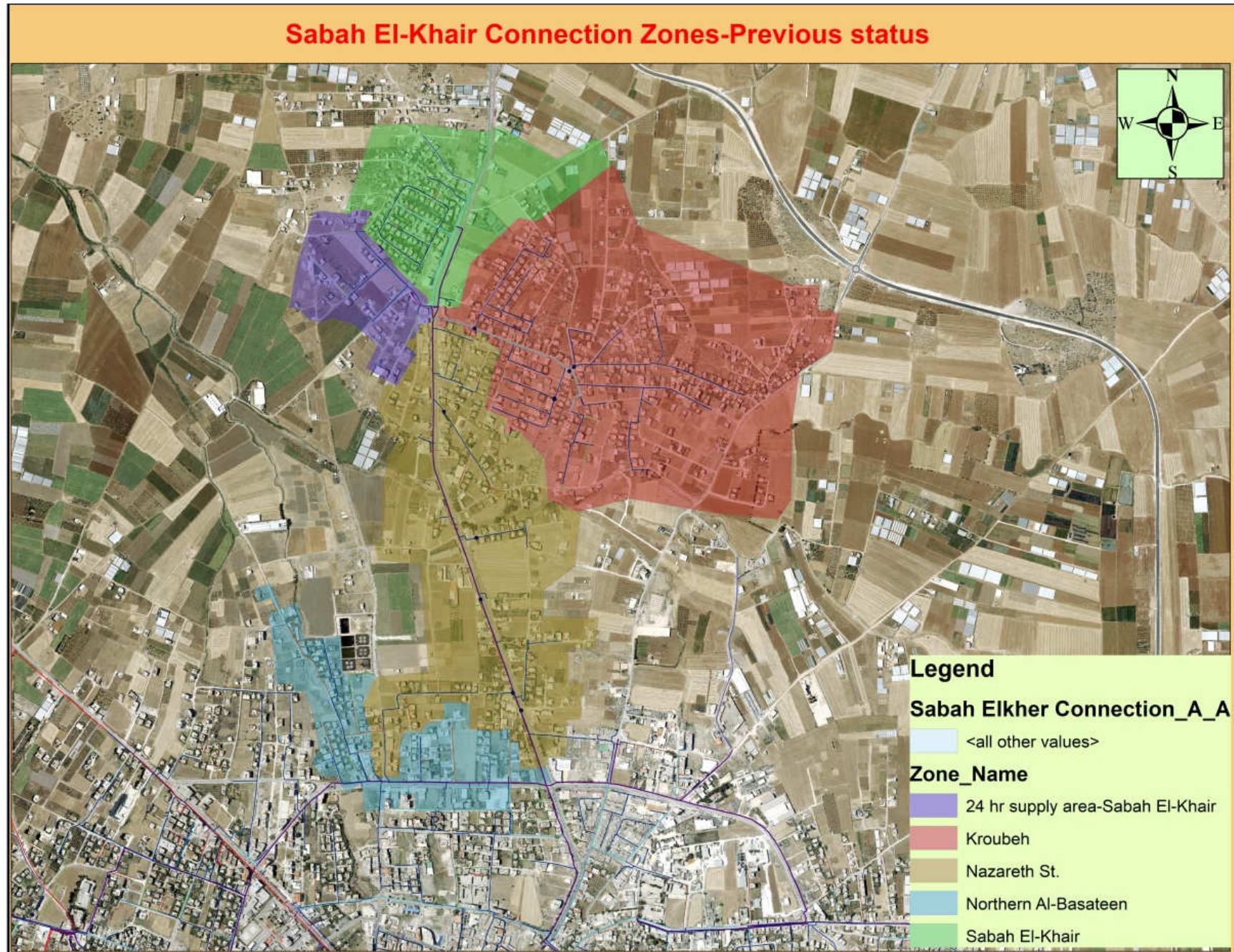
Solution

Partly separated Al-Basateen-1 (North) from Al-Nasreh St. Zone by installing 4 new 2" valves in the 4 branches along Al-Nasreh St.

Result

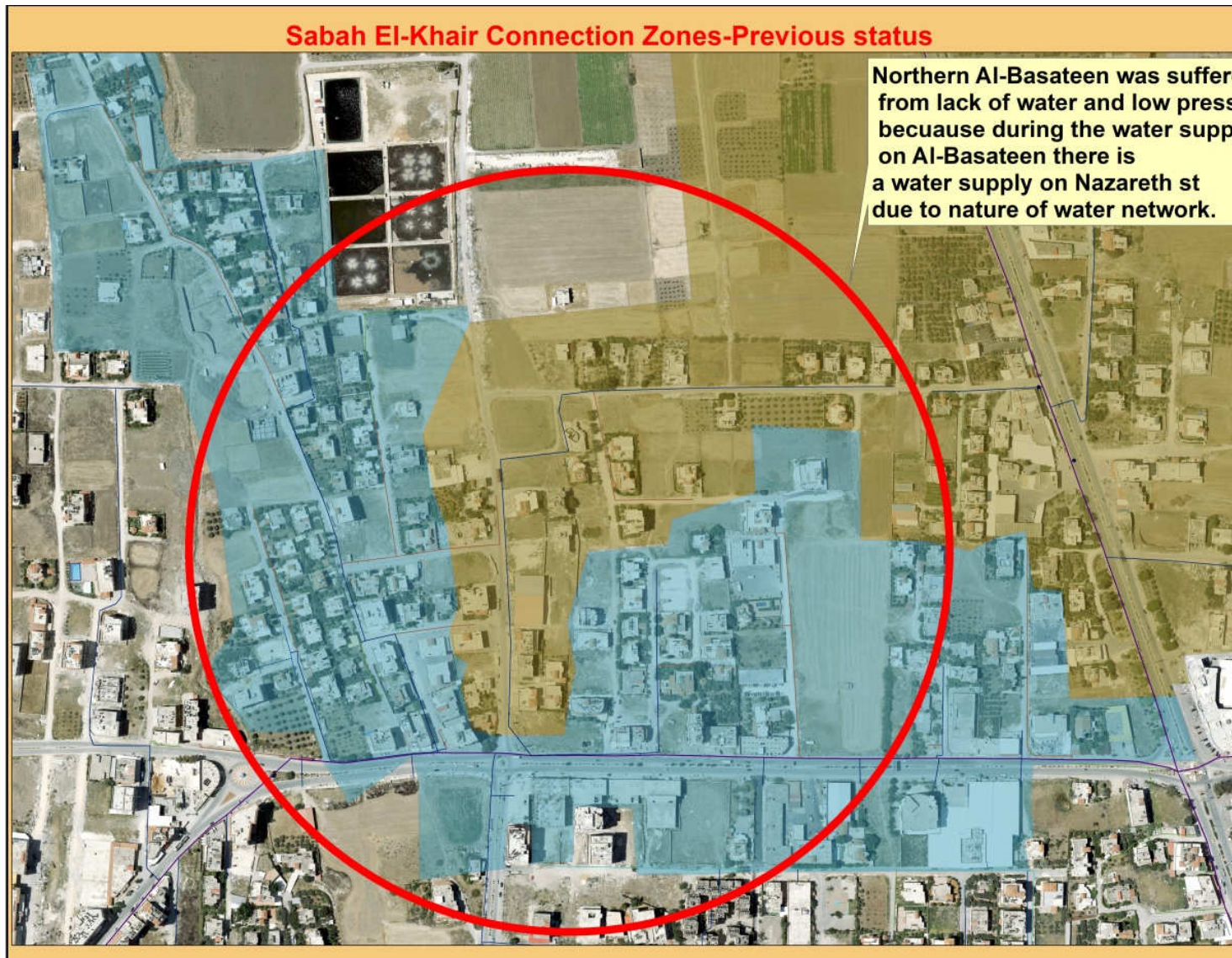
Supplied water quantity & pressure has been drastically improved in Al-Basateen-1 (North).

Supply Zone related to Sabah el Khair Connection



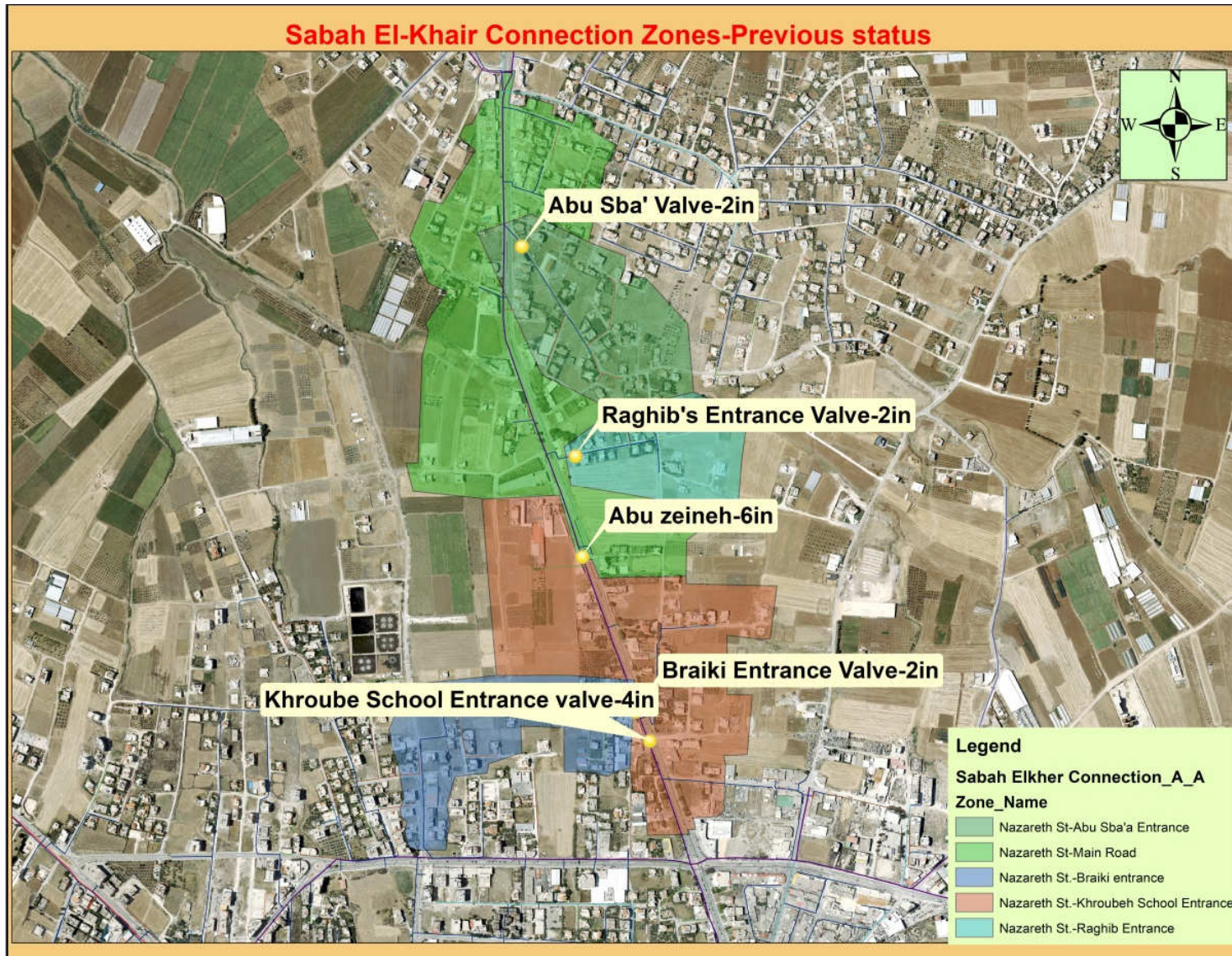
Al-Basateen-1 (North): Previous Water Supply Status

Northern Al-Basateen area suffered from lack of water supply and low pressure due to simultaneous operation to supply to both Al-Basateen and Al-Nasreh St.

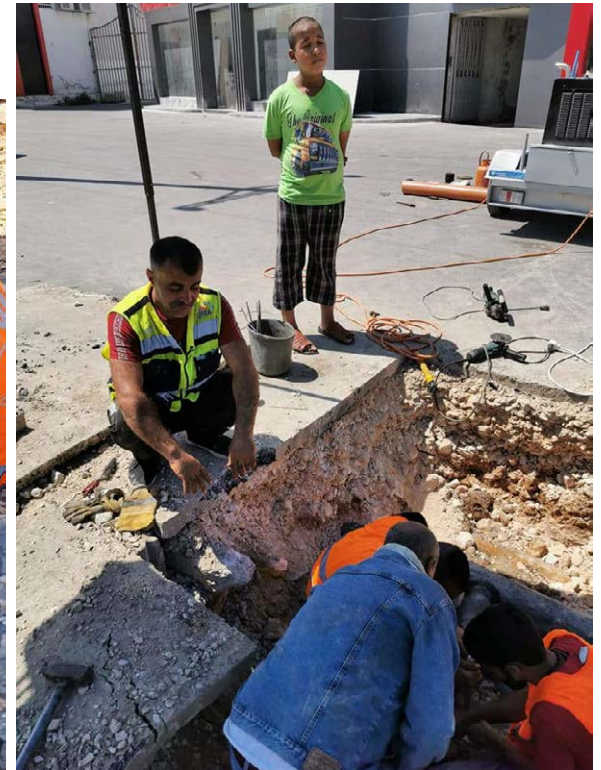


Al-Basateen-1 (North): Improvement Measures

Installed 4 new 2" valves at the 4 branches of Al-Nasreh St. in order to close them when water is supplied to Northern Al-Basateen.



Installation of new valves (2" & 4") along Al-Nasreh St.



SOLUTION THROUGH DSIP CASE #7

UTILIZE ABU HATAB WELL AS ADDITIONAL WATER SOURCE FOR
EASTERN AREA (DISTRICT 2)

Problem

Low water pressure and shortage of water supply in Eastern Housing, Al Ibrahimian and Almanieh.

Solution

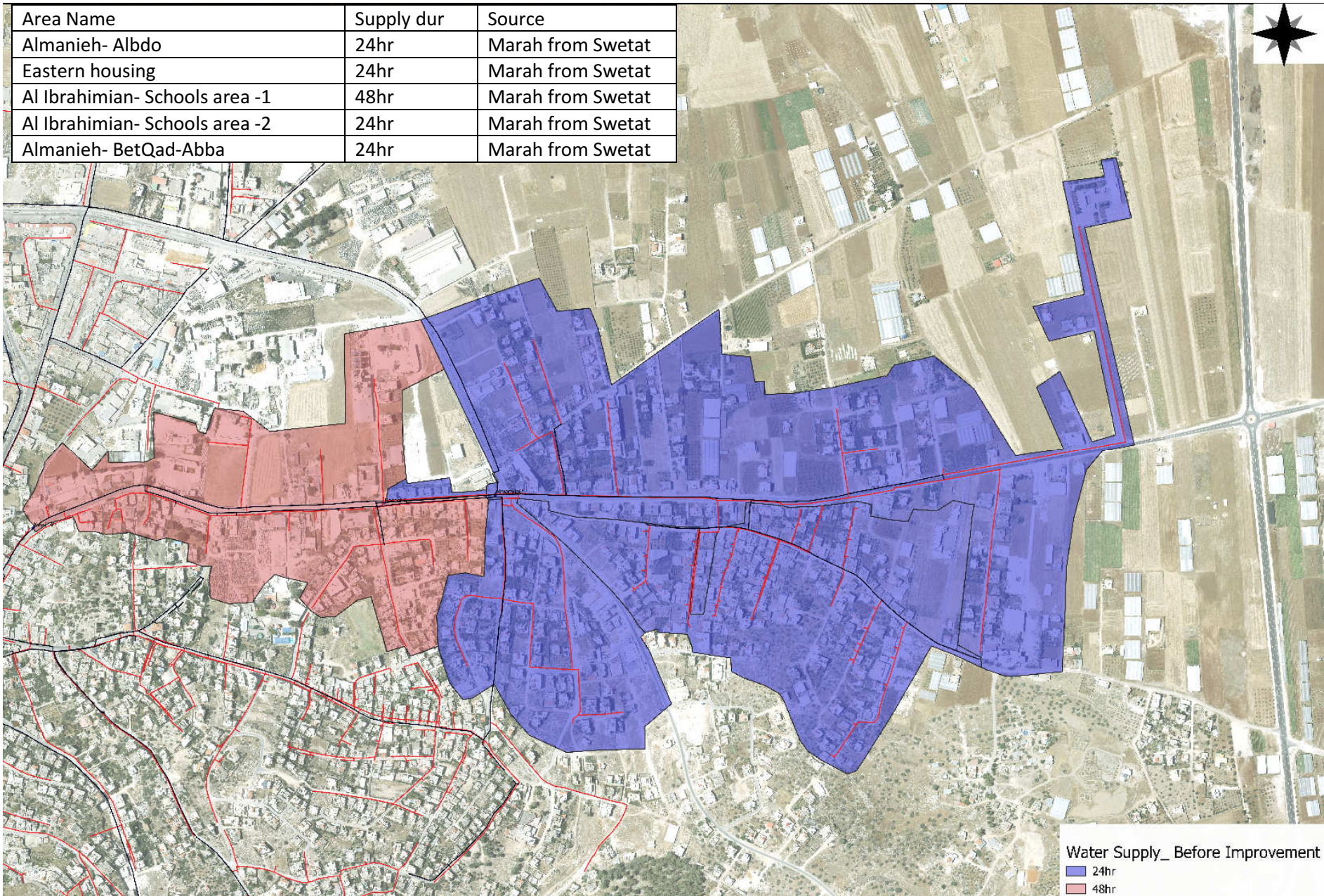
Made contract with private well Abu Hatab in mid-September 2019 and modified the distribution zones and schedule, in order to secure water in eastern area.

Result

The water supply has been drastically improved in eastern area.

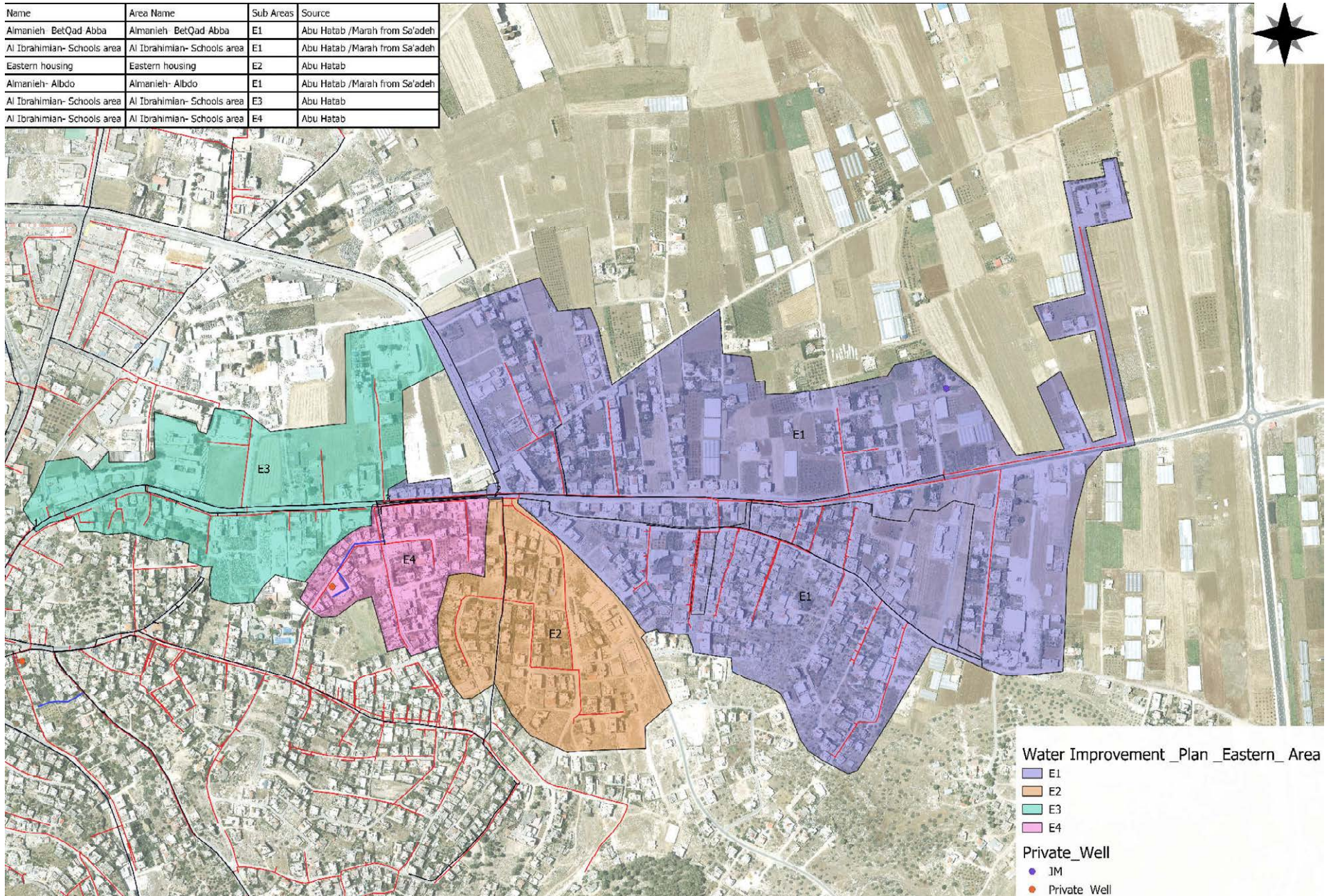
Previous Distribution Zones in Eastern Area

Area Name	Supply dur	Source
Almanieh- Albdo	24hr	Marah from Swetat
Eastern housing	24hr	Marah from Swetat
Al Ibrahimian- Schools area -1	48hr	Marah from Swetat
Al Ibrahimian- Schools area -2	24hr	Marah from Swetat
Almanieh- BetQad-Abba	24hr	Marah from Swetat

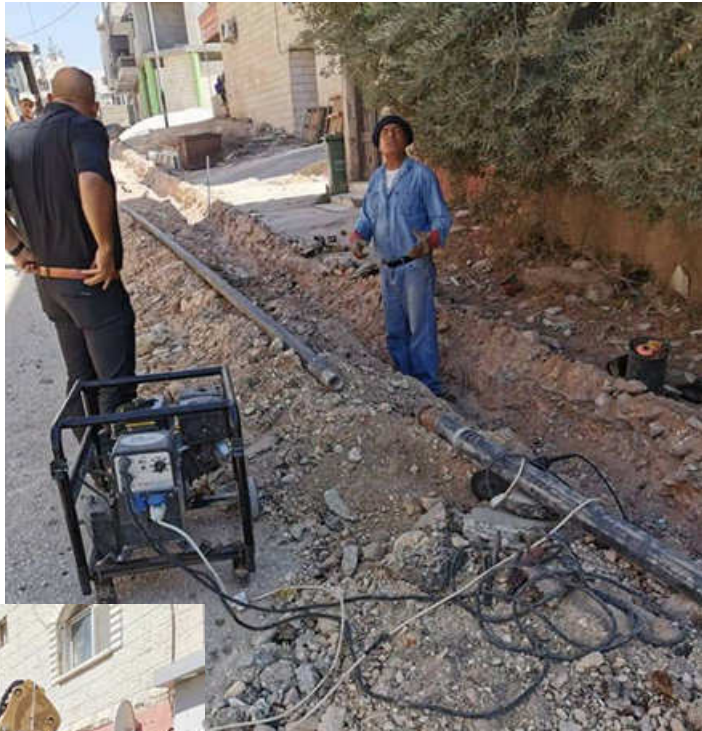


Modified Distribution Zones after Utilizing Abu Hatab Well

Name	Area Name	Sub Areas	Source
Almanieh- BetQad Abba	Almanieh- BetQad Abba	E1	Abu Hatab /Marah from Sa'adeh
Al Ibrahimian- Schools area	Al Ibrahimian- Schools area	E1	Abu Hatab /Marah from Sa'adeh
Eastern housing	Eastern housing	E2	Abu Hatab
Almanieh- Albdo	Almanieh- Albdo	E1	Abu Hatab /Marah from Sa'adeh
Al Ibrahimian- Schools area	Al Ibrahimian- Schools area	E3	Abu Hatab
Al Ibrahimian- Schools area	Al Ibrahimian- Schools area	E4	Abu Hatab



Installation of Booster Pump and Linking Pipeline to Existing Network



SOLUTION THROUGH DSIP CASE #8

UTILIZE ABU SAMER WELL AS ADDITIONAL WATER SOURCE FOR PA3

Problem

Low water pressure and shortage of water supply in Upper Halima Sa'di and Upper Sharkeh.

Solution

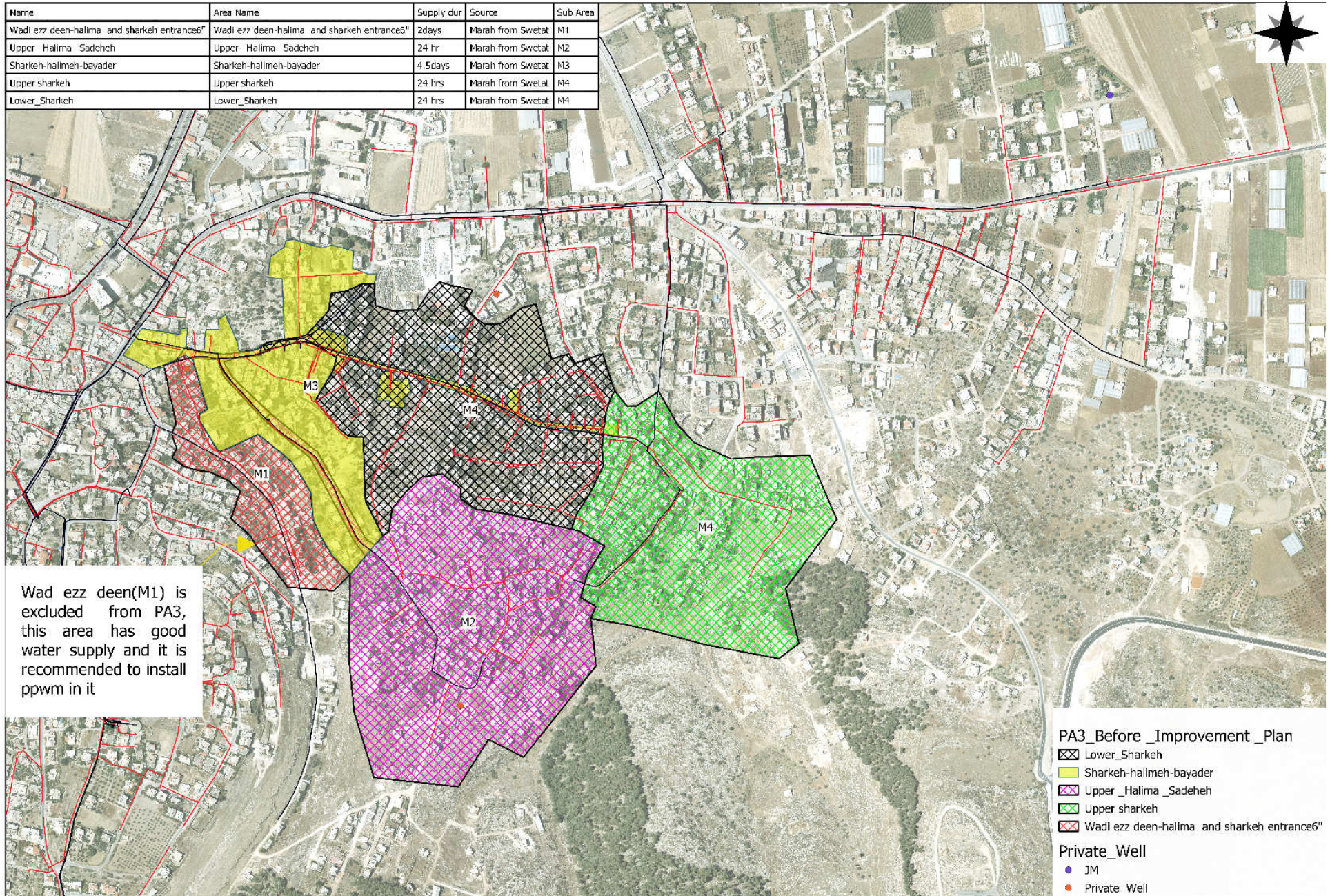
Made contract with private well Abu Samer in mid-September 2019 and modified the distribution zones and schedule, in order to secure water in Halima Sa'adi and Sharkeh areas.

Result

Water supply has been drastically improved in these areas.

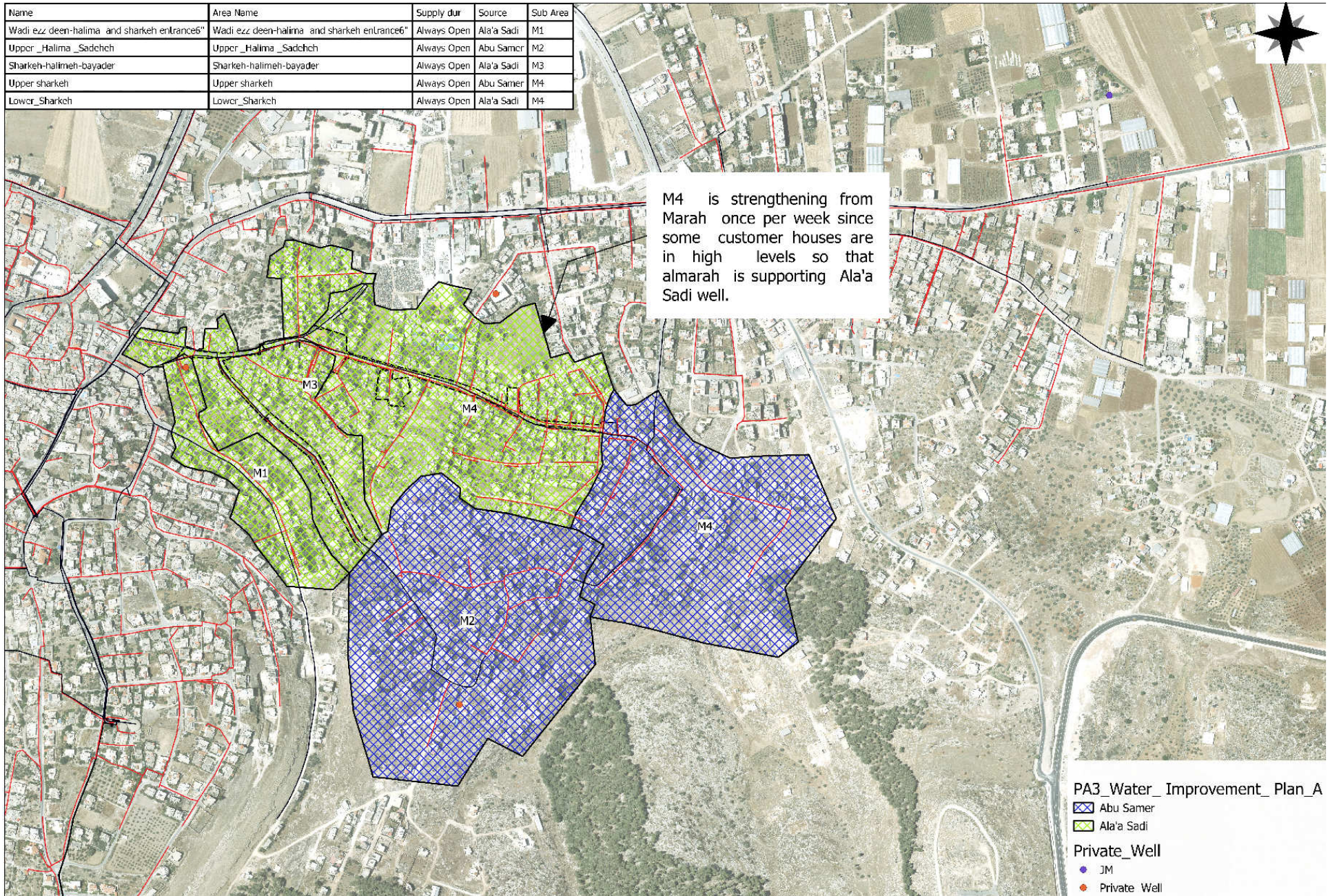
Previous Distribution Zones in PA3

Name	Area Name	Supply dur	Source	Sub Area
Wadi ezz deen-halima and sharkeh entrance6"	Wadi ezz deen-halima and sharkeh entrance6"	2days	Marah from Swetat	M1
Upper Halima Sadchch	Upper Halima Sadchch	24 hr	Marah from Swetat	M2
Sharkeh-halimeh-bayader	Sharkeh-halimeh-bayader	4,5days	Marah from Swetat	M3
Upper sharkeh	Upper sharkeh	24 hrs	Marah from Swetat	M4
Lower_Sharkeh	Lower_Sharkeh	24 hrs	Marah from Swetat	M4



Modified Supply/Distribution Zones after Utilizing Abu Samer Well

Name	Area Name	Supply dur	Source	Sub Area
Wadi ezz deen-halima and sharkeh entrance6"	Wadi ezz deen-halima and sharkeh entrance6"	Always Open	Ala'a Sadi	M1
Uppor _Halima _Sadchch	Uppor _Halima _Sadchch	Always Open	Abu Samer	M2
Sharkeh-halimeh-bayader	Sharkeh-halimeh-bayader	Always Open	Ala'a Sadi	M3
Upper sharkeh	Upper sharkeh	Always Open	Abu Samer	M4
Lowor _Sharkeh	Lowor _Sharkeh	Always Open	Ala'a Sadi	M4



SOLUTION THROUGH DSIP CASE #9

CHANGE SUPPLY ZONE OF AL-BATAL RAMP

Problem

Low water pressure and shortage of water supply at Al-Batal Ramp (part of Nablus St.)

Solution

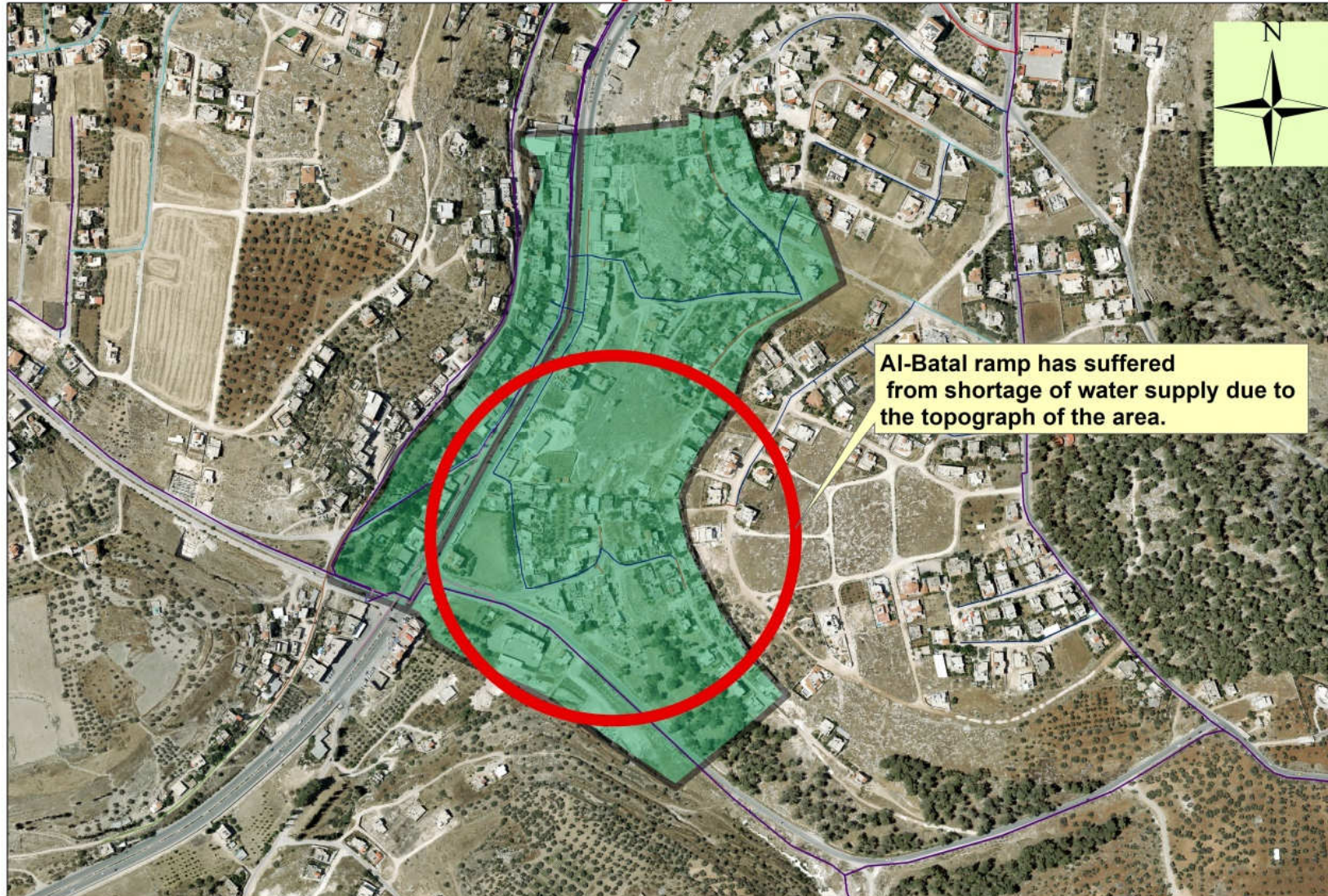
To install new 2" pipeline from the 6" pipeline which comes from Bala'ma Well

Result

Still to be implemented.

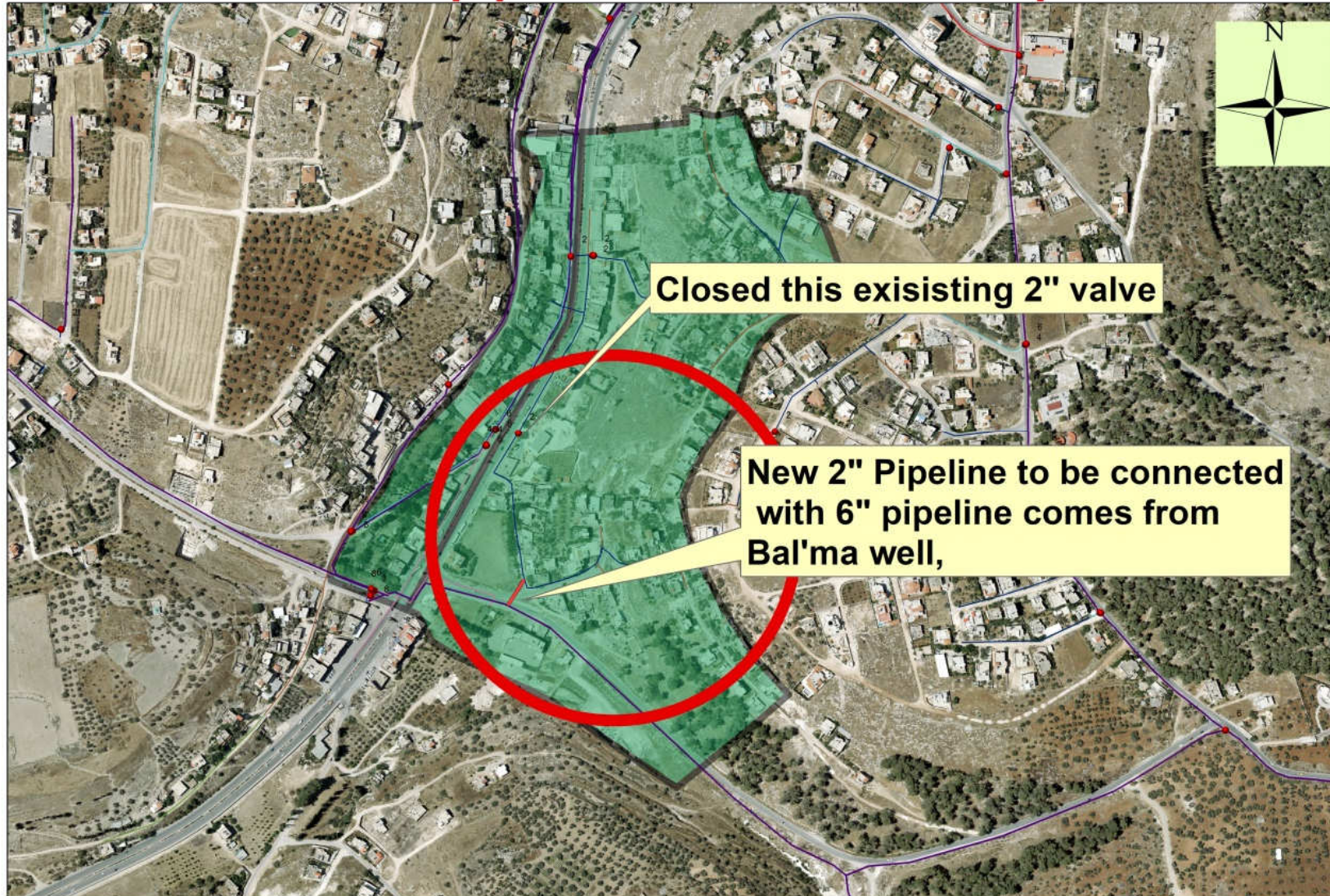
Previous Supply Zone in Al-Batal Ramp (Abu Arab Well via Sanouri PS)

Al-Batal Ramp-part of Nablus st.



Change Supply Zone of Al-Batal Ramp to Bala'ma Well

Al-Batal Ramp-part of Nablus st-Future planned



別冊資料 CD 3.3

**Action Plan (Updated) May 2022 for Terminal
Evaluation – English Version**

This report indicates the action plan to show the road map on how to achieve all target values of “Strengthening the Capacity of Water Service Management in Jenin Municipality” Project and complete the remaining activities before the end of the project.

Action Plan (Updated 1)

Prepared By: Eng. Khairia Souqia
Assted by : JET

1. Executive Summary

The project of “Strengthening the Capacity of Water Service Management in Jenin Municipality” aims to improve the water service provided by JM to the customers through several aspects, values and indicators. The overall goal of this project is to improve water service in JM, while the project purpose is to strengthen the water service management capacity.

This project has five main outputs:

- Structure of NRW reduction activities and strengthening bill collection of JM is established.
- Capacity to formulate plan for water service management of JM is strengthened.
- NRW reduction capacity of JM is strengthened.
- Direction for improvements of bill collection of JM is presented.
- Project outputs and knowledge are shared among other water service provide.

This project started in September 2017, and it was supposed to end by the end of August 2020; the project was extended two times in order to achieve the outputs of the project 100%.

The first extension was till the end of August 2021, and the second extension is set to be ended by the end of Feb 2022. The first extension of the project was due to COVID-19 pandemic, while the second extension was due to the delay of the 4350 PPWMMs Delivery and to achieve the target of NRW in PA2.

The Plan provides the strategy that will be implemented to tackle the unachieved targets, besides setting the installation plan for the 4350 PPWMMs.

The unachieved activities are listed as follow:

- From output 3: NRW management measures including rectification of Illegal connections, zero consumption survey in Pilot Areas, especially in PA2, NRW rollout plan including DMA plan for the entire city and start of establishment of priority DMAs.
- From output 4: PPWMM installation rejected cases in PAs, 4350 PPWMM delivery and start installation.

Actions have been developed for each activity, with particular focus on how to achieve the targets and OVIs, taken into account the delay of each activity and the estimated time to achieve the goals 100%.

2. Introduction

Jenin Municipality located in the northern part of the West Bank, Jenin Municipality provides an average of 10,000 m³/day of water to the population of 60,000, or about 9,500 households. JM produces the water from its own wells (Al Saadeh, Al Mechanic, and Balama wells), some water is purchased from private wells within the Municipal boundary (Farathy, Alwaneh, Muamar Jarrar, and Alsa'di,), and some water is imported from Mekrot company via Al Jalameh connection and Al Swetat connection, and from West Bank Water Department (WBWD) via Abo Arab connection. Main water supply facilities include wells, pumping stations, transmission mains, reservoirs, tanks, distribution mains, and booster pumping stations.

The supply system is intermittent and cyclical. The cyclical is not 24hr supply. So, the supply schedule is not always the same and it may differ from one week to other. Consequently, most areas receive water once or twice a week for periods ranging from one to two days in the summer. While, in winter season, the supply time becomes longer as the demand for water decreases. In addition, some people use rain water for drinking purposes. The water supply is controlled by manually closing and opening the valves by water and waste water department (WWD) staff.

One of the reasons for high NRW in Jenin Municipality is aging of meters, where the percentage of meters older than 10 years is more than 50%, besides other reasons such as leakages, accurate meter reading in some areas and the illegal connections. Based on that, the project of "Strengthening the Capacity of Water Service Management" was implemented in JM. This project targeted three pilot areas (PA-1, PA-2 and PA3) as an initial stage.

During this project, the water supply condition has been improved, the NRW in PA1 and PA3 has been decreased, and the NRW for Jenin City has been slightly decreased. After replacement of 3200 meters the bill collection ration has been increased in the PAs and the entire city, beside of other activities such as collection campaigns and sms reminders.

3. Legislative Requirements

Changing community expectations has led to the development of a legislative framework of WWD that extends the focus and objectives of the department beyond the

maintenance of network only to include other outcomes such as strengthening the relationship between the customer and the department and increase trust and credibility. The progressive definition of roles and responsibilities has materially changed the obligations imposed upon service providers which is in that case WWD in JM.

The following legislation were set by the municipality in order to improve the services provided by WWD:

- Renewing the customer contract.
- Debt settlements with customers.
- Contracting with new 7 private wells to improve water supply conditions.
- Purchasing 1700 PPWMs
- Separate the WWD bank account from the other departments in JM.
- Contracting with Palpay.
- Collection Campaigns.
- Recruiting new staff for WWD.
- Adopt new ICT technologies.

4. Strategic Context

The Strategic Plan seeks to reduce NRW and increase bill collection ratio. To this end, WWD will set a new strategic plan to continue the activities of this project and to achieve lower percentage of NRW and higher bill collection ratio. This action plan is considered as a milestone to obtain a strategic plan for WWD for years 2022- 2025. Besides providing durable services by WWD.

5. Objective

The Action Plan objective is to achieve the uncompleted targets, and completion of installation process for 4350 PPWMs.

The Action Plan focuses on the project outputs as a whole, as well as OVIs, to identify remaining actions. Implementation and completion of this projects will contribute to the achievement of reduction targets of NRW and increment of bill collection ratio mainly. This will conduct the development and improvement in the services provided by WWD/JM and ensure the sustainability of the services.

The Action Plan will ensure WWD is well informed and effectively positioned to oversee development and endorsement of future services that will be implemented after the end of the project.

6. Analysis

6.1. Current Status

The yellow parts are remaining activities.

Activity	Progress and Achievement as of May 2022
1 Structure of NRW reduction activities and strengthening bill collection of Jenin Municipality is established.	
1-1 Assess current situations and identify issues regarding Jenin Municipality's water services.	Completed.
1-2 Revise the structure of Water and Wastewater Department to improve Jenin Municipality's water services	Completed and on-going.
1-3 Examine existing Management Information System (MIS) and identify necessary data for the Project activities.	Completed.
1-4 Measure the Baseline data.	Completed.
1-5 Install necessary bulk meters to measure accurate water quantity.	Completed and on-going measurement. Accuracy of all private well meters was checked and two meters were replaced due to low accuracy.
1-6 Measure accurate NRW ratio every month.	Completed and on-going. The reading areas have been redistributed among the meter readers, all areas of Jenin municipality are read every month now.
1-7 Measure and evaluate the End-line data and propose recommendations for further improvement.	Completed.
2 Capacity to formulate plan for water service management of Jenin Municipality is strengthened.	
2-1 Establish Water Service Management Task Force.	Completed.
2-2 Conduct trainings for corporate and financial management for water service operation and appropriate water tariff setting.	Completed.
2-3 Formulate mid and long-term water service operational business plans that include financial plans.	Completed.
2-4 Formulate an annual plan including the financial plan.	Completed.
2-5 Amendment for the water tariff is proposed	Completed. The revised water tariff was proposed in mid/long term business plan.
2-6 Improvement of financial and accounting rules and regulations for the Water and Wastewater Department is proposed.	Completed.

ACTION PLAN

Activity	Progress and Achievement as of May 2022
2-7 Publish annual report of water service.	Completed. The annual report of 2020 completed in April 2021 and published on the JM website.
3 NRW reduction capacity of Jenin Municipality is strengthened.	
3-1 Establish NRW reduction team and conduct NRW related trainings.	Completed.
3-2 Select three Pilot Areas.	Completed.
3-3 Prepare water distribution network drawings in Pilot Area 1, isolate an area hydraulically and install necessary bulk meters and gate valves.	Completed.
3-4 Conduct OJT on leak detection in Pilot Area 1 and assess current physical losses.	Completed
3-5 Assess current commercial losses (illegal connections and customer meter inaccuracy etc.) in Pilot Area 1.	Completed and on-going. Suspicious illegal connections were found by CDS. Customer meter inaccuracy test was done. Survey for illegal connections is being carried out by investigating zero consumption (suspicious) customers and stop-cock tests.
3-6 Conduct NRW reduction activities in Pilot Area 1.	Completed and on-going. Initial leak detection and repair was finished in PA1. Step test and stop-cock test have been implemented and the countermeasures are on-going. These tasks will continue so that NRW level reduces further and does not rebound.
3-7 Measure NRW ratio after the implementation in Pilot Area 1, then examine the cost effectiveness of activities and compile them into a report.	Completed. A report has been prepared.
3-8 Continue monitoring NRW ratio at Pilot Area 1 and maintain achieved NRW ratios.	Monitoring NRW ratio in PA1 continues. The NRW team is trying to reduce NRW ratio and maintain reduced NRW level by monitoring NRW ratio by sub-areas of PA1.
3-9 Implement activities of 3.3-3.8 in Pilot Area 2 and 3.	All preparatory works have been completed in both PA2 and PA3, and NRW countermeasures are ongoing. A new private source was added in PA2 which caused flow direction changes and one of the mechanical meters and a boundary valve did not work properly. So the meter was replaced after which regular monitoring of NRW resumed. However, NRW in PA2 is still very high and intensive countermeasures are essential to continue in this PA.
3-10 Review Pilot Projects, then formulate cost effective NRW reduction roll-out plan for Jenin Municipality.	In progress. Initial steps of rollout plan; a zoning plan have been completed. The remaining works are progressing.
3-11 Compile NRW reduction methodology and usage of leak detection equipment and tools into manuals.	Completed. NRW management (comprehensive and basic version) and equipment usage manual (standard and simplified version)

ACTION PLAN

Activity		Progress and Achievement as of May 2022
3-12	Prepare District Metered Area (DMA) plan for entire city	Draft DMA plan has been prepared, finalization is under progress.
3-13	Start implementation of DMA plan based on the plan prepared in 3-12.	Completed and on-going; all works completed in 2 DMAs and NRW measurement started.
4	Direction for improvement of water bill collection of Jenin Municipality is presented.	
4-1	Analyze details of current situation and issues regarding bill collection and finance of Water and Wastewater Department.	Completed. The details are given in BSR.
4-2	Conduct water user opinion survey on willingness to pay for water tariff and introductions of pre-paid meter.	Completed.
4-3	Based on activities of 4.1 and 4.2, review Jenin Municipality's water service and water tariff, and identify direction for customer meter replacements including the possibility of prepaid meter introductions.	Completed. Direction for customer meter replacements including the introduction of PPWM was proposed in 2nd JCC and decided.
4-4	Submit proposed revisions of rules and regulations of bill collection.	Completed.
4-5	Conduct public awareness raising activities for customer meter replacements in selected Pilot Areas.	Completed (Pre- installation door-to-door visits for public awareness).
	Replace customer meters in selected Pilot Areas.	Completed.
4-6	Replace in PA1	About 84.5% was completed and remaining are the rejected cases.
	Replace in PA2	About 80% was completed and remaining are the rejected cases.
	Replace in PA3	About 91.8% completed and remaining are the rejected cases.
4-7	Monitor bill collection ratios and customer satisfaction of Pilot Areas.	A) Completed (monitoring system and method). B) Completed post-Installation surveys
4-8	Analyze monitoring results and propose future direction for customer meter replacement.	Completed and on-going. Decision to procure 6500 PPWM in addition to 1850 numbers procured for three pilot areas is made by Jenin Municipality. Jenin Municipality started procurement of 1200 and 500 PPWM. On JM's request JICA is assisting to procure further 4,350 PPWMs. JM has prepared the installation plan.
4-9	Compile case studies about customer meter replacements.	Completed. The experience of other water service providers was studied, and the PPWM study report was compiled and presented in 2nd JCC. The case study report of PPWM introduction to Jenin Municipality was prepared.
4-10	Conduct the support activities in response to the COVID-19 emergency.	Completed and on-going of 4350 PPWM procurement.
4-11	Prepare prepaid water meter (PPWM) replacement plan for entire	Completed. Jenin Municipality had decided procurement of 6,050 PPWM and procured

ACTION PLAN

Activity	Progress and Achievement as of May 2022
city based on the results in Pilot Areas.	1700 PPWM and JICA is procuring 4,350 PPWM.
4-12 Start replacement customer meters with PPWM that Jenin Municipality purchases according to the plan prepared in 4.11.	Started. According to the plan, the installation begun for the PPWMs procured by JM.
5	Jenin Municipality's project outputs and knowledge are shared among other water service providers.
5-1 Share manuals produced by the Project among other water service providers.	Manuals have been developed. The manuals were shared with other water service provider.
5-2 Through the annual seminar, disseminate Project activities and lessons learnt.	The first, the second and the third seminars were held.

6.2. Targets not achieved and Action Plan

OVI		Achievement status
3-1	NRW ratios in Pilot Areas are lowered by 12% points compared with the Baseline.	Likely to be achieved
3-2	Leak detection activities are carried out regularly.	Likely to be achieved
3-3	Cost-effective NRW reduction activities are carried out.	Likely to be achieved

Area	NRW %				Activities	Person in charge	Implementation Period
	Baseline	Target	Sep2021	Current (Mar2022)			
PA1	57	45	46 (40.6 lowest in May 2021)	44.8	<ul style="list-style-type: none"> • Regular check of 24/7 supply area for any new leakage or illegal connection • Stop-cock test for Sub-area 4 (NST). • Zero-meter consumption survey. 	NRW Team Assisted by JET	• End of August
PA2	66 (revised)	54	59.5	62.2	<ul style="list-style-type: none"> • Confirmation of PA2 boundary. • Stop-cock test for the remaining visible sections. • Ground microphone survey • Zero-meter consumption survey 		• End of August
PA3	55	43	46	43.4	<ul style="list-style-type: none"> • Repeating the leakage detection survey for any visible failures. • Zero-meter consumption survey • Conduct stop-cock test. 		• End of August

ACTION PLAN

Entire city	60	57	57.3	57.06 (Jan2022)	<ul style="list-style-type: none"> • Replacement of inaccurate BM • Replacement of broken domestic meters, if PPWM is available • Zero-meter consumption survey • Rectification of illegal connection • Quick response for any leakage events 	WS Assisted by JET	• End of August
<ul style="list-style-type: none"> • Mr. Husam and Ms. Khairia are responsible for NRW Activities monitoring and reporting. 							

*Average reduction target in PAs is 12%.

6.3. Action Plan for Remaining Activities

Remaining activities	Activities to be made to complete	Person in charge	Implementation Period
1. Activities to reduce high NRW, especially in PA2	1. NRW management activities mentioned above.	NRWMD/WS	End of August
2. Cost effective NRW reduction roll-out plan	1. Preparing the plan	Mr. Husam, Ms. Khairia, Mr. Thapa and Mr. Abdullah	End of June 2022
3. Draft DMA Plan for Jenin City	1. Finalization of the Plan. 2. Continue NRW reduction activities for the remaining new DMAs.		
4. Start of implementation of roll-out plan	1. Restart of priority DMA construction after delivery of 4350 PPWM 2. Start CDS 3. Update customers information and GIS mapping 4. Update GIS database 5. Zero consumption 6. Illegal connection survey	NRWMD/WS	August 2022
5. Start replacement customer meters with 4350 PPWM	1. Delivery of 4,350 PPWM 2. Start CDS 3. Start DtD survey 4. Replace with new PPWM	CSS, PR and WS	August 2022

6.4. Deliverables and reports to be prepared

The following output documents which are to be prepared through the activities of the Project will be submitted.

Deliverables and reports	Progress	Person in charge	Deadline
1. Manual for NRW Reduction	Completed		

ACTION PLAN

(several versions are prepared in accordance to the level of the supposed users)			
2. Manual for Operating Leakage Detection Equipment (including simplified version)	Completed		
3. Report on Replacing Customer Water Meter (Case study report)	Completed.		
4. Report on Cost/Benefit Analysis of NRW Reduction Activities	Completed		
5. NRW Reduction Roll-Out Plan	Draft was prepared	Husam, Khiria Thapa, Harada, Abdullah,	End of June 2022
6. District Metered Area (DMA) plan for entire city	Finalization of the Plan		
7. Prepaid water meter (PPWM) replacement plan for entire city	Completed		
8. Customer service activity procedures	Completed		

別冊資料 CD 3.4

Job Descriptions

別冊資料 CD 3.4.1 English Version



PALESTINIAN WATER AUTHORITY

**THE PROJECT FOR STRENGTHENING THE CAPACITY OF WATER SERVICE MANAGEMENT IN
JENIN MUNICIPALITY**



CURRENT ORGANIZATION AND JOB DESCRIPTION

September 2022

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

TEC INTERNATIONAL CO., LTD.

PADECO CO., LTD.

Table of Contents

LIST OF ACRONYMS

1. Introduction	1
2. Job Descriptions	2
2.1 Director of WWD	2
2.2 Water Section	4
2.3 Studies & Project Section	10
2.4 Customer Service Section	14
2.5 Warehouse	23
2.6 Secretary	24
2.7 Public Service Center	25

LIST OF ACRONYMS

CSS	Customer Service Section
GIS	Geographical Information System
SPS	Studies & Project Section
WWD	Water and Wastewater Department (of JM)
WS	Water Section

1. Introduction

Current organization setup is as shown in Figure 1. There are two departments which are related to water supply business in Jenin Municipality: 1) Finance Department and 2) Water and Wastewater Department (WWD). Finance Department is responsible for entire financial management of Jenin Municipality. Concerning water supply business, he shall transact cash management of the payment from the customers and track the customers' debt of water bills. WWD is responsible for the entire management of water supply and wastewater from the viewpoint of operation and maintenance.

On the hands, the bill collection division of the Customer Service Section (CSS) has been under WSS. This division is responsible for not only for bill collection but also meter reading at this moment. For this reason, this section shall receive the orders from Finance department and CSS.

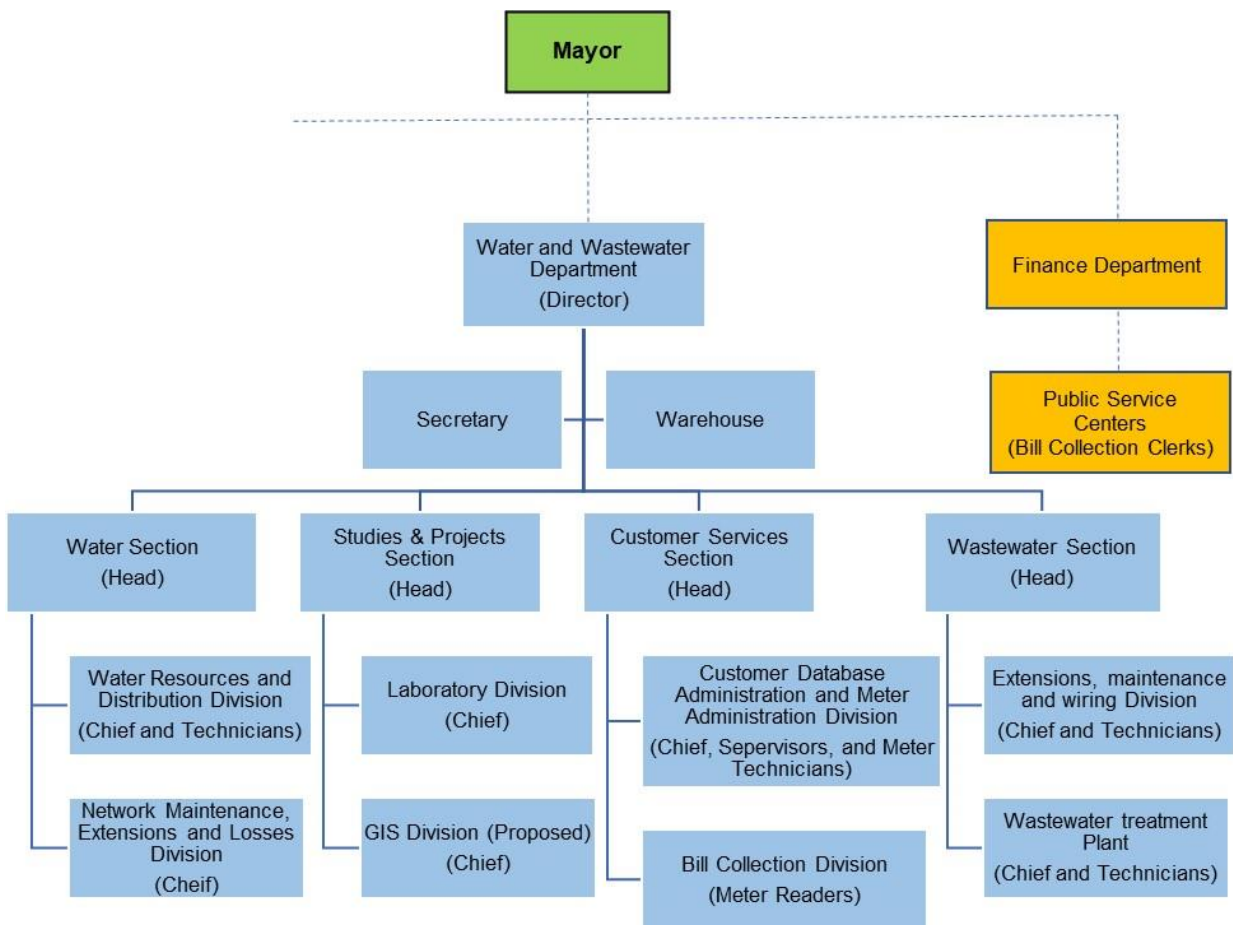


Fig.1 Current organizational setup

2. Job Descriptions

2.1 Director of WWD

Director of WWD

Job Title: Director of Water and Wastewater Department		
Department: WWD	Section:	Unit/Division:
Belongs to:	Municipality Director	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Management and follow-up for the activities of Water Section (WS), • Management and follow-up for the activities of Project, Planning, and Study Section (SPS), • Management and follow-up for the activities of Customer Service Section (CSS), • Management and follow-up for the activities of Wastewater Section (WWS), • Others. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Management and follow-up for the activities of WS	<ul style="list-style-type: none"> • Ensure safety and stable water supply to the entire water users in Jenin municipality, • Ensure the availability of equipment, materials, vehicles, and human resources necessary for achieving safety and stable water supply to the staff of Water section, • Supervise all the activities of WS from time to time and give instructions to them, • Check all the results of the activities and direct to rectify the work, if needed, • Check weekly water supply schedule for entire city prepared by WS and request to rectify, if needed, • Participate in weekly meeting of WS and give comments for their activities, 	
1.2 Management and follow-up for the activities of SPS	<ul style="list-style-type: none"> • Ensure the availability of equipment, materials, vehicles, and human resources necessary for achieving SPS's tasks, • Monitor the activities of SPS for project management and request to rectify, if needed, • Participate in significant meeting for project management and negotiate with the other party as a representative of WWD, • Monitor monthly change in Non-Revenue Water (NRW) ratio prepared by SPS and participate in making plan on preventive leakage control, • Monitor periodical change in chemical and biological tests for water supply prepared by SPS, 	
1.3 Management and follow-up for the activities of CSS	<ul style="list-style-type: none"> • Follow up customer management work, • Follow up reduction of negative events related to bill collection ratio, • Follow up activity for financial improvement. • Follow up activity for facilitation of PPWM installation. 	
1.4 Management and follow-up for the activities of WWS	<ul style="list-style-type: none"> • Ensure safety and stable wastewater operation in Jenin municipality, • Ensure the availability of equipment, materials, vehicles, and human resources necessary for achieving safety and stable wastewater operation to the staff of Wastewater section, • Supervise all the activities of WSS from time to time and give instructions to them, • Check all the results of the activities and direct to rectify the work, if necessary, • Participate in weekly meeting of WSS and give comments for their activities, 	

1.5 Others	<ul style="list-style-type: none"> • Participate in preparation of long and mid-term plans for rehabilitation and extension of water and wastewater networks. • Prepare periodic and non-periodic reports on department performance and discuss them with the Municipality Director. • Submit proposals which may develop the work in the department. • Review the inventory report prepared by Warehouse supervisor, and request necessary materials and/or equipment to Procurement Department. • Perform any tasks that the Municipality Director requests within the scope of work.
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2. Number and Level of Immediate Subordinates

4 sections: WS, WWS, SPS, and CSS, Secretary and Warehouse

3. Knowledge and Skills Requirement

3.1 General Education	Master's degree in water supply or wastewater and preferable in water resources management.
3.2 Professional/ Vocational Qualification	Null.
3.3 Relevant Pre-Job Experience	Not less than 10 years' experience in the field of water supply or wastewater
3.4 Managerial Skills	<ul style="list-style-type: none"> • To be able to understand mentality of the employees of WWD and customers, • To be able to deal with and solve urgent problems related to the employees of WWD and the customers.
3.5 Communication Skills	<ul style="list-style-type: none"> • To be able to communicate with JM & WWD staff. • To be able to communicate adequately with the superiors and subordinates in the municipality and the citizens, • To be able to use diplomacy in dealing with the project contractors and various material suppliers and manufacturers.
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to work with computer applications related to water and wastewater, • To be able to design water supply facilities or wastewater facilities, if needed, • To be able to supervise construction work of water supply facilities or wastewater facilities, if needed, • To be able to report and do presentations fluently.

4. Working Environment

4.1 Working place	Office and minor site.
4.2 Hazards	<ul style="list-style-type: none"> • Mental stress due to management of various field of the works, • Injuries from flying particles or materials while supervising.

2.2 Water Section

2.2.1 Head of Water Section

Job Title: Head of Water Section		
Department: WWD	Section: Water Section (WS)	Unit/Division:
Belongs to	Director of WWD	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Water network maintenance, • Extension of existing distribution network, • Valve operation (Water distribution schedule), • Pumps & Wells (O&M), • Non-Revenue-Water (NRW) activities, • Managerial works, • Others. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Water Network maintenance	<ul style="list-style-type: none"> • Assign the technicians to each repair work, • Coordinate with Movement and Mechanics Department, Warehouse Section to provide the technicians with the required machinery, drivers, equipment, materials and fittings; if any shortage, report to the WWD Director for further actions, • Give instructions to the technicians to arrange traffic safety preparations at site, • Develop required plans for emergency situations by coordinating with the Movement and Mechanics Department, Warehouse Section and under the directions of the WWD director. 	
1.2 Extension of existing distribution network	<ul style="list-style-type: none"> • Receive work order for extension work from Project Division Officer, • Making arrangement materials, equipment, heavy duty machines necessary for extension work together with Head of Network Maintenance Division • Conduct extension work of the existing pipeline along with the design drawing prepared by PPSS, • Supervise pipeline work including service pipe installation from time to time. 	
1.3 Valve operation (Water distribution schedule)	<ul style="list-style-type: none"> • Make weekly water distribution schedule together with the head of WWD and Head of Network Maintenance Division, • Direct and following up the control of valves, • Monitor the data on water volume distributed to each DMAs and water pressure at specific sites which was transferred by NRW officer. 	
1.4 Pumps & Wells (O&M)	<ul style="list-style-type: none"> • Coordinate with pumps and well operators to provide the water according to the water distribution schedule, • Receive feedbacks on functionality of existing boosting pumps & submersible pumps from the operator, • Request electrical test, groundwater level survey, or replacement of the equipment to the head of WWD. 	
1.5 Managerial works	<ul style="list-style-type: none"> • Arrange regular meetings for the technicians and give the instructions and recommendations to them, • Prepare a daily schedule for the technicians and evaluate their performance. • Plan a shift schedule (daytime/ night) of the technicians to assign and submit it to the head of WWD for his approval, • Monitor the stock of materials and equipment in cooperation with the warehouse officer and request necessary items to the head of WWD, if needed. 	
1.6 NRW activities	<ul style="list-style-type: none"> • Review investigation/ analysis report on NRW activities prepared by NEL division, • Plan and take measures for water losses, • Request WWD director to announce the citizens for their cooperation through public communication channels, if necessary. 	

1.7 Others	<ul style="list-style-type: none"> • Assist SPS in preparation of bidding document (e.g., bill of quantities, technical specifications, scope of work, etc.), • Assist NEL in finding out illegal connections, • Develop a preventive maintenance plan of waterworks in consultation with the director of WWD, • Prepare annual activity report which deals with the section situation, activities and submit it to the director of WWD. • Perform any tasks requested by the director of WWD.
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2. Number and Level of Immediate Subordinates

2 divisions: Water resource and distribution (WRD) division and Network maintenance, extensions, and losses (NEL) division

3. Knowledge and Skills Requirement

3.1 General Education	B.A in civil engineering (water supply)
3.2 Professional/ Vocational Qualification	Null.
3.3 Relevant Pre-Job Experience	7 years' experience in water supply works
3.4 Managerial Skills	<ul style="list-style-type: none"> • To able to manage day-to-day assignments for the technicians, • To be able to guide and motivate staffs that are already pressed with work schedules to complete. • To be able to use diplomacy in settling customer complaints with care.
3.5 Communication Skills	<ul style="list-style-type: none"> • Good communication skills with the WWD staff and customers.
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to use water design, management, and analysis software applications.

4. Working Environment

4.1 Working place	Office and site visitation.
4.2 Hazards	Injuries from flying particles or materials on duty (site work).

2.2.2 Water resource and distribution division (WRDD)

Chief of WRDD

Job Title: Chief of Water Resource and distribution division		
Department: WWD	Section: Water Section	Unit/Division: Water resource and distribution (WRDD)
Belongs to:	Head of WS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> Valve operation (opening/closing the water network valves) Operation of booster pumps, Other works. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Valve operation (Water distribution schedule)	<ul style="list-style-type: none"> Assist the head of WS in making weekly water distribution schedule, Conduct valve operation work (Open /close) at the target areas according to the weekly operation plan, together with the technicians, Conduct measuring work for water volume and water pressure together with the technicians and submit the data to head of WS. Give instructions to his colleague to arrange traffic safety preparations for operating the valves located in the streets. 	
1.2 Operation of booster pumps	<ul style="list-style-type: none"> Operate booster pumps according to the received distribution schedule (except the well pump operation as it is monitored by the subcontractor) . 	
1.3 Managerial works	<ul style="list-style-type: none"> Assist in arranging regular meetings, Assist in planning a shift schedule (daytime/ night) of the technicians, Assist in monitoring the stock of materials and equipment in cooperation with the warehouse officer and report it to head of WS. 	
1.4 Others	<ul style="list-style-type: none"> Assist head of WS in developing a preventive maintenance plan of waterworks, Perform any tasks requested by the head of WWD. 	
2. Number and Level of Immediate Subordinates		
Technicians.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school at minimum; diploma in plumping is preferable.	
3.2 Professional/ Vocational Qualification	Null.	
3.3 Relevant Pre-Job Experience	Minimum 10 years' experience in operation and maintenance of water works.	
3.4 Managerial Skills	Thorough understanding of distribution schedules; the location of and the areas to be controlled by each valve; and the priority of each target area.	
3.5 Communication Skills	A good communication skill with the WWD staff	
3.6 Technical skills	<ul style="list-style-type: none"> To be able to use PC software (Word, Excel etc.). To be able to solve valve failure at site with his knowledge and to operate booster pumps. 	
4. Working Environment		
4.1 Working Place	Mainly site.	
4.2 Hazards	<ul style="list-style-type: none"> Mental stress due to site works in the middle of the road and uncooperative drivers, Physical stress due to site work under hard sunshine in summer. 	

Technician of WRDD

Job Title: Technician of Water resource and distribution		
Department: WWD	Section: WS	Unit/Division: Water resource and distribution (WRD)
Belongs to:	Chief of Water resource and distribution	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Valve operation, • Operation of booster pumps, • Other tasks. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Valve operation (Water distribution schedule)	<ul style="list-style-type: none"> • Conduct valve operation work (Open /close) at the target areas according to the weekly operation plan, under the supervision of the head of WS and/or the chief, • Conduct measuring work for water volume and water pressure under the supervision of the head of WS and/or the chief. • Arrange traffic safety preparations for operating the valves located in the streets. 	
1.2 Operation of booster pumps	<ul style="list-style-type: none"> • Operate booster pumps according to the received distribution schedule under the supervision of the head of WS and/or the chief. . 	
1.3 Others	<ul style="list-style-type: none"> • Perform any tasks requested by the head of WS and/or the chief. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Second school, diploma favorable in plumbing	
3.2 Professional/ Vocational Qualification	Null.	
3.3 Relevant Pre-Job Experience	2 years in plumbing work.	
3.4 Managerial Skills	Null	
3.5 Communication Skills	<ul style="list-style-type: none"> • Good communication skills 	
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to use tools for meter checking and repair, • To be able to check and repair tools and equipment. 	
4. Environmental and Other Features		
4.1 Working Place	Mainly site.	
4.2 Hazards	<ul style="list-style-type: none"> • Mental stress due to site works in the middle of the road and uncooperative drivers, • Physical stress due to site work under hard sunshine in summer. 	

2.2.3 Chief of Network maintenance, extensions & losses division (NELD)

Chief of NELD

Job Title: Technician		
Department: WWD	Section: WS	Unit/Division: Network maintenance, extensions & losses (NELD)
Belongs to:	Head of WS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Water network maintenance, • Extension of existing distribution network, • Managerial works, • Other works 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Water network maintenance	<ul style="list-style-type: none"> • Assist the head of WS in assigning the technicians to do repair work, • Assist the head of WS in Coordinating with Movement and Mechanics Department, Warehouse Section to provide the technicians with the required machinery, drivers, equipment, materials and fittings, • Assist the head of WS in giving instructions to the technicians to arrange traffic safety preparations at site, • Assist the head of WS in developing required plans for emergency situations. 	
1.2 Extension of existing distribution network	<ul style="list-style-type: none"> • Conduct an initial survey for the site, • Making arrangement materials, equipment, heavy duty machines necessary for extension work in coordination with Warehouse • Supervise extension work on behalf of the head of WS, • Assist the head of WS in supervising pipeline work. 	
1.3 NRW activities	<ul style="list-style-type: none"> • Collect data on authorized billed consumption from CSS twice a month, • Conduct flowmeter measurement by zones twice a month, • Calculate NRW ration on the basis of above information and adjust the measured figures, if necessary, • Plan the measure for improvement of NRW ratio and conduct field work upon the verification of the Head of WS, • Prepare the work report for above work and submit it to the Head of WS. 	
1.4 Managerial works	<ul style="list-style-type: none"> • Assist in arranging regular meetings for the technicians, • Assist in planning a shift schedule (daytime/ night) of the technicians, • Monitor the stock of materials and equipment in cooperation with the warehouse officer. 	
1.5 Others	<ul style="list-style-type: none"> • Perform any tasks requested by the head of WS. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school at minimum; diploma in plumbing is preferable.	
3.2 Professional/ Vocational Qualification	Null.	
3.3 Relevant Pre-Job Experience	Minimum 10 years' experience in operation and maintenance of water works.	
3.4 Managerial Skills	Thorough understanding of distribution schedules; the location of and the areas to be controlled by each valve; and the priority of each target area.	
3.5 Communication Skills	A good communication skill with the WWD staff	
3.6 Technical skills	Favorably able to deal with Microsoft Office programs (Word and Excel).	
4. Working Environment		
4.1 Working Place	Mainly site.	

4.2 Hazards	<ul style="list-style-type: none"> • Mental stress due to site works in the middle of the road and uncooperative drivers, • Physical stress due to site work under hard sunshine in summer.
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Technician of NELD

Job Title: Technician	
Department: WWD	Section: WS Unit/Division: Network maintenance, extensions & losses (NELD)
Belongs to:	The Chief of Network maintenance, extensions & losses
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Water network maintenance, • Extension of existing distribution network, • NRW activities, • Other works.
1. Main Tasks and Detailed Activities	
Main Tasks	Detailed Activities
1.1 Water network maintenance	<ul style="list-style-type: none"> • Take over equipment, materials, fittings, tools from Warehouse, • Conducting pipe repair, replacement of the pipes, installation of valve chamber, etc. • Arrange traffic safety preparations at site,
1.2 Extension of existing distribution network	<ul style="list-style-type: none"> • Conduct an initial survey at the site under the supervision of the head of WS and/or the chief, • Take over materials and equipment from Warehouse, • Conduct pipeline work and valve installation under the supervision of the head of WS and/or the chief.
1.3 NRW activities	<ul style="list-style-type: none"> • Conduct measurement work of the flow meters by zones twice a month and report them to the Chief, • Conduct installation work for new valve and flowmeter chambers, • Conduct investigation work such as water leakage, • Repair or replace the damaged pipeline.
1.4 Others	<ul style="list-style-type: none"> • Perform any tasks requested by the head of WS and/or the chief
2. Number and Level of Immediate Subordinates	
No subordinates.	
3. Knowledge and Skills Requirement	
3.1 General Education	Second school, diploma favorable in plumbing
3.2 Professional/ Vocational Qualification	Null.
3.3 Relevant Pre-Job Experience	2 years in plumbing work.
3.4 Managerial Skills	Null
3.5 Communication Skills	Good communication skills
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to use tools for meter checking and repair, • To be able to check and repair tools and equipment.
4. Work Environment	
4.1 Working Place	Mainly site.
4.2 Hazards	<ul style="list-style-type: none"> • Mental stress due to site works in the middle of the road and uncooperative drivers, • Physical stress due to site work under hard sunshine in summer.

2.3 Studies & Project Section (SPS)

2.3.1 Head of SPS

Job Title: Head of PPS		
Department: WWD	Section: Studies & Project	Unit/Division:
Belongs to:	Director of WWD	
Responsibility (Job Description Summary):	<ul style="list-style-type: none"> • Project management (e.g., discussion and negotiation with the concerned personnel of counter side, arrangement of the human resource deployment for the project, etc.), • Making various plans (e.g., installation of PPWM, customer database survey, verification studies, structural design, network design for water and wastewater, studies, etc.) • Preparation of develop plans for the water and wastewater infrastructure and service, • Follow up projects related to WWD, in coordination with related departments and sections, • Monitor seasonal changes in water quality 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Project management	<ul style="list-style-type: none"> • Formulating various project related to water supply & wastewater <ul style="list-style-type: none"> ○ Conducting needs survey (fact-finding survey for the verification of the needs, ○ Deciding the studies to be done, ○ Scheduling, ○ Budgeting, ○ Approval • Selecting the consultant/ contractor <ul style="list-style-type: none"> ○ Preparing Bidding document (scope of work, technical specification, etc.) in cooperation with the Procurement Department, ○ Conducting bidding evaluation in cooperation with the Procurement Department ○ Negotiating with the nominated consultant/ contractor. • Supervising the performance of the consultant/ contractor in coordination with the heads of related sections. • Prepare the parts of technical specifications, bill of quantities, technical requirement, etc., for the Bidding Document and submit them to the Procurement Department of the Municipality, 	
1.2 Following up the activities of WS and WWS	<ul style="list-style-type: none"> • Prepare weekly water supply schedule for WS, considering the residents' distribution and concept of existing water supply, • Prepare extension plan of existing pipeline for water supply and wastewater, when developing an urban planning of the city, in coordination with the Engineering Department and related sections, • Carry out survey works and prepare required drawings, • Prepare hypothesis studies about the wastewater inflow amounts and the best methods for reuse. • Check the water and wastewater testing results submitted by the Lab Division and reports it to the director of WWD. 	
1.3 Making annual plan including budgeting	<ul style="list-style-type: none"> • Facilitate each section of WWD to make annual activity plan including budgeting, • Have an interview with each section head on annual activity plan and request to rectify, if needed, • Finalize entire annual activity plan in cooperation with the head of WS, • Submit it to the Municipality Director for his approval, • Participate in preparation of annual plans and programs of the municipality, • Participate in preparation of municipal annual budgets, 	

1.4 Others	<ul style="list-style-type: none"> • Prepare annual plan of all the sections of WWD, • Prepare monthly activity report of WWD, • Arrange internal meetings for all the department, if requested, • Provide suggestions of how to improve and develop the WWD functions, • Any other duties or tasks requested by the director of WWD.
2. Number and Level of Immediate Subordinates	
<ul style="list-style-type: none"> • Lab division • GIS division 	
3. Knowledge and Skills Requirement	
3.1 General Education	B.A civil engineering (water & wastewater) or mechanical engineering.
3.2 Professional/ Vocational Qualification	Null.
3.3 Relevant Pre-Job Experience	5 years' experience in planning, design and project management.
3.4 Managerial Skills	<ul style="list-style-type: none"> • To be able to supervise and rectify ongoing projects, • To be able to use diplomacy in dealing with the project contractors and various material suppliers and manufacturers.
3.5 Communication Skills	<ul style="list-style-type: none"> • Good communication skills with JM & WWD staff.
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to visit project sites and evaluate infrastructure situation on site, • To be able to use the software for designing water & facilities, project scheduling, • To be able to verify potential problems on current water and wastewater situation and to provide the solutions for them.
4. Environmental and Other Features	
4.1 Working Conditions	Office and site visit.
4.2 Hazards	<ul style="list-style-type: none"> • Following up site work may expose WWD's staff to accidents, if public safety precautions are not taken, especially in excavations and constructions work.

2.3.2 Laboratory division

Job Title: Chief Chemist		
Department: WWD	Section: Studies & Project (SPS)	Unit/Division: laboratory
Belongs to:	Head of Studies & Project Section	
Responsibility (Job Description Summary):	<ul style="list-style-type: none"> Conduct all required water & wastewater quality tests, Follow the disinfection process for all water resources and network. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Conducting water quality test	<ul style="list-style-type: none"> Take water samples for testing physical parameters for water at the water sources (public and private wells & reservoirs) regularly, Visit the water sources and the water network and take samples to conduct biological tests periodically. Conduct urgently the required tests in an emergency where it is informed about potential pollution in the network or in the water sources. Indicate the compliance of the water quality to the WHO guideline for drinking water quality and the PWA standard. 	
1.2 Disinfection	<ul style="list-style-type: none"> Supervise the water disinfection procedures to confirm the chlorine percentage in water. 	
1.3 Others	<ul style="list-style-type: none"> Follow the regular maintenance and calibration for water laboratory equipment and devices. Follow up the procurement for laboratory disinfection and testing materials and agents in coordination with the head of the Section. Fulfill any tasks that are requested from the WWD Director and within the scope of work. 	
2. Number and Level of Immediate Subordinates		
No immediate subordinate.		
3. Knowledge and Skills Requirement		
3.1 General Education	BA in chemical engineering or civil engineering (water & environment)	
3.2 Professional/ Vocational Qualification	Null.	
3.3 Relevant Pre-Job Experience	5 years in laboratory works.	
3.4 Managerial Skills	Null.	
3.5 Communication Skills	Null.	
3.6 Technical skills	<ul style="list-style-type: none"> To be able to use and maintain the testing devices and equipment, To be able to perform the testing procedure in a professional way, To be able to use water testing analysis software. 	
4. Working Environment		
4.1 Working Place	Lab and site visits.	
4.2 Hazard	There is a risk of physical damages when using chemical materials in laboratory tests and when performing field tests in construction works.	

2.3.3 GIS division

Job Title: GIS Officer		
Department: WWD	Section: Studies & Project	Unit/Division: GIS
Belongs to:	Head of SPS	
Responsibility (Job Description Summary):	<ul style="list-style-type: none"> • Following up customers' information related to updating customers' information such as customer's ID, telephone, etc., complaints, etc., • Finalizing various reports (CDS report, PPWM installation report, etc.) • Updating GIS data related to new customer, extended pipeline, etc., • Notifications work related to tracking DMAS, notifying daily assignment to the technicians, etc., • Others 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Following up customers' information	<ul style="list-style-type: none"> • Tracking and updating following customers' issue upon the receiving information from the concerned sections, <ul style="list-style-type: none"> ○ Customers' complaint (incoming and results) ○ 0-meter reading, ○ PPWMs' problem, ○ Random check, 	
1.2 Finalizing various reports	<ul style="list-style-type: none"> • Finalizing following reports after receiving the data form the surveyors, <ul style="list-style-type: none"> ○ Customer Database Survey, ○ PPWM Installation Report (including disconnection, transferring, and temporary mechanical meter using). 	
1.3 Updating GIS data	<ul style="list-style-type: none"> • Updating data on customers' issue and existing facilities after receiving information from the concerned sections. 	
1.4 Notification work	<ul style="list-style-type: none"> • Tracking daily status of DMAS • Notifying day-to-day work assignment to the technicians after receiving the request from the sections. 	
1.5 Others	<ul style="list-style-type: none"> • Any other tasks requested by the director of WWD or SPS. 	
2. Number and Level of Immediate Subordinates		
No immediate subordinate.		
3. Knowledge and Skills Requirement		
3.1 General Education	B.A civil engineering (favorable)	
3.2 Professional/ Vocational Qualification	Null.	
3.3 Relevant Pre-Job Experience	2 years' experience in planning, design and project management.	
3.4 Managerial Skills	<ul style="list-style-type: none"> • To be able to manage various tasks flexibly, 	
3.5 Communication Skills	<ul style="list-style-type: none"> • Good communication skills. 	
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to speedily use computer software (Word, Excel, PowerPoint, GIS), 	
4. Environmental and Other Features		
4.1 Working Conditions	Office.	
4.2 Hazards	<ul style="list-style-type: none"> • Mental stress from the coordination work for various fields. 	

2.4 Customer Service Section (CSS)

2.4.1 Head of CSS

Job Title: Head of CSS		
Department: WWD	Section: Customer Service (CSS)	Unit/Division:
Belongs to	Director of WWD	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Monitoring and taking actions for customer management (customers' satisfaction to facilitate to access municipal water and sewerage service), • Monitoring and taking actions for negative events related to users (reduction of illegal connection and 0-meter reading), • Monitoring and taking actions for staff management (the activities of CCS staff), • Monitoring and taking actions for stock management of PPWM, • Others 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Monitoring and taking actions for customer management	<ul style="list-style-type: none"> • Receive monthly status of customers' complaints, PPWM problems, customers Nos., disconnection Nos. from the concerned staff, • Analyze customers' satisfaction, based on the above information, • Arrange conducting study, public meeting, making plan for improving customers' satisfaction, • Request the director of WWD to implement improving plan, if necessary. 	
1.2 Monitoring and taking actions for negative events	<ul style="list-style-type: none"> • Receive monthly information (raw data and inspection result) on 0-meter reading from the Monitoring officer • Receive monthly information illegal connections that were found by Water Section (WS) and meter management administration of CSS, • Analyze illegal connection type, • Making plans for finding illegal connections, based on the analysis, • Request WS to find out illegal connection, • Consult with legal section of the municipality in case of remarkably malicious case, • Prepare monthly information of activities for reduction of 0-meter reading and illegal connections. 	
1.3 Tasking actions for financial improvement	<ul style="list-style-type: none"> • Receive information on monthly status of 0-meter reading in PPWM users and illegal connections from the concerned staff, • Monitor monthly charged amount and debt recovery of PPWM users, • Monitor monthly collected amount of water tanker selling • Monitor monthly collected amount from temporary meter uses, • Analyze monthly collected amount by user types, • Analyze seasonal changes in collected amount (including user types), • Formulate improvement plan, based on tendency of income (collected bill) and reduction plan of negative events (0-meter reading and illegal connections), • Submit above plan including analysis data to the director of WWD. 	
1.4 Monitor bill collection status for temporary mechanical meter users	<ul style="list-style-type: none"> • Receive monthly amount of bill collection from the temporary mechanical meter users, • Submit above data to GIS division, • Take measure for unpaid customers. • Consult with the head of Financial Department on how to transact about unrecoverable debt and do it according to the suggestion from the director of finance department 	
1.5 Managing activities of CSS's staff	<ul style="list-style-type: none"> • Hold weekly internal meeting to confirm the followings: <ul style="list-style-type: none"> ○ Receive the request (e.g., replacement of PC, provision of office supply, additional PPWMs and tools, etc.) from the subordinates, ○ Expected annual leaves, ○ Expected events and/ or tasks, ○ Result of weekly performance, ○ Any difficulties for achieving performance, ○ If, others. 	

	<ul style="list-style-type: none"> • Make arrangement for solving the difficulties (e.g., to deploy somebody temporarily for the subordinate's annual leave, etc.) • Request the director of WWD to make arrangement for the request which seems to be reasonable.
1.7 Others	<ul style="list-style-type: none"> • Assist the director of WWD for preparing annual activity plan from the aspect of CCS, • Perform any tasks requested from the director of WWD, • Any other duties or tasks requested by the director of WWD.

2. Immediate Subordinates

Two divisions: Customer database administration and Meter administration division and bill collection division

3. Knowledge and Skills Requirement

3.1 General Education	BA in business administration.
3.2 Professional/ Vocational Qualification	None.
3.3 Relevant Pre-Job Experience	Minimum five (5) years in business administration.
3.4 Managerial Skills	<ul style="list-style-type: none"> • To be able to understand customers and related bills and application forms in whole water supply area of Jenin Municipality • To be able to deal with and solve urgent problems related to customers.
3.5 Communication Skills	<ul style="list-style-type: none"> • Very good communication skills, • To be able to work under pressure • To tact and diplomacy in dealing with customers and JM employees.
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to deal with computerized billing software, Excel, Word, PowerPoint, and other related computer programs; speedy use of computer.

4. Working Environment

4.1 Working place	Office, minor site, if needed.
4.2 Hazards	Wrong analysis for improvement plan will give financial risks.

2.4.2 Customer database administration and meter administration division

(1) Officers in charge of customer database administration

Job Title: Customer Database Officer		
Department: WWD	Section: Customer Service (CSS)	Unit/Division: Customer database administration and meter management administration
Belongs to	Head of CSS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> Follow up customers' request, Arrange water bills for Municipality employee, temporary mechanical meter users, Arranging income from water tanker selling. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Follow up customers' requests for the connections	<ul style="list-style-type: none"> Receive customers' requests such as new connection, disconnection, transferring, etc. from the various channels, Request meter management division for data entry into PPWM system, Enter above same data into Al-Shamel at the same time, Fill up necessary data on "PPWM Installation Report" and send it to the secretary for archiving, Fill up current status as "completed" in Customers' complaints in DMAS. 	
1.2 Arranging temporary measure for troubled PPWM	<ul style="list-style-type: none"> Monitor day-to-day status on Web customers' complaint, Request meter management officer to send technician to inspect the meter, Arrange to replace from PPWM to mechanical meter as temporary measure, if necessary, Arrange to install temporary meter (mechanical type), if needed. Arrange to make the meter reader to start reading work including bill collection until replacement would be made again. Prepare financial information on temporary water bill, Fill up necessary data on "PPWM Installation Report" and send it to Archive department to file it into the Customer file, 	
1.3 Arranging monthly water bill for municipality employee	<ul style="list-style-type: none"> Abstract monthly consumption data of the employee from PPWM's software, Calculate monthly water bill (Excel Sheet), Send it Financial Department. 	
1.4 Following up Al-Shamel issues	<ul style="list-style-type: none"> Consult with Al-shamel Company for the solution when something wrong was found in Al-shamel software (including version up case), Consult with Al-shamel Company for the solution when something wrong was found in mobile billing system (Device). 	
1.5 Arranging financial information on "Water Tanker Selling"	<ul style="list-style-type: none"> Receive the invoice of Water Tanker Selling from the movement Department, Prepare monthly sales amount of Water Tanker Selling (Excel file), Submit it to the head of CSS Archive it (hardcopy) in the file. 	
1.6 Others	<ul style="list-style-type: none"> Perform any other tasks requested from the Head of CSS. 	
2. Number and Level of Immediate Subordinates		
No immediate subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary education.	
3.2 Professional/ Vocational Qualification	None.	

3.3	Relevant Pre-Job Experience	Minimum five (5) years in business administration.
3.4	Managerial Skills	<ul style="list-style-type: none">To be able to understand customers and related bills and application forms in whole water supply area of Jenin Municipality; to be able to deal with and solve urgent problems related to customers.
3.5	Communication Skills	<ul style="list-style-type: none">Very good communication skills
3.6	Technical skill	<ul style="list-style-type: none">To be able to deal with computerized billing software, Excel, Word; speedy use of computer.
4. Working Environment		
4.1	Working Place	Mainly office
4.2	Hazards	Wrong calculations for consumption give financial risks.

(2) Officers in charge of meter management administration

Job Title: Customer Monitoring Officer		
Department: WWD	Section: Customer Service)CSS(	Unit/Division: Customer database administration and Meter administration Division
Belongs to	Head of CSS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> Monitors customers' information through PPWM system, Transact customers' official request (new connection, disconnection, transferring, etc.) Supervise the performance of the contractors and/or the meter technicians of CSS, Troubleshooting for the notifications from PPWM system, problems in vending station, Gateway, card reading, customers' complaints, etc. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Monitoring work	<ul style="list-style-type: none"> Monitor day-to-day status of customers' PPWM, especially for Notification of Alerts, Track the status of customers' PPWM with Alert which is low serious case. Arrange sending the meter technicians for inspection for urgent case (high serious level), Request meter management officer to send troubled PPWM to the maintenance center, Solve the problem which is beyond control of the technicians at site. 	
1.2 Transaction for customers' official request	<ul style="list-style-type: none"> Transact following work for new connection request: <ul style="list-style-type: none"> Enters new customer's information into PPWM's software, Request the technicians to take over necessary equipment, materials, tools, etc. such as a kit of PPWM, PPWM case, pipe materials, fittings. Supervise the meter technician's performance at site, Give an orientation on "how it works" to the customer and hand smart card to the customer, Request GIS division of SPS to finalize the work report and archive. Transact following work for disconnection and relocation requests: <ul style="list-style-type: none"> Abstract customer information (Household ID, Meter ID, customer name, telephone number, zone, etc.) from the system, Confirm the location of Household in the zone from GIS, Arrange sending meter technician to the site, Request GIS division of SPS to finalize work report and archive. 	
1.3 Supervisory work	<ul style="list-style-type: none"> Give an orientation on "how smart card works" and "how to install PPWM at site" to the contractor for bulk installation work, Supervise randomly the contractor's performance at site, Evaluate entire performance of the contractor and comment it in PPWM installation report, Give an orientation on "how smart card works" and "how to install PPWM at site" to new meter technicians (new employees), Supervise the performance of the meter technicians of CSS from time to time, 	
1.4 Troubleshooting for various troubles	<ul style="list-style-type: none"> Transact various troubles such as card charging issue, broken meter, leakage, battery problem, no working, customers' complaints, etc., Arrange sending troubled meter to the maintenance center, Negotiate and consult with the supplier for various problems, Arrange to conduct on-site accuracy test for meter. 	
1.5 Follow up customers' complaints for PPWM	<ul style="list-style-type: none"> Monitor day-to-day status in Web customers' complaint (DMAS), Request technician to inspect the meter, Fill up necessary data on "PPWM Installation Report" when completed, 	

	<ul style="list-style-type: none"> • Send “PPWM Installation Report” to the secretary for archiving, • Fill up current status as “completed” in Web customers’ complaint (DMAS)
1.6 Reporting Work	<ul style="list-style-type: none"> • Collect monthly data on PPWM status such as “in operation”, malfunction, breakdown of malfunctions, the result of random checkup and accuracy check, etc., • Prepare periodical report on PPWM system, based on above collected information.
1.7 Others	<ul style="list-style-type: none"> • Assist site work for troubleshooting, if necessary, • Perform any other tasks requested from the Head of CSS.

2. Number and Level of Immediate Subordinates

No immediate subordinates.

3. Knowledge and Skills Requirement

3.1 General Education	Secondary education.
3.2 Professional/ Vocational Qualification	Diploma in PC skill, Plumbing work (preferable), etc.
3.3 Relevant Pre-Job Experience	Minimum five (5) years in the field of water meter, plumbing works, meter management work, etc.
3.4 Managerial Skills	<ul style="list-style-type: none"> • To be able to understand customers’ requests and needs related to the meter management in whole water supply area of Jenin Municipality, • To be able to arrange work plan for the technicians, • To be able to negotiate and coordinate with the contractor for achieve the required works (replacement work in bulk), • To be able to deal with customers complaints, PPWM system to solve urgently.
3.5 Communication Skills	<ul style="list-style-type: none"> • Very good communication skills, • Ability to work under pressure.
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to deal with PPWM’s management software, Excel, Word, and other related computer programs • To be able to conduct the meter installation & works, • To be able to conduct on-site accuracy test for meter, • To be able to supervise work performance.

4. Working Environment

4.1 Working place	• Office and very minor site visits if necessary
4.2 Hazards	• Mental stress from monitoring work for PPWM system, supervisory work at site and office, transacting customers’ complaints, etc.

(3) Meter technicians

Job Title: Water Meter Technician		
Department: WWD	Section: Customer Service)CSS(	Unit/Division: Customer database administration and Meter administration Division
Belongs to	Head of CSS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Meter work for new connection, disconnection, relocation including plumbing work, • Installation of temporary mechanical meter in case of PPWM's failure, • Supervision for contractor's performance, • Troubleshooting for the problems of PPWM system (PPWM, vending station, Gateway, Card reading, etc. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 New connection work	<ul style="list-style-type: none"> • Take over PPWM, fittings, pipe materials, consumables necessary for installation work from the Warehouse, when he receives work order (installation work) from Meter management officer, • Receive the customer's information (e.g., customer's name, house location, when to go, Telephone No., PPWM pamphlet, etc.) • Check meter location with customer and relocate, if there is an access difficulty, • Install PPWM and give a simple orientation on "how to use" to the customer, • Prepare meter installation report with photos and submit it to GIS division of SPS, • Return remaining material and consumables to the Warehouse, 	
1.2 Disconnection and relocation work	<ul style="list-style-type: none"> • Receive work order including customer's information (e.g., customer's name, house location, when to go, Telephone No., meter No., etc.) from the supervisor of mater management administration, • Conduct disconnection work including plugging outlet of service pipe and check meter No., meter's function, • If PPWM did not function when the technician took over PPWM, the technician shall ask potential reasons to the customer, • Conduct relocation work of the existing PPWM as per the customer's request. • Take "Work Photos" and submit them to the Project Division of PPM, • Return functional PPWM, remaining material and consumables to the Warehouse, • Request the supervisor of mater management administration to maintain troubled meter. 	
1.3 Temporary installation of mechanical meter	<ul style="list-style-type: none"> • Receive work order including customer's information (e.g., customer's name, house location, when to go, Telephone No., meter No., etc.) from the supervisor of mater management administration, • Conduct replacement of the meters at site, • Measure last cumulated consumption on the counter, • Prepare work report with the photos and submit GIS division of SPS for archiving, • Inform the cumulated consumption on the counter to the supervisor of customer database administration division, 	
1.4 Supervisory work at site	<ul style="list-style-type: none"> • Supervise the contractors' performance for installation work of PPWMs at site. 	

1.5	Troubleshooting for various troubles in meter works	<ul style="list-style-type: none"> • Receive work order including customer's information (e.g., customer's name, notification case, when to go, Telephone No., meter No., etc.) from the supervisor of mater management administration, • Check status of troubled PPWM and try to solve it, • Replace to new PPWM/ temporary mechanical meter, if the trouble was beyond his control, • Measure cumulated consumption on the counter in case of temporary replacement as mentioned in above, • Prepare work report with the photos and submit GIS division of SPS for archiving, • Request Mater Management officer to arrange maintenance of troubled meter, if needed, • Inform the cumulated consumption on the counter to the supervisor of customer database administration division,
1.6	Other Tasks	<ul style="list-style-type: none"> • Conduct on-site accuracy test with using portable test bench, if requested. • Perform any other tasks requested from the Head of CSS.
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1	General Education	Secondary school
3.2	Professional/ Vocational Qualification	Diploma in plumbing (favorable)
3.3	Relevant Pre-Job Experience	2 years in plumbing work.
3.4	Managerial Skills	<ul style="list-style-type: none"> • To be able to organize his work efficiently and flexibly (e.g., changing the scheduled area to visit)
3.5	Communication Skills	<ul style="list-style-type: none"> • To be able to communicate with the customers and related personnel in the Municipality
3.6	Technical Skills	<ul style="list-style-type: none"> • To be able to use tools for meter checking and repair. • Favorably to able to deal with Microsoft Office programs (Word and Excel)
4. Working Environment		
4.1	Working place	<ul style="list-style-type: none"> • Mainly site works
4.2	Hazards	<ul style="list-style-type: none"> • Mental stress from dealing with complaints and uncooperative customers, • Physical stress from working under severe weather condition such as high temperature in summer, cold weather and rain in winter.

2.4.3 Bill collection division

Meter readers

Job Title: Meter Readers		
Department: WWD	Section: Customer Service)CSS(	Unit/Division: Bill collection
Belongs to	Head of CSS	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> • Meter reading for temporary mechanical meter users. • Delivery of water bills to the temporary mechanical meter users, • Collection of bill payment from the above customers 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Temporary meter reading	<ul style="list-style-type: none"> • Measure cumulated water consumption on the counter of the mechanical meter for the temporary mechanical meter users, • Inform it to the supervisor of customer database administration. 	
1.2 Bill collection work	<ul style="list-style-type: none"> • Receive the water bill from the above supervisor and deliver it to the temporary mechanical meter users, • Collect the bill payment from the above customer, • Deliver the collected bill payment (cash) to the director of finance department, • Inform the difficulty of bill collection to the supervisor of customer database administration, if such case happened. 	
1.6 Other Tasks	<ul style="list-style-type: none"> • Inform potential illegal connection to the supervisor of meter management administration, if found. • Perform any other tasks requested from the Head of CSS. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school	
3.2 Professional/ Vocational Qualification	None.	
3.3 Relevant Pre-Job Experience	None.	
3.4 Managerial Skills	To be able to pay attention to cash management.	
3.5 Communication Skills	To be able to communicate with the customers and related personnel in the Municipality	
3.5 Technical Skills	None.	
4. Working Environment		
4.1 Working place	<ul style="list-style-type: none"> • Mainly site works 	
4.2 Hazards	<ul style="list-style-type: none"> • Mental stress from dealing with complaints and uncooperative customers, • Physical stress from working under severe weather condition such as high temperature in summer, cold weather and rain in winter. 	

2.5 Warehouse

Job Title: Warehouse Officer		
Department: WWD	Section:	Unit/Division:
Belongs to	Director of WWD	
Responsibility (Job Description Summary)	Entire management for WWD's own materials, equipment including Stock management	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Management of outgoing and incoming materials, equipment, etc.	<ul style="list-style-type: none"> • Provide materials, equipment, consumables, etc. in response to the request of WWD's staff upon the verification of the Director, • Input data on newly incoming materials, equipment, etc., 	
1.2 Stock management	<ul style="list-style-type: none"> • Update current status of the stock logs in the stock management system monthly. • Take stock of existing materials and equipment seasonally and submit it the director of WWD • Prepare the list of the items to be waste disposal in the stock logs to the director of WWD, if needed. 	
1.3 Others	<ul style="list-style-type: none"> • Perform any tasks requested from the Director of WWD. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school	
3.2 Professional/ Vocational Qualification	None.	
3.3 Relevant Pre-Job Experience	5 years in stock management (favorable)	
3.4 Managerial Skills	<ul style="list-style-type: none"> • To keep on careful recording about incoming and outgoing items • To Be able to visualize ways to organize the available space for maximum efficiency. 	
3.5 Communication Skills	None.	
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to operate software for data entry and inventory. 	
4. Working Environment		
4.1 Working place	In the WWD warehouse	
4.2 Hazards	Warehouse can be a dangerous place when heavy equipment or giant packages are moved in/out.	

2.6 Secretary

Job Title: Secretary		
Department: WWD	Section:	Unit/Division:
Belongs to	Director of WWD	
Responsibility (Job Description Summary)	Archiving official letters, project documents and drawings, etc.,	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Archiving official letters, project documents and drawings, etc.,	<ul style="list-style-type: none"> • Archive incoming and outgoing official letters, • Archive project documents and drawings including soft copies, • Prepare a monthly log on incoming and outgoing items, 	
1.2 Others	<ul style="list-style-type: none"> • Perform any tasks requested from the Director of WWD. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school	
3.2 Professional/ Vocational Qualification	None.	
3.3 Relevant Pre-Job Experience	5 years in secretary work (favorable)	
3.4 Managerial Skills	<ul style="list-style-type: none"> • To keep on careful archiving official letters, project documents and drawings, etc. • To Be able to visualize ways to organize the available space for maximum efficiency. 	
3.5 Communication Skills	None.	
3.6 Technical skills	<ul style="list-style-type: none"> • To be able to operate software for data entry and inventory. 	
4. Working Environment		
4.1 Working place	Office.	
4.2 Hazards	None.	

2.7 Public service center

Bill collection clerks

Job Title: Meter Readers		
Department: Finance	Section: Public service center	Unit/Division:
Belongs to	Director of Finance	
Responsibility (Job Description Summary)	<ul style="list-style-type: none"> Responsible for providing the service for smart card charging, transactions of bill collection, cash management. 	
1. Main Tasks and Detailed Activities		
Main Tasks	Detailed Activities	
1.1 Service for smart card charging and any other request	<ul style="list-style-type: none"> Charge the credit for PPWM, Input the data on above credit into PPWM system, Issue the receipts for the above customers, Follow up any modification such as cancellation, etc. 	
1.2 Bill collection from the conventional/temporary meter users	<ul style="list-style-type: none"> Receive and transact customers' bills payments for the conventional/temporary meter users, Issue the receipts for the above customers, Deliver the collected bill payment (cash) to the Finance department daily, Summarize periodical (Monthly) financial report and send it the director. 	
1,3 Other Tasks	<ul style="list-style-type: none"> Perform any other tasks requested from the Head of FD. 	
2. Number and Level of Immediate Subordinates		
No subordinates.		
3. Knowledge and Skills Requirement		
3.1 General Education	Secondary school	
3.2 Professional/ Vocational Qualification	None.	
3.3 Relevant Pre-Job Experience	None.	
3.6 Managerial Skills	<ul style="list-style-type: none"> To be able to pay attention to cash management, To be able to work on PPWM management software and Al-shamel software. 	
3.5 Communication Skills	To be able to communicate with the customers and related personnel in the Municipality	
3.7 Technical Skills	None.	
4. Working Environment		
4.1 Working place	<ul style="list-style-type: none"> Mainly public service centers 	
4.2 Hazards	<ul style="list-style-type: none"> Mental stress from dealing with complaints and uncooperative customers, 	

別冊資料 CD 3.4

Job Descriptions

別冊資料 CD 3.4.2 Arabic Version



سلطه لمامي الفلوسيني في ة
مشروع عيسين للاق درة على إدارة خدمات الهم افسيل دي قن ين



الهي لتي القن ينظمي مدي ة لى اى رلق مدي اه لى ص رفلل ص ح يو الوص و فو نظوي في ة.

أى لول 2022

الوكلا ة الهيئة للتعاون الديل ي (JICA)
TEC INTERNATIONAL CO., LTD.
PADECO CO., LTD.

جدول المحتويات

قائمة اختصارات

1	.....	1. المقدمة
2	.....	2. الوصوفالبيظية
2	.....	1.2 مدير لئزفام بي الى صرف الصحي
4	.....	2.2 قس للمياه
10	.....	3.2 قس م اللسات والمثاري ع
14	.....	4.2 قس م خدماتل مشوكين
23	.....	5.2 المستودع
24	.....	6.2 السرليتيير
25	.....	7.2 مركز خدمات الجمهور

صارات

قسم خدمات مشروع كين	CSS
نظم المعلومات الجغرافية	GIS
قسم اللمسات والمثلاري ع	SPS
اتخيرة المياه والصرفلي هويج بلدية جنين	WWD
قسم المياه	WS

<ul style="list-style-type: none"> • لتتجاوز لرفع أي يلقى أي التكميل التي يتم ضخمها في وقت مبكر من ضغوطات المرافقي • الشبكات وتبني البنية التحتية التي يسبقها للمياه . • إعطاء توجيهات ال مخطط من اتخاذ إجراءات عامة عن فتح وإ • المخطط لوقائق تحفي مكن ال مزدحمة . 	
<ul style="list-style-type: none"> • تنشغيل محطات المياه فوق الجدول لتتوزع للمبني بمبني إنشاء محطات ابار لتتبع • تشغيلها مقبل جهة خارجية . 	1.2 تشغيل محطات المياه .
<ul style="list-style-type: none"> • ليعاد في تنظيم اتماع التدرية . • ليعاد في وضع جدول الميزانية (الموازنة) /خ الانهار . • للمياه على إدارة الخزون من المواد والمعدات والهيكلية الضرورية والتسيير • مع مرفق مستودعات المياه والطلب من مديرة البلدية بتوجيه طلب شراء البضائع اقصره إلى دائرة المشتريات 	1.3 لمهام راية .
<ul style="list-style-type: none"> • مساعده رئيس قسم المياه في وضع خطط عمل انشائية لخصيصة المياه • تنفيذ أي مهام يطلبها من مديرة المياه والصراف للصحى . 	1.4 مهام أخرى .
2. عدد ومستوى المهنيين اللذين .	
نوين	
3. المهارات والامانة المطلوبة	
<ul style="list-style-type: none"> • 3.1 المهارة العملي • 3.2 المؤات المهنية • 3.3 للخبرات السابقة • 3.4 للمهارات ارية • 3.5 مهارات التواصل والتواصل • 3.6 للتعلم والمهارة الرقمية 	<ul style="list-style-type: none"> • توجيهي كحد أدنى في فضائل وفي يتعمق صيانة خطوط المياه . • يوجد • خبرة 10 سنوات كحد أدنى في مجال المياه وبتنظيم شبكات المياه . • لقدرة على فهم جدول وتوزيع المياه ومعرفة واقع العمل على شبكة المياه ولقوية المناطق من حيث للتزويد . • مهارات الاتصال والتواصل مع مختلف دوائر المياه التي لها صلة بالصحة . • لتتعمق في مجال العمل بالمياه (وورد ، كلسل) • لقدرة على العمل مع طاقم في الموقع ولقدرة على تشغيل محطات المياه .
4. بيئة العمل	
<ul style="list-style-type: none"> • 4.1 ظروف العمل • 4.2 لأمخاطر 	<ul style="list-style-type: none"> • غالباً ميدانية . • الضغوط في العمل في المناطق المزدحمة وعدم تعاون شركتي والعملاء . • لاجتماعات عن العمل في ساعات لحر .

فني شريعة تنويع وإدارة مصدري المياه (WRDD).

العمد الموظف فني شريعة تنويع وإدارة مصدري المياه .	
<ul style="list-style-type: none"> • شعبة / للوحدة بشعبة تنويع وإدارة مصدري المياه . 	<ul style="list-style-type: none"> • القسم المياه
المنهجية:	
<ul style="list-style-type: none"> • فني شريعة تنويع وإدارة مصدري المياه . • تشغيل محطات المياه (فتح / مخطط تشغيل المياه) . • تشغيل محطات المياه . • مهام أخرى . 	<ul style="list-style-type: none"> • للمصروف الوصف • لوظيفة
1. المهام الرئيسية والنطاقات الرئيسية	
<ul style="list-style-type: none"> • لتفصيل في 	<ul style="list-style-type: none"> • للمهام الرئيسية
<ul style="list-style-type: none"> • إغ ق فتحة مجلس شبكة المياه فوق البنية التحتية للمياه وذلك لباشر انشائها وتنظيم المرافق والمياه . • قيااس للمياه التي يتم ضخها في وقت مبكر من ضغوطات المياه في شبكات المياه ؛ وذلك بتوفير من رضى وتنظيم المرافق التي يتم ضخها في شبكات المياه . • بتخاذ إجراءات لتتوزع المياه عن فتح وإغ ابسالات المياه المزدحمة . • تشغيل محطات المياه فوق الجدول لتتوزع للمبني بمبني إنشاء محطات ابار لتتبع • رضى للمياه . 	<ul style="list-style-type: none"> • 1.1 تشغيل للمجلس بناء على جدول تشغيل المياه . • 1.2 تشغيل محطات المياه .
<ul style="list-style-type: none"> • تنفيذ أي مهام يطلبها من مديرة المياه / لرى للمياه . 	<ul style="list-style-type: none"> • 1.3 مهام أخرى
2. نوع ومستوى المهنيين اللذين .	
يوجد	

• ميداني	4.1 ظروف العمل
• الض غلظناتج عرش كاوي المشركين و عدهم عاونهم.	4.2 المخاطر
• لش الكللصحي للنتاج عزل عمل في ظروفلطقس طين عب ة نثل لحرارة	
• ال غلفي الصي ف لوبرد وللطفي فصل الشتاء.	

3.3 بي ة جبالتي قوا تير .

قاربي ال عدادات .

المسمى الوظيفي :قراى ال عدادات	
الطيرة : بطرق ميا ه ال لصر فللصحي	لقبي : قسم خدمات المشركين
ليتنعية ة :	قسم خدم التلمه بتركيين
لهي ؤوي ة (م لخص ال و ص لوظي في)	<ul style="list-style-type: none"> • قراءة اعنت ال دفع ال مؤجل اب ا كاتل لمؤقتة . • سنولم فلتير ليهاه اب عداد ال دفع ال مؤجل لمؤقتة . • بجاي فستوي المي امن أص حاب عدادات ال دفع ال مؤجل لمؤقتة .

1. الرئ ي سري ة وال مفاصل ي لية

شطة الويش ية	التمه لطي ي لية
1.1 قراءة اعنت ال دفع ال مؤجل اب شتراك التلمه مؤقتة .	<ul style="list-style-type: none"> • متقدي ركبيات ه ال متركمة على أص حاب عدادات ال دفع ال مؤجل لمؤقتة . • ؤول إدار قوا و اعني ان ات المشركين ب ذلك .
1.2 بجاي فستوي المي امن أص حاب عدادات ال دفع ال مؤجل لمؤقتة .	<ul style="list-style-type: none"> • سرات فساتور المي امن مس ؤول إدار قوا و اعني ان التلمه بتركيين سول ي م ه ال ل ل أص حاب عدادات ال دفع ال مؤجل لمؤقتة . • جم ع ال بيير من متبركي يديات ال دفع ال مؤجل لمؤقتة . • تسال ل مبل ال غ التي يت مبعيها ن قد ال لى مي ر ال طيرة ال لملي ة . • غنصل عوب التلمه يتي تم مواجها في مع كالات ير ال لى مس ؤول إدار ة قوا و اعني ان ات شلله متركين إن و جد .
1.3 م هام أخرى	<ul style="list-style-type: none"> • عن لو تغيل ل قان و ية ال مضملة ال لى مس ؤول إدار قوا و اعني ان ات المشركين إن و جد . • فن في ذ أي م هام أخرى يطلب الويش ي قسم خدم التلمه بتركيين .

2. عدد و مسيو ال م و سري ن ل ا ح ل ي ي ن

ي و ج د م ر و س ي ن ل ي ي ن

3. ال م ع فة وال م هارات ال مطلوبة

3.1 لم ؤهل ال عملي	توحي هي
3.2 الم ؤهل المهن ي	ي و ج د
3.3 ال بيخرا ت سلال بقة	ي و ج د
3.4 لم هارات ا رية	لقديرة فقيت ح لمبر ؤول ي قلم ال غ ال قو ي ال تي تم جم عها
3.5 م هارات لتصل لل ات واصل	لوق ة دخل ال ال ال عمل م المشركين يظ فمي ال ب ل دي ة .
3.6 ال بي ة وال مهات الرقي ة	ي و ج د

4. بي ة ال عمل

• مي لرية	4.1 ظروف العمل
• الض غلظناتج عرش كاوي المشركين و عدهم عاونهم.	4.2 المخاطر
• لش الكللصحي للنتاج عزل عمل في ظروفلطقس الصعب تمثل لحرارة ال غلفي الصي ف لوبرد وللطفي فصل الشتاء.	

2.5 مس تودع ال ل و قوا ه ال لصر ف الصحي .

المسمى الوظيفي :مراقب مس تودعات	
الطيرة : داي لرق ميا ه ال لصر فللصحي	لقسم :
ليتنعية ة :	مير طار لرق ميا ه ال لصر ف الصحي
لهي ؤوي ة (م لخص ال و ص لوظي في)	إدار ة م و جودات مس تودع دائرة الميا ه من مواد و م عدادات و أ ج ه ز قو ق طع .
1. الم الم ر ئ ي ي ي ة و ة ال م تفص ي لية	
المهام الئ ي سري ة	طة ال تفص ي لية

شروط تعيين القدر على إدارة خدمات المياه قبل بداية تعيين

1.1	إدارة لصل او والوارد من ت والمعدات	<ul style="list-style-type: none"> • تزويد المواد والمعدات والقطع . لا خالف بين بناءً على طب مدير نظرة المياه والصراف الصحي . • تنسيق عمليات المعدات وا دوات الواردة حيثاً إلى الامتدوع .
1.2	إدارة موجودات المستودع	<ul style="list-style-type: none"> • تضديت الفاضل الخالي للموجودات على نظام إدارة الموجد بلش كل ش مري . • متقريم المواد والمعدات الجودة في المستودع بشكل موسمي ليم لتتبع إلى مدير دائرة المياه والصراف الصحي . • إعداد قوائم المور وتقسيمها إلى مدير دائرة المياه والصراف الصحي .
1.3	مهام أخرى	<ul style="list-style-type: none"> • تنفيذ أية مهام يطلبها من مدير نظرة المياه والصراف الصحي .
2. عدد حسنات ووسائل العمل الجيد		
3. المعرفة والمهارات المطلوبة		
3.1	المؤهلات العلمية	تتبع هي
3.2	المؤهلات المهنية	يوجد
3.3	الخبرة السابقة	فضل لخبرة هونك في مجال المستودعات
3.4	المهارات ارية	<ul style="list-style-type: none"> • متباعدتس عمل الوردال صادر من المواد والمعدات وا بش كل دوري . • القدرة على ا حات الترفيش كلف عال .
3.5	مهارات ا والتواصل	يوجد
3.6	الاجابة ولهمار التلقوية	<ul style="list-style-type: none"> • القدرة على تنشغ للبرنامج الخاص بإدخال البيانات الوجودك والجرد .
4. بيئي قال عمل		
4.1	ظروف العمل	يوجد
4.2	المخاطر	يوجد

2.6 سالكترتيرة

المسمى الوظيفي : السركتيرة		
الظرة دائرة المياه والصراف الصحي .	قسم :	وحدة/الشعبة :
المبنة	مدير نظرة المياه والصراف الصحي	
المسؤولية (لخص الوصف الوظيفي)	رشد لكتب الرسمة وثوائقالمشروع والمخططات . إلخ	
1. المهام الرئيسية والمسئوليات		
1.1	المهام الوظيفية	طمة التفصيلية
1.1	أرشد لكتب الرسمة وثوائقالمشروع والمخططات . إلخ	<ul style="list-style-type: none"> • قرائل لكتب الرسمة الصادر والوارد . • أرشفة وثائق الاشرايع والمخططات وا مخططات مؤرشفة للتروي . • إعداد قوائم المور الصادر والوارد بشكل ش مري .
1.2	مهام أخرى	<ul style="list-style-type: none"> • تنفيذ أية مهام يطلبها من مدير نظرة المياه والصراف الصحي .
2. عدد حسنات ووسائل العمل الجيد		
3. المعرفة والمهارات المطلوبة		
3.1	المؤهلات العلمية	تتبع هي
3.2	المؤهلات المهنية	يوجد
3.3	الخبرة السابقة	فضل لخبرة هونك في مجال السلكتيرة
3.4	المهارات ارية	<ul style="list-style-type: none"> • حرطل على أرشفة الکتب الرسمة ووثائق الاشرايع والمخططات . إلخ . • ح التمت و فرقت تلقى صى حد ممكن .

別冊資料 CD 4

広報資料

別冊資料 CD 4.1

Major Public Awareness Activities of Customer Service Section (CSS)



Jenin Municipality

Project for Strengthening the Capacity of Water
Service Management in Jenin Municipality
(WaSIP)

Major Public Awareness Activities of
Customer Service Section (CSS)

in Cooperation with the PR
Department

December 2021



Japan International Cooperation Agency

وكالة التعاون الدولي الياباني

Purpose of the Report

This report aims to provide a brief review of Public Relation section's activities, Jenin Municipality under the 'Project for Strengthening the Capacity of Water Service Management in Jenin Municipality' funded by JICA (Japan International Cooperation Agency) (September 2017- February 2022).

Customer Service Section of WWD, in cooperation with PR Department, had lunched extensive PR activities for this project. the PR activities played an important role in the resident's awareness and acceptance of PPWM with only a low percentage of rejections.

In the following, we review the public relations activities that were implemented during the project period and still on going.

- 1- Baseline social survey in PAs, Jenin city and in other municipalities in Palestine
- 2- Customer data base survey (CDS)
- 3- Neighborhood meetings and meetings with community leaders
- 4- Preparation of PPWM PR materials
- 5- Door to door visits prior to installation of PPWM for awareness purpose
- 6- Re-visit of customers who initially rejected PPWM installation
- 7- Post-installation visits (Customer satisfaction visits)
- 8- Using social media channels
- 9- Preparation of PR materials
- 10- Social case study in cooperation with WWD
- 11- Cooperate with other institutions for raising public awareness in the city
- 12- Collection soft-approach campaigns
- 13- End line social survey
- 14- Project logo
- 15- Project jacket

Abbreviation

CDS	Customer data survey
CSS	Customer Service Section
DMA	District metered area
DtD	Door to door
JM	Jenin Municipality
JSC-JWV	Joint Service Council- Jenin Western Village
PA	Pilot area
PPWM	Pre-paid water meters
PR	Public relations
PWA	Palestine Water Authority
WS	Water Section
WWD	Water and Wastewater Department
WSRC	Water Sector Regulatory Council

1. Baseline social surveys; willingness to pay and opinion on PPWM

In addition to the basic information, the social survey collected information on:















- 1) Customer satisfaction of JM's water service,
- 2) Willingness to pay in case of any increase of water tariff and,
- 3) Public's opinion on PPWM if the Project decides to install PPWM.

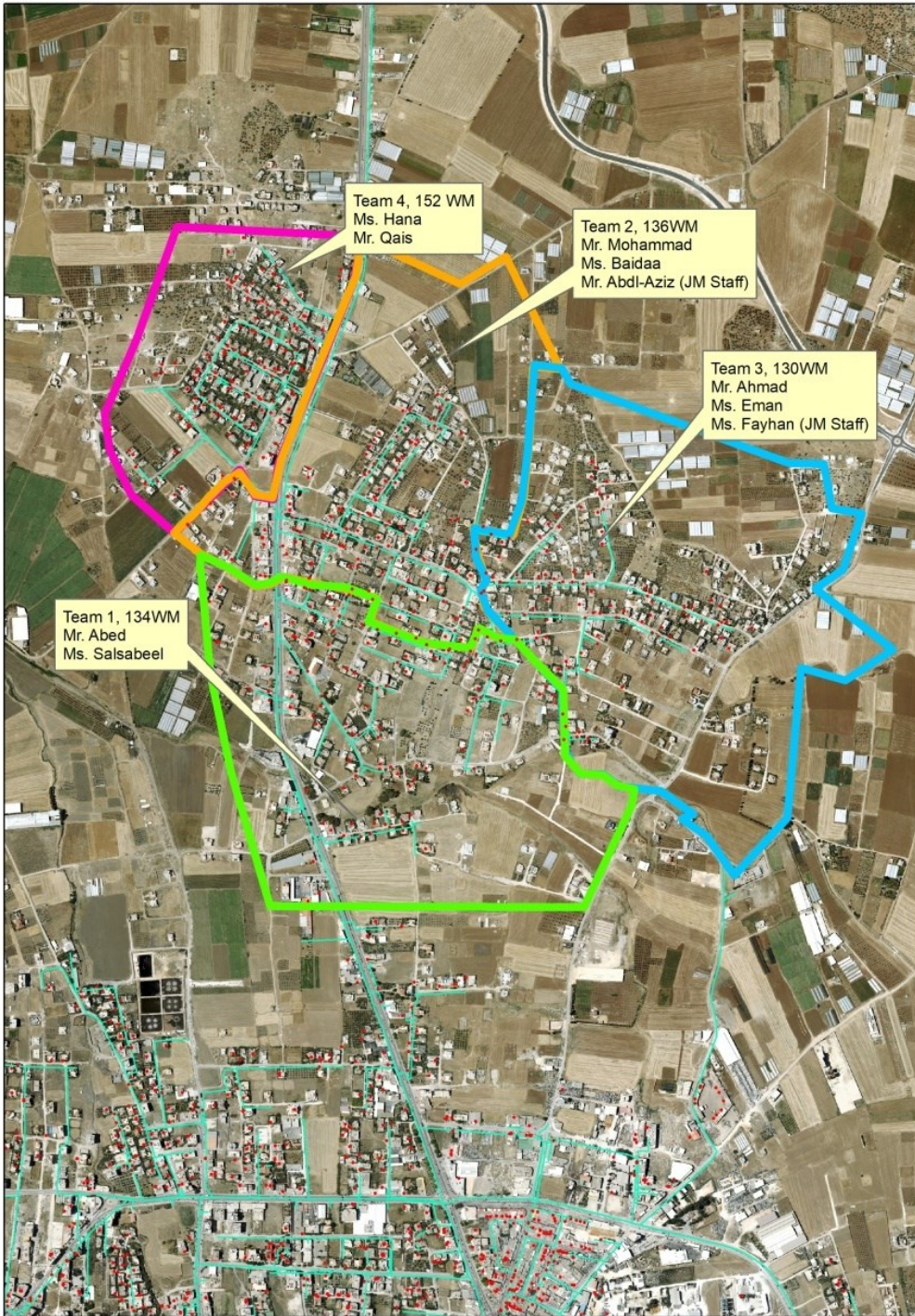
A total of 124 questionnaires were filled out in the PA 1 area, and 100 questionnaires in Jenin city (citywide) including PA2 and PA3.

The survey team consisted of surveyors with a survey plan and mapped areas as seen in tables and maps below for PA1 and for All City in cooperation with the PR Department.

For details, please refer to Report on Baseline Social Survey.









Team of the Social Survey in PA1

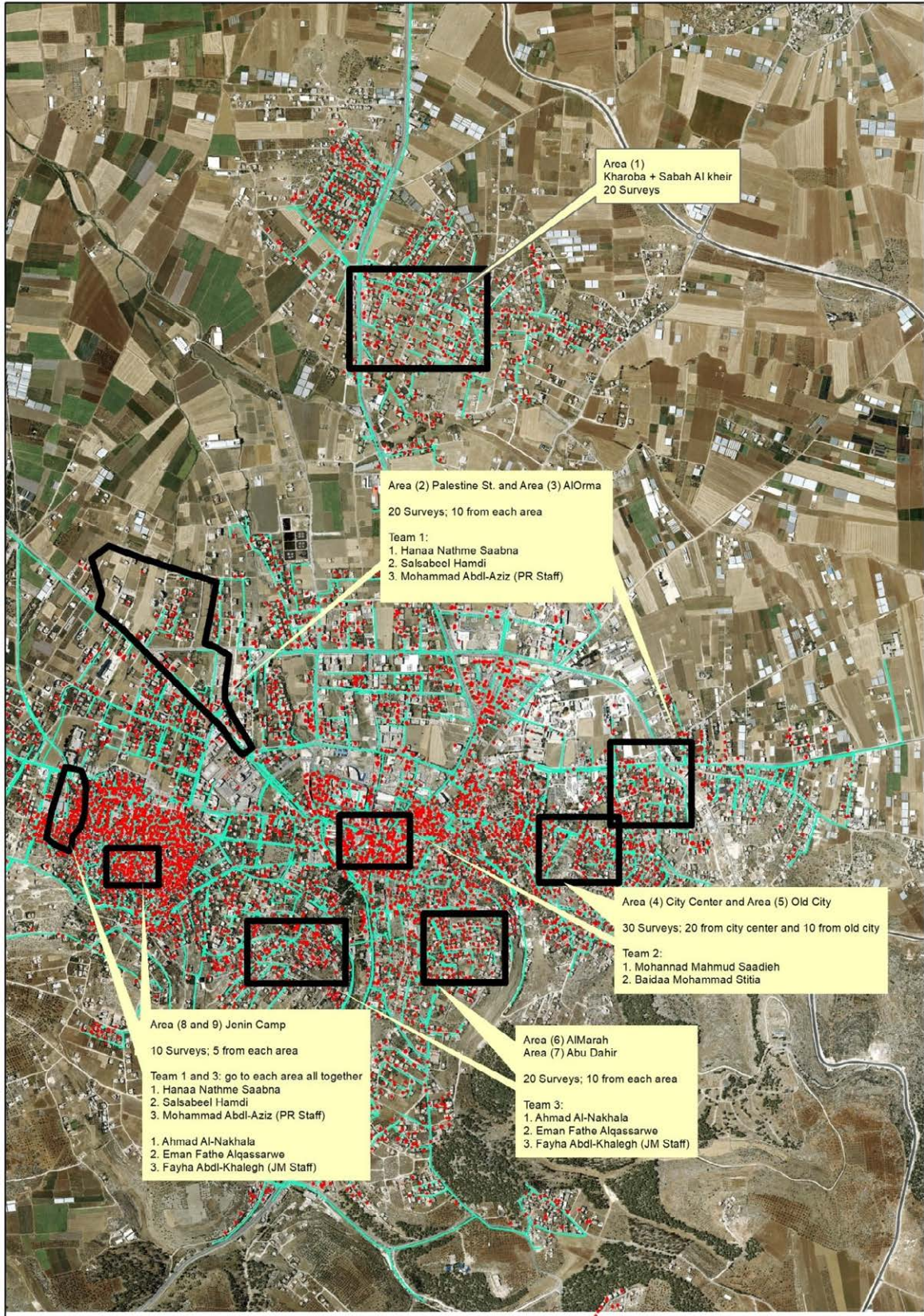
Survey	Purpose	1 st Survey Area	Number of Survey	
Social Survey	To gather basic information and mainly to collect data on customer's: 1) Satisfaction with water services 2) Willingness to pay 3) Opinion on PPWM	PA 1 area: approximately 550 connected and about 70 unconnected (counted buildings without water meter on satellite imagery)	124 surveys (20% of total buildings of 620)	
		Samples, Survey Team, Schedule: ----- 124 surveys = 4 teams × 6-7 surveys per day × 5 days		
		Names	Phone Number	Survey Area
Team 1		Mr. Abed Alrhmman Fayeze Moghrabi	0597052986	
		Ms. Salsabeel Hamdi	0595085154	
Team 2		Mr. Mohannad Mahmud Saadieh	0595557964	
		Ms. Baidaa Mohammad Stitia	0598012652	
		Mr. Mohammad Abdl-Aziz (JM Staff)	0599754460	
Team 3		Mr. Ahmad Al-Nakhala	0568704241	
		Ms. Eman Fathe Alqassarwe	0598307980	
		Ms. Fayha Abdl-Khalegh (JM Staff)	0599970985	
Team 4		Ms. Hanaa Nathme Saabna	0599588216	
		Mr. Qais Zahalka	0598222461	
Start/End		Target of the day		
Sun. 22 nd , October		Full day: Preliminary training		
Mon. 23 rd to Sat. 28 th , October:		Field survey:		
9:00AM		Orientation of the day-Transport to the field		
9:30AM-15:30PM		Survey 6-7 properties		
15:30AM-16:00pm		Back to the office to submit the filled-out forms and discuss the day issues if any and plan for next day		



Map of Survey Area in PA1

Team of the Social Survey in all Jenin (City-wide)

Survey	Purpose	All-city Social Survey	Number of Survey	
All-city social Survey	To gather basic information and mainly to collect data on overall customer's: 1) Satisfaction with water services 2) Willingness to pay 3) Opinion on PPWM	Area: All city	80 surveys (total is 100 and 20 already done from PA1 area, so only 80 would be collected)	
		Samples, Survey Team, Schedule:		
		80 surveys = 3 teams × 9 surveys per day × 3 days		
		Names	Phone Number	Survey Area
Team 1		Ms. Hanaa Nathme Saabna	0599588216	Area 2 (day 1) Area 3 (day 2)
		Ms. Salsabeel Hamdi	0595085154	Area 8 and 9 (day 3)
		Mr. Mohammad Abdl-Aziz (PR Staff)	0599754460	
Team 2		Mr. Mohannad Mahmud Saadie	0595557964	Area 4 (day 1)
		Ms. Baidaa Mohammad Stitia	0598012652	Area 5 (day 2 and 3)
Team 3		Mr. Ahmad Al-Nakhala	0568704241	Area 6 (day 1)
		Ms. Eman Fathe Alqassarwe	0598307980	Area 7 (day 2)
		Ms. Fayha Abdl-Khalegh (JM Staff)	0599970985	Area 8 and 9 (day 3)
Start/End	Target of the day			
The 7 th , 8 th , and 11 th of Nov. 8:30AM 9:30AM-15:00PM 15:15AM-16:00pm	Come to the office; Orientation of the day, survey area maps, transport to the field Survey 9 properties , then back to the office to submit the filled-out forms Discuss the day issues if any and plan for next day			



Map of Survey Areas in City-wide

The results on willingness to pay and opinion of PPWM were as follow. For details on the survey result refer to the Baseline Survey Report.

Willingness to pay in Citywide survey

- 82% of the 100 surveyed people did not know about the amount of current water tariff fee.
- When explained about the current tariff fee of Jenin Municipality and some other cities in Palestine, only half of them (60%) believed that it is a fair fee and 34% believed that it is still expensive.
- If water services improved, half of the respondents are willing to pay a little more (4.98NIS/m³ instead of the current 4.3NIS/m³).
- The other half who are not willing to pay more have the following reasons for their opinion:
 1. Financial status is bad.
 2. Its Municipality responsibility.
 3. No need.
 4. To get better services.
 5. We already pay a lot for the JM.

Opinion on PPWM in Citywide survey

- From the total 100 respondents, 56 prefer PPWM and the rest don't.
- If JM takes a decision to install PPWM, slightly a higher number of residents accept PPWM (61). This means an obligatory PPWM will not make a difference in the Publius's acceptance of PPWM.
- The reasons for accepting PPWM were:
 1. Customer pays regularly
 2. Makes customer periodic
 3. To get water every day without cutting.
 4. This system is better.
 5. Easier for customers and municipal.
 6. More accurate and depends on how much people consume.
 7. We don't pay attention for bills every month.
 8. Water will be available always.
 9. More accurate and depends on how much people consume.
 10. Better control consumption
- Reasons for not accepting were:
 1. Not enough money to charge regularly.
 2. It cost more money.
 3. Don't trust municipality.
 4. We are paying cash so no need for this system.
 5. This WM read more than consuming.
 6. Not suitable for poor people.
 7. More difficult system.
 8. Lack of money.
 9. Paying every month is better, and the financial status is bad.
 10. Too much commitment.
 11. This WM read more than consuming.
 12. Not suitable for poor people.

Willingness to Pay in PA1

- 83.3% of the connected surveyed population said that they pay their bills and 9.3% don't pay and the rest pay sometimes.
- 70% of the 124 surveyed people did not know about the amount of current water tariff fee.
- When explained about the current tariff fee of Jenin Municipality and some other cities in Palestine, only half of them (50%) believed that it is a fair fee and mostly believed that it is still expensive.
- If water services improved, over half of the respondents are willing to pay a little more (4.87NIS/m³ instead of the current 4.3NIS/m³).

The 45.5% who are not willing to pay more have the following reasons for their opinion:

1. It's municipality responsibility.
2. They have no enough money.
3. It's already so expensive.
4. They don't trust municipality.
5. They are good by well water they purchase so no need to improve and pay more.

Opinion on PPWM in PA1

- From the total 124 respondents, 81 (65%) prefer PPWM and the rest don't.
- If JM takes a decision to install PPWM, slightly a higher number of residents accept PPWM (67%). This means an obligatory PPWM will not make a difference in the Public's acceptance of PPWM.
- The reasons for accepting PPWM were:
 1. Customer pays regularly
 2. To get water every day without cutting.
 3. This system is better.
 4. Easier for customers and municipal.
 5. More accurate and depends on how much people consume.
- Reasons for not accepting were:
 1. Not enough money to charge regularly.
 2. It cost more money.
 3. Don't trust municipality.
 4. We are paying cash so no need for this system.
 5. This WM read more than consuming.
 6. Not suitable for poor people.

1.1 Study PPWM satisfaction of current users in other water providers

To study customers practical experience and their satisfaction, the project interviewed other water service providers in which already had PPWMs installed for a while. It was a part of a PPWM study done by the project. The survey targets were as follows.

- West Jenin JSC (9 customers)
- JSC- Tubas (3 customers).
- Aqraba village (3 customers)
- Nablus city (5 customers)

(1) Basic findings; before and after PPWM

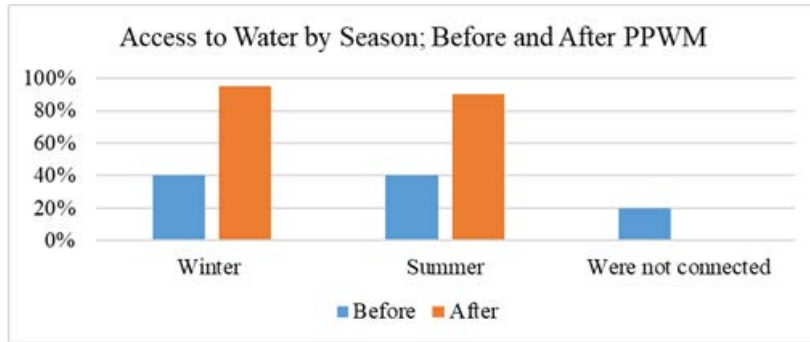
The customers were divided to two exiting groups; those with continues water supply and those with few days a week of water supply.

Percentage of customers with continues (tap) water supply and weekly water supply and their status as before and after the installation of PPWM were measured.

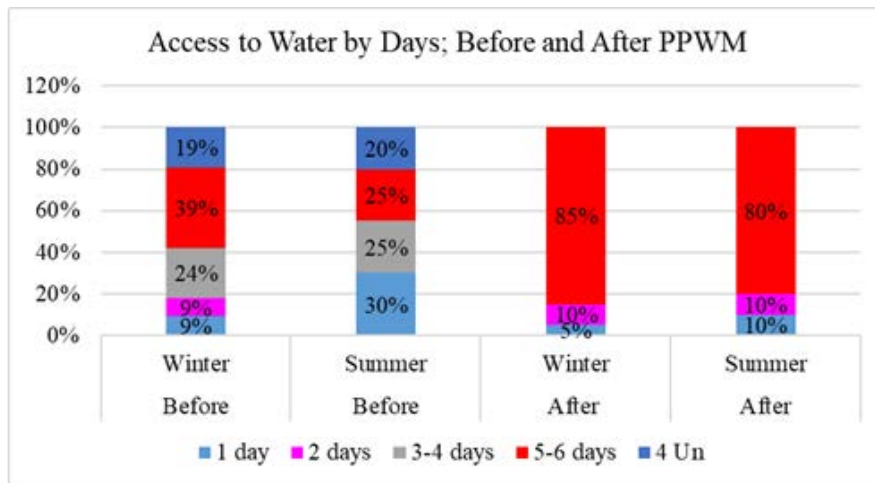
The change in water supply before and after the installation of PPWM were measured.

A summary of the results is as follows.

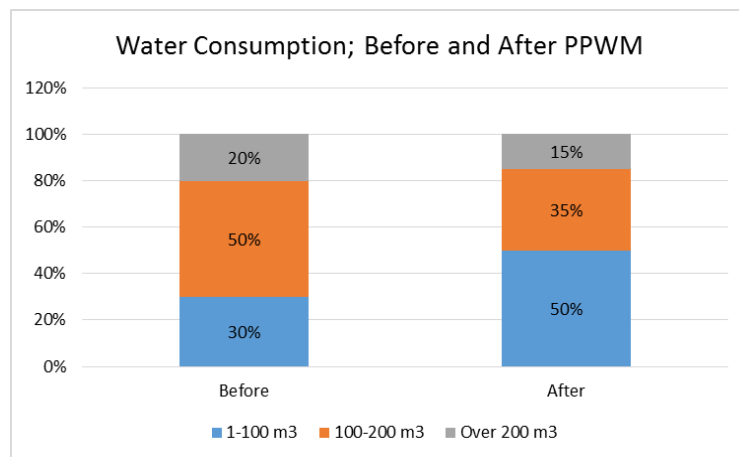
1. Water consumption decreased after PPWM.
2. Access to water after PPWM has increased both in winter and summer.
3. Access to water by number of days has increased and reached 5-6 days after PPWM.



Percentage of customers with constant access to tap water by season before and after PPWM installation



Percentage of customers with weekly water supply days by season before and after PPWM installation



Percentage of customers with water supply before and after PPWM installation

(2) Satisfactions

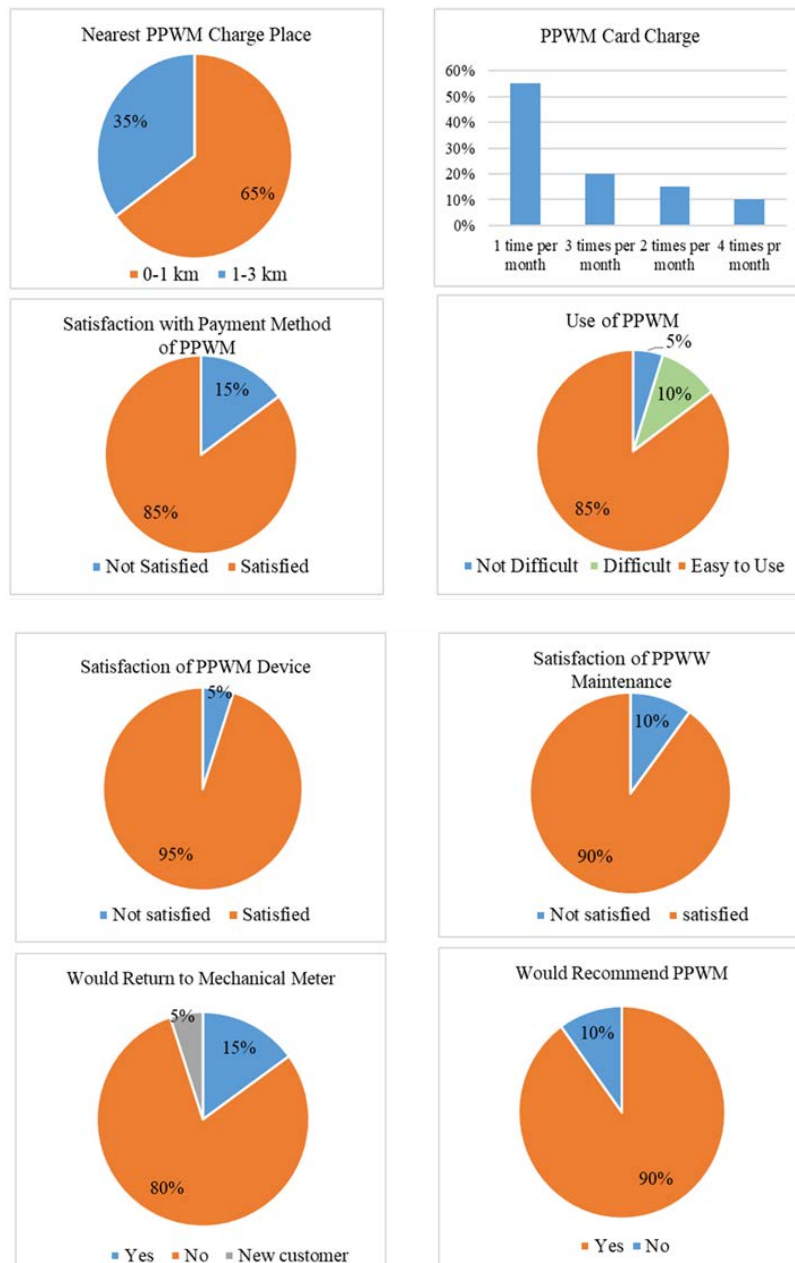
The results of the following questions regarding satisfaction were measured:

1. Distance to the vending station
2. Frequency of credit charging

3. Satisfaction with payment
4. Difficulty in using PPWM system
5. Handling of PPWM device
6. Maintenance of PPWM
7. Return to mechanical meters?
8. If recommend PPWM to others?

In general, as seen in the figure below, the users are highly satisfied with the PPWM and recommend it to others. The reasons for their satisfaction are as follows.

1. The charge center for PPWM card is close and within 0 to 1 km for most of them. Distance to the charge center has a high impact on the satisfaction.
2. Most of the users charge once a month and it is more convenient to them.



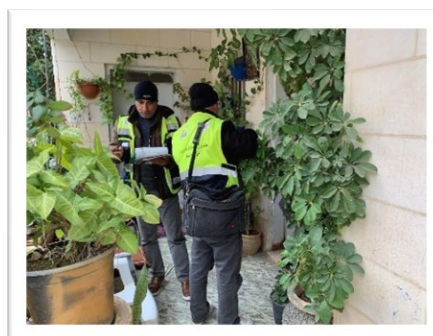
Customer satisfaction summary figures

2. Customer data survey (CDS)

In cooperation with WWD and collection necessary it was necessary to improve customer database on AlShamel and GIS.

A team of PR staff conducts Customer Database Survey (CDS) prior to the installation period in each area to collect the following information. It is an ongoing activity since 2017 for all PPWM installation areas.

- a) Building owner's name
- b) Building code number
- c) Number of households and family
- d) Registration status in customer database
- e) Water meter number, route of house connection, Utilized pipe material and diameter
- f) XY coordinates of the water meter location and branched points XY
- g) Usage of private network
- h) Number and volume of water tanks
- i) Building photo



Following table provides the result of CDS in the project pilot areas as of December 2021.

Area	Current progress
Pilot area 1 (Kharobeh, Sabah Alkhair and Nasrah st.)	836
Pilot Area 2 (Alzahra neighborhood)	671
Pilot area 3 (Alsharqeia neighborhood)	575
Al-Jenan DMA	59
Al-Basateen DMA	415
Almaniya	218
Al-Ibrahymeean	261
Industrial Area	108
Total	3143

3. Neighborhood meetings and meetings with community leaders

Public meetings were held with neighborhoods and with community leaders in Jenin city in order to prepare for the PPWM installation and to raise people's awareness of PPWM features and its reflection on improving Jenin municipality services.

These meetings are more effective when it is well planned and key members of the community such as mosque imam and community leaders are also attending. Attendance of higher-level management of the JM is essential in these neighborhood meetings.

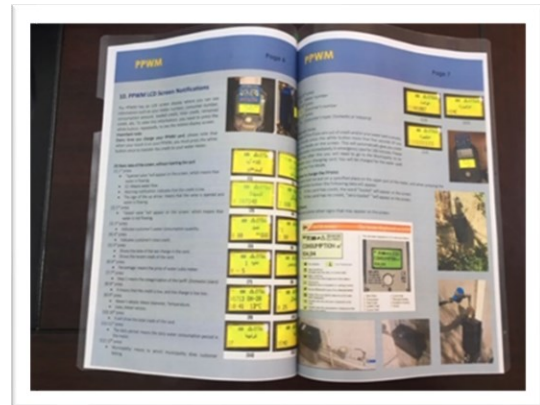


4. Preparation of PPWM PR materials

PR has produced several PR materials and assortments to facilitate customer acceptance of PPWM. Questionnaires of pre-installation door to door visits and the PPWM's booklet were designed and published to be distributed during pre-installation door to door visits.

In the booklet customers can read about:

- PPWM in Jenin
- PPWM benefits
- Type of PPWM in projects areas and how it works
- Water fee and credit charges
- Where to purchase credit for PPWM card (charging your card)
- Customers Responsibility on their PPWM.
- How to Maintain the PPWM from damages or misuse
- Where to report if notice any damages in the PPWM or malfunction
- Installation timetable
- PPWM screen notifications



PPWM Booklet

5. Pre-installation door to door visits (DtD visit)

Public awareness activities are important to prepare the residents for the PPWM system. The purpose of the activities is to inform public about the positive impacts of the PPWM in providing better water services and to gain public's consents and support towards PPWM. Not only the PPWM plan itself needs public backing but the implementation of the PPWM installation plan also needs their support and should meet the public's expectation.

To understand the public's expectation of the installation procedures, an introductory survey is designed and is conducted before meter installation. A second survey needs to be conducted in order to collect public information and compare if the installation and experience of PPWM were positive.

This survey needs to be conducted before the installation starts, a week before.

Sample Work Plan of the Pre-Installation Door-To-Door Visit
(Work period, workload, team, and staff recruitment)

Required period and workload		Estimated pre-installation questionnaire time for each customer: 0.5 hour	
Teaming/Transportation			
Members		Customers per day	Other tasks
Team 1	1) JM PR Staff: 2 PR staff	6 to 8 customers (10am to 14pm)	Initial training, filling out forms 1 and 2 on the field, taking photos, pinpoint absent/disagreed customers for re-visits
Team 2	1) JM PR Staff: 2 PR staff	6 to 8 customers (10am to 14pm)	Initial training, filling out forms 1 and 2 on the field, taking photos, pinpoint absent/disagreed customers for re-visits
Data entry	Assistant PR	18- 24 customer data entry daily (8am to 4pm)	Data entry in GIS, scanning, photo filing, tabulating data
Transportation		JM Car	

Pre-Installation Questionnaire (Form 1)

Customer ID/ House ID /
 Name of Interviewee Phone Number
 Date of Interview Name of Neighborhood:

1. About PPWM Project
 1.1 Have you heard that JM is going to install PPWM for your area?
 Yes No If Yes: from JM neighbors Community leaders project activities in the area other
 1.2 The water meter of your premise will be replaced with PPWM by JM. Do you have any comments?
 Positive comments Negative comments Indifferent comments No comments at all
 Details of the comment:

2. PPWM Device
 2.1 Do you know about these types of PPWMs:
 PP Velocity: Yes No Some extent
 PP Volumetric: Yes No Some extent
 PP Ultrasonic: Yes No Some extent
 ✘Interviewer: Please explain about each type briefly after the answer as below:
PP Velocity: 1) With mechanical parts, it can be damaged. 2) The accuracy is reduced according to age. 3) Air is counted even though it does not likely affect the measurement. 4) Cheaper
PP Volumetric: 1) Dirt problems are severe. 2) Air is counted even though it does not likely affect the measurement. 3) Cheaper
PP Ultrasonic: 1) Water with air and air bubble is not measured. 2) Without mechanical parts, life is longer. 2) It is less likely to be blocked by any dirt or sand particles. 3) More expensive
 2.2 PP Ultrasonic is been selected as the best choice and will be installed in your premise. After hearing the comparison, do you understand why it is the best choice?
 I understand that Ultrasonic is the best choice I need more explanation




3. PPWM Implementation
 3.1 What is your expectation of JM at any stage of the replacement:
 a. Time of the replacement: Weekday Weekend Morning Time Afternoon Time Evening Time
 b. Woman in the replacement team: No need Needed

4. PPWM Charge and Use
 ✘Interviewer: Please explain how to use PPWM and the charging card and locations based on the instruction material.
 4.1 After explaining, do you understand now how to use the PPWM/card and charging the card? Yes No
 4.2 Where do you prefer to charge your prepaid card? ✘Multiple answer is OK.
 JM AlJalil supermarket on the street Haifa St. charge center Downtown charge center Other

5. PPWM PR Activities
 5.1 What method you would like to be reached for the PPWM project information?
 Public meetings workshops door to door JM website Phone call SMS
 Neighborhood committee Social Media Others

6. Satisfaction
 6.1 What factors will make you satisfied with the PPWM installation procedure?

PPWM Pre-Instruction Checklist (Form 2)

<p>Team #:</p> <p>PPWM Instruction Checklist (Form 2)</p> <p>Date of Installation/Replacement: (mm/dd/yy)</p> <p>Customer ID/House ID:</p> <p>Neighborhood: <u>Khroube</u> <input type="radio"/> <u>Sobah Alkheir</u> <input type="radio"/> N. Street</p> <p>Address in the neighborhood</p> <p>Name of the Water Meter Owner:</p> <p>New PPWM No.:</p> <p>Customer Phone Number:</p>	 <p>“Project for Strengthening the Capacity of Water Service Management in Jenin Municipality”</p>   <p>Japan International Cooperation Agency</p>																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 2px;">The customer is informed:1. An introduction on the PPWM’s type, how it works, and its parts</td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 2px;">2. Water tariff fee and PPWM ownership</td> <td></td> </tr> <tr> <td style="padding: 2px;">3. How to use the water meter and how to charge</td> <td></td> </tr> <tr> <td style="padding: 2px;">4. How to maintain the PPWM from damages, or misuse</td> <td></td> </tr> <tr> <td style="padding: 2px;">5. The initial available credit of water for first time use</td> <td></td> </tr> <tr> <td style="padding: 2px;">6. How and where to charge the card</td> <td></td> </tr> <tr> <td style="padding: 2px;">7. Where to report if notice any defect in the PPWM or malfunction</td> <td></td> </tr> <tr> <td style="padding: 2px;">8. What to do if the charging card is stolen or lost</td> <td></td> </tr> <tr> <td style="padding: 2px;">9. JM website complaint system and live chat</td> <td></td> </tr> <tr> <td style="padding: 2px;">10. Apply for different services at the PCSC</td> <td></td> </tr> <tr> <td style="padding: 2px;">11. Customer’s other questions are answered.</td> <td></td> </tr> </table>		The customer is informed:1. An introduction on the PPWM’s type, how it works, and its parts		2. Water tariff fee and PPWM ownership		3. How to use the water meter and how to charge		4. How to maintain the PPWM from damages, or misuse		5. The initial available credit of water for first time use		6. How and where to charge the card		7. Where to report if notice any defect in the PPWM or malfunction		8. What to do if the charging card is stolen or lost		9. JM website complaint system and live chat		10. Apply for different services at the PCSC		11. Customer’s other questions are answered.	
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10. Apply for different services at the PCSC																							
11. Customer’s other questions are answered.																							
<p>Survey Staff</p> <p>Name:</p> <p>Position:</p> <p>Signature</p>	<p>Customer</p> <p>Name:</p> <p>Signature</p>																						

Final Water Meter Reading before Replacement

Final Water Meter Reading before Replacing with PPWM

The final water meter reading is confirmed as below:

Date of Reading/Replacement: (mm/dd/yy)

House ID:

Neighborhood: Khroube Sobah ALKheir N. Street

Address:

Name of the Water Meter Owner:

Type of Regular Water Meter:

Water Meter No.:

Final Reading:

New PPWM No.:


The following photos were also taken:

Photo 1: Water Meter



Photo 2: Water Meter showing the surroundings

Photo 3: PPWM |

Photo 4: PPWM showing the surroundings



“Project for Strengthening the Capacity of Water Service Management in Jenin Municipality”

Japan International Cooperation Agency

<p>Replacement Staff</p> <p>Name:</p> <p>Position:</p> <p>Signature</p>	<p>Customer (if Present)</p> <p>Name:</p> <p>Signature</p>	<p>Customer Service Section</p> <p>Name: Khaled Abu Obeid</p> <p>Position: Section Head</p> <p>Signature</p>
--	---	---

The pre-installation DtD public awareness campaign started in March 2019 to explain PPWM to water customers and to encourage them to install PPWM.

The following table shows the results of the pre-installation door to door visit in the project pilot areas from March 2019 up to Feb 2021.

- Pre-Installation door to door visits	- PA1	- Completed (753 customers)	38 rejections 3 abandoned houses
	- PA3	- Completed (526 customers)	33 rejections 5 abandoned houses
	- PA2	- Completed (524 customers)	23 rejections 3 abandoned houses



Pre-installation DtD visits

As for the new installation; it is planned to start pre-installation DtD from two weeks before the installation of PPWM. Data entry is done for the completed areas. Table below summarizes the data from the field survey done by PR staff.

Table x.x Summary Table for Data Entered by PR Staff (DtD) Until October 2021 for New DMAs

DtD Visits progress in the extended DMAs:			
Area	Estimated total customer	Current progress	Rejected customers
Al-Jenan DMA	57	57	15
Al-Basateen (North and South) DMA	400	65	1
Almaniya DMA	130	0	0
Al-Ibrahemian	250	0	0
Industrial DMA	250	0	0

6. Re-visit of rejecting customers (DtD visit)

The second visit's purpose is to convince those customers who remain rejecting installation of PPWM for their property. According to experience from the pilot project areas, most of these customers finally accept the installation. It is important that higher level of management and key people such as the mayor, head of the WWD, key community people, or council members accompany the PR team for the second visits for a more successful result.

Re-visit of rejecting Customers in 20; Summary Result

PA	Date of re-visit	Status								
		Installed	Agreed and will Be Installed	Building under Construction	Abandoned House	Under discussion	Still disagree and referred to JM for legal actions	Issue with Locating Customer on Map	Other	Total Re-visits of Rejected Customers
PA1	03-Jun	2	0	0		4	4	0	0	10
PA1	10-Jun	2	0	0		1	6	0	0	9
PA1	17-Jun	2	0	0		2	3	1	0	8
PA1	01-Jul	2	1	0		2	5	0	0	10
PA1	22-Jul	0	0	0		0	0	0	0	0
PA1	27-Jul	4	0	0		0	0	0	0	4
PA1	05-Aug	2	0	0		4	15	3	0	24
PA1	12-Aug	7	2	3		2	2	13	1	30
PA3	02-Sep	4	2	0		8	8	9	0	31
PA3	16-Sep	3	5	0		0	0	6	2	16
PA1	16-Sep	1	0	0		0	1	0	0	2
PA1	03-Oct	2	0	0		0	0	27		26
PA1	10-Oct	3	1	0		1	0	0	5	5
PA1	31-Oct	1	0	0		0	0	0	0	1
PA1	14-Nov	2	1	0		2	0	1	0	6
PA3	14-Nov	1	0	0		0	0	0	0	1
PA1	17-Jan	2	6	0	1	0	2	0	0	9
Total		40	18	3	1	26	46	60	3	192

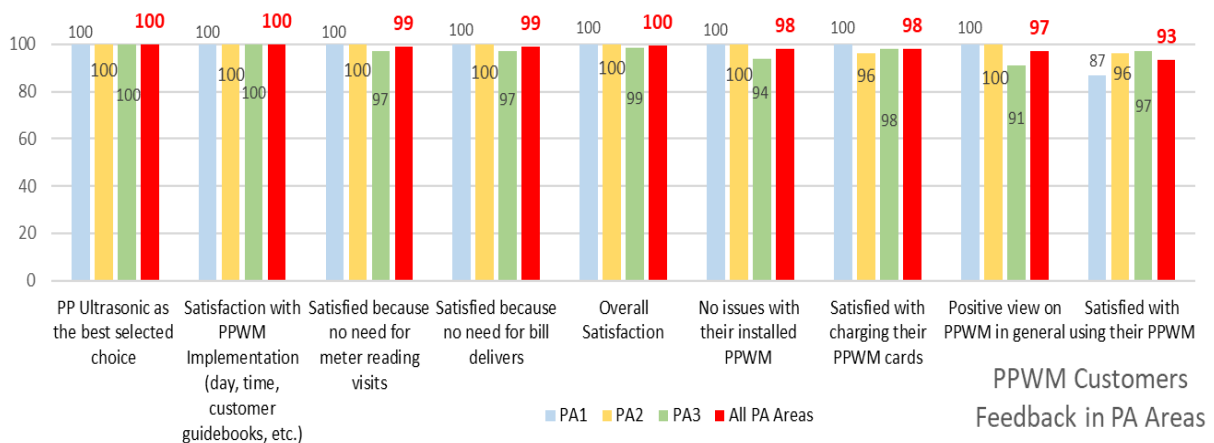
7. Post-installation visits (Customer satisfaction visits)

Visits aimed to measure positive experience of the PPWM customers and address any issues they may have. The satisfaction level shared with the city citizens for the purpose of public awareness.

In September 2019, public relations team have started visiting PPWM customers in PA1 (Post-installation door to door visits) to measure their satisfaction and to follow up if some customers were faced any problems with PPWM usage. For PA2 and PA3 the survey started on June 2020.

The following table shows the summary of post-installation door to door visits:

Post-Installation door to door visits	PA1	Completed 70 visit (10% of total customers)
	PA2	Completed 65 visit (10% of total customers)
	PA3	Completed 60 visit (10% of total customers)



Post-installation door to door visits analysis

The overall satisfaction with PPWM was generally high. The reasons for lower satisfaction towards PPWM are mostly due to the short and low pressure water supply rather than using their PPWM.

8. Social media channel for PR activities

During the project, the PR staff began to, extensively, use social media mainly Facebook to communicate with citizens and increase their awareness towards the Municipality's efforts on this project.

To achieve this purpose, PR staff prepared the required many materials using the design software such as Photoshop or other similar software. They also prepared suitable design to match JM goals (Municipality's activities or special events for example) with consideration the targeted people.

They also prepared special posts for the Municipality's activities and the religious events or any other events.

Public relations staff regularly publish the following on the JM's Facebook page:

- Publish of PPWM features.
- Published the link of complaints website and WWD's emergency phone number.
- Published about water saving benefits.
- Published the VS locations and their work time.
- Publish about JM activities in the city.
- Publish of illegal use of water in the city and advice people to cooperate with municipality staff.




Sample of posts on JM's Facebook page by PR Department


9. Preparation of promotional giveaway PR materials for the Project

1.1 **Calendars:** JET and PR staff have designed and prepared a calendar for year 2021, and 2022 (near finalization as of Dec 10th, 2021).


مشروع تحسين خدمة المياه في بلدية جنين


لنحافظ على قطرة مياه من أجل مستقبل أطفالنا







عداد الدفع المسبق







مع عداد الدفع المسبق تتحسن الجباية ولن تتراكم الديون



معاً وسوياً نجعل جنين أفضل





2022

CALENDAR

01

JANUARY

S	M	T	W	T	F	S
	25	26	27	28	29	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

لنحافظ على كل قطرة مياه من أجل مستقبل أطفالنا

2021



January							كانون ثاني	
S	M	T	W	T	F	S		
							1	2
3	4	5	6	7	8	9	10	11
10	11	12	13	14	15	16	17	18
17	18	19	20	21	22	23	24	25
24	25	26	27	28	29	30	31	

February							شباط	
S	M	T	W	T	F	S		
							1	2
7	8	9	10	11	12	13	14	15
14	15	16	17	18	19	20	21	22
21	22	23	24	25	26	27	28	

March							آذار	
S	M	T	W	T	F	S		
							1	2
7	8	9	10	11	12	13	14	15
14	15	16	17	18	19	20	21	22
21	22	23	24	25	26	27	28	29
28	29	30	31					

April							نيسان	
S	M	T	W	T	F	S		
							1	2
4	5	6	7	8	9	10	11	12
11	12	13	14	15	16	17	18	19
18	19	20	21	22	23	24	25	26
25	26	27	28	29	30			

May							ايار	
S	M	T	W	T	F	S		
							1	2
2	3	4	5	6	7	8	9	10
9	10	11	12	13	14	15	16	17
16	17	18	19	20	21	22	23	24
23	24	25	26	27	28	29	30	31

June							حزيران	
S	M	T	W	T	F	S		
							1	2
6	7	8	9	10	11	12	13	14
13	14	15	16	17	18	19	20	21
20	21	22	23	24	25	26	27	28
27	28	29	30					

July							ايلول	
S	M	T	W	T	F	S		
							1	2
4	5	6	7	8	9	10	11	12
11	12	13	14	15	16	17	18	19
18	19	20	21	22	23	24	25	26
25	26	27	28	29	30	31		

August							اب	
S	M	T	W	T	F	S		
							1	2
1	2	3	4	5	6	7	8	9
8	9	10	11	12	13	14	15	16
15	16	17	18	19	20	21	22	23
22	23	24	25	26	27	28	29	30
29	30	31						

September							تموز	
S	M	T	W	T	F	S		
							1	2
5	6	7	8	9	10	11	12	13
12	13	14	15	16	17	18	19	20
19	20	21	22	23	24	25	26	27
26	27	28	29	30				

October							كانون اول	
S	M	T	W	T	F	S		
							1	2
3	4	5	6	7	8	9	10	11
10	11	12	13	14	15	16	17	18
17	18	19	20	21	22	23	24	25
24	25	26	27	28	29	30	31	

November							تشرين ثاني	
S	M	T	W	T	F	S		
							1	2
7	8	9	10	11	12	13	14	15
14	15	16	17	18	19	20	21	22
21	22	23	24	25	26	27	28	29
28	29	30						

December							تشرين اول	
S	M	T	W	T	F	S		
							1	2
5	6	7	8	9	10	11	12	13
12	13	14	15	16	17	18	19	20
19	20	21	22	23	24	25	26	27
26	27	28	29	30	31			



مشروع تحسين خدمة المياه
في بلدية جنين

كلوا نتمخ

1.2 billboard advertisement for the project

At the northern, southern and western entrances to the city of Jenin city, JM installed billboards written on it "Thank to Japan" with pointing objectives of the project to 1) reduce NRW, 2) reduce illegal connections, 3) install PPWM, 4) raise the rate of collection, 5) improved water quality through chlorination, and 6) raise the capacities of JM staff to improve water service management.



مشروع تحسين خدمة المياه في بلدية جنين
ساهم بتوفير خدمة أفضل للمواطنين من خلال:

- تقليل فقدان المياه
- تقليل وصلات المياه الغير شرعية (السرقات)
- رفع قدرات طاقم البلدية لتحسين إدارة خدمة المياه
- تركيب عدادات الدفع المسبق للمياه
- زيادة نسبة الجباية
- تحسين جودة المياه من خلال الكلورة

عزيزي المواطن: دفعك للفاتورة يعني استمرار الخدمة وتحسينها

شكراً لليابان


www.ienin.city



1.3 Install signboards for JM's collection center



1.4 Vending stations labels

JET and PR have prepared and designed sticking labels which contain the customer name and house connection ID in addition to the vending stations locations to attach on PPWM boxes.



1.5 Project Roll up

JET have prepared and design a Roll up for JICA Project for Strengthening the Capacity of Water Service Management in Jenin Municipality which is include the main targets of the project.





1.6 Global Handwashing Day Cartoon

Translate and published the cartoon of the Global Handwashing Day which prepared by JICA.



1.7 Promotional movies

In cooperation with the Public Relations Department, JET have created and published some promotional videos about the project. These videos included an explanation of the project's activities, PPWM, in addition to some improvements introduced to the municipality's systems such as the mobile billing system, below are the topics posted by a promotional video with the post link on JM Facebook page:

- 1- Project movie: <https://www.facebook.com/JeninMunicipality/videos/2399831336906296>
(accessed on 15/08/2022)
- 2- PPWM movie: <https://www.facebook.com/JeninMunicipality/videos/1361795583981204>
(accessed on 15/08/2022)
- 3- MBS movie: <https://www.facebook.com/JeninMunicipality/videos/1529285360569666>
(accessed on 15/08/2022)
- 4- Customer satisfaction movie
- 5- Project anime movie: a 2.5 minute motion graphic video
<https://drive.google.com/file/d/1KbOaRRSezl3o3yn1yupqZwKqvg2Kf6vS/view>
(accessed on 15/08/2022)

10. Social cases study

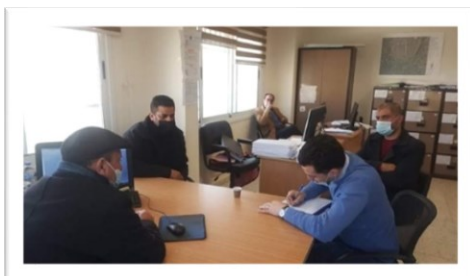
The water issue is one of the most sensitive issues that countries seek to improve the provision of it to their citizens in the appropriate quantity and quality.

With the increase in the number of the installed PPWMs, the Water Department (WWD) began to receive some complaints about the inability to charge the PPWM, especially in the periods of the financial problem with the Israeli side that extended from April 2020 to December 2020 and the preceding the entry of the Corona pandemic to Palestine from the beginning of 2020 until the moment of preparing this study in December 2020, which necessitated thinking about developing mechanisms and solutions that allow the JM to deal with special social cases in order to ensure water access to these social cases and to guarantee the right of the municipality on the one hand and not to oppose the human rights that is guaranteed by the Palestinian law which indicated on the right to equitable access to water.

For this purpose, PR staff, JET and WWD conducted a study to find a solution to deal with the social cases in the city by 3 stages:

- 1- Interviews with other water providers in Palestine.
- 2- Interviews with governmental water authorities (PWA and WSRC).
- 3- Interviews with human rights institutions in Palestine.

As a result of above study, PWA and WSRC proposed JM to collect the required data to apply new Tariff steps which will include the social cases in consideration in the first step of cubic meter price.



Social cases interviews

Social cases Questionnaire – Water provider (Form 1)

Water provider	Name of Interviewee	Phone Number
.....	interviewee position	
.....		
Date of Interview	City	

1. About PPWM installation

- 1.1 When did PPWMs begin installed?
- 1.2 What is the type of PPWM?
- 1.3 How many PPWM you installed?
- 1.4 Percent of installed PPWM.....
- 1.5 Do you have any maintenance contract?
- 1.6 People impression about PPWM system?
- 1.7 Did you consider your PPWM project successful: Yes No Why?

2. Water Supply

- 2.1 Service population.....
- 2.2 Supply is: intermittent or continuous?
- 2.3 If the supply improved, that was before the PPWM installation or After?

3. Water Tariff and PPWM charging card

- 3.1 Water tariff fee in NIS/m3
- 3.2 Tariff classifications.....
- 3.3 Is tariff changed after installing PPWM? Yes , No
- 3.4 Minimum credit per charge.....

4. Social cases

- 4.1 Have you ever received any request from social case: Yes No
- If Yes: How many(Total or per month)?
- 4.2 How do you deal with social cases who requested some help or facilities from the municipality:
 - a)Special tariff?.....
 - b)Opened the PPWM to be postpaid?.....
 - c)Charge for free?.....
 - d)Reject the request ?.....
 - e)Other way?.....
- 4.3 Is there an official policy in place to deal with social cases?
- 4.4 Do you have any cooperation with Ministry of social affairs: Yes , No
- If Yes: What kind of the cooperation?

- Do you have any ideas for dealing with social cases?

- 1).....
- 2).....
- 3).....
- 4).....

- Are there other recommendations?

Survey Staff

Name:
Position:
Signature

Interviewee

Name:
Signature



Japan International Cooperation Agency



11. Cooperation with other social facilities for raising public awareness in the city

In order to raise public awareness in Jenin city and increasing citizens' cooperation with the municipality, the Public Relations section developed a plan for cooperation with some government institutions such as the Ministry of Education and the Ministry of Religious Affairs.

1- Cooperation with Ministry of education:

PR head planned to visit deferent schools in the city and they will explain to the students about water situation in the city and PPWM and answer the questions from students. For this purpose, PR staff designed a cartoon poster contains some instructions and advices for water saving in the city.



2- Cooperation with Ministry of Religious Affairs:

PR section has been sent an official letter to the ministry of religious affairs, to inform the imams to talk in Friday speech about the importance of paying water debts, and the importance of rationalizing water consumption and maintaining the public network.

12. Collection campaign

In April 2019, the project experts conducted a model soft-approach collection campaign for 3 days with stages of follow up afterward. The result was positive and the method was recommended to JM/WWD to conduct further collection campaigns. Details on the campaign method can be found in Attachment x.x Procedure Manuals for Major Customer Service Management. Since the pandemic of COVID 2019, the recommended collection campaign was delayed and re-started in May 2021 with assistance of PR Department. Table below is a sample of the conducted soft approach as door-to-door visits of the high debtors.

Table x.x Sample DtD Visits of High Debtors and Request o Pay their Debts

Customer Name	HC-ID	Debt Amount (NIS)	Date of Visit	Remaining	Remarks of the visiting day
x.x.x.x.x.x	W522	39952.77	25-05-21	39,944	Needs to check the debt amount for possible errors.
x.x.x.x.x.x	W6040	34176.47	25-05-21	34,247	Family dispute on who should pay.
x.x.x.x.x.x	W709	14268.38	25-05-21	14,268	He will pay 200 NIS next week, and will pay every new bill and 100 NIS from debts.
x.x.x.x.x.x	W5130	19728.07	22-06-21	19,728	He will install PPWM with 50 NIS deducted each charge
x.x.x.x.x.x	W714	19509.56	04-06-21	19,510	He will pay 50 NIS every day to the area's collector (Mr. Amin Alnasra) until the full amount is paid
x.x.x.x.x.x	W5069	19288.63	04-06-21	19,289	He will come to JM to make a deal and pay the full amount.
x.x.x.x.x.x	W2229	16596.7	04-06-21	16,597	He didn't receive any bill. He asked JM to provide him the bill and he will pay 50 NIS daily.
x.x.x.x.x.x	W9333	15516.52	04-06-21	15,517	He paid a check to JM for the amount of 10 thousand NIS in 2017 and PPWM has been installed for him recently.
x.x.x.x.x.x	w1152	27538.44	04-06-21	27,538	He will install PPWM and will come to JM to make a deal
x.x.x.x.x.x	W4821	45804.58	22-06-21	45,805	Dispute over ownership of the subscription. Customer will review the current owner and make a settlement with him.
x.x.x.x.x.x	W4615	26265.03	22-06-21	26,265	Willing to install a PPWM and pay part of debt each charge. The customer is unemployed and does not have the money to pay.
x.x.x.x.x.x	W3613	77548.86	15-08-21	77,549	He has problem with JM, he is ready to set with JM to solve it

x.x.x.x.x	W4698	19966.37	15-08-21	19,966	He is outside of Palestine, when he returns, he will follow up the debts with JM
x.x.x.x.x	W3809	88636.44	15-08-21	88,636	They will divide the debts among the brothers, if JM make a discount, they will pay the full amount.
x.x.x.x.x	W8960	86722.12	15/82021	86,722	He will ask JM to reduce the debt (plea of clemency). He said that the bill for the month of January 2021 amounted to 41 thousand NIS

- 1) Currently, a new staff at PR Department is assigned to make follow up phone calls to the visited customers on the status of their payment promises.
- 2) JM sends official notifications letters to the high debtors (Commercial and residential) for 15 day to visit FD to schedule their debts. (as of October 2021)
- 3) A meeting was held with Mr. Mayor and FD head to follow up the procedures of the collection campaign and to take more legal actions.
- 4) To take more serious action, Mayor of Jenin Municipality, in November 2021 has announced a new policy for collection of debt. The announcement was podcast on the well-known radio channel of Good Morning Palestine and published on JM's FB page. Below is a translation of the announcement:

“JM announced that since December 9th ,2021 all the files of customers with accumulative water debts would be transferred to the Palestinian authority institutions for collection purpose. In case such files are transferred , customers services by the Palestinian authority institutions will be stopped ,till customers have a settlement with Jenin municipality. Thus, JM calls upon the targeted category, who has been officially notified many times, to visit the municipality and settle their debts before December 9th,2021.

Mayor of Jenin Municipality

Mr. Fayyz Al Saadi”



13.

14. End-line social survey

In order to compare the results of the project in the city with that of the Baseline survey, and to analyze the change and the customer's recognition on PPWM before and after the Project. The questionnaire of End-line survey was conducted to the customers of JM's water service in project pilot areas and outside of project pilot areas.

The following table shows the details of the survey in the PAs.

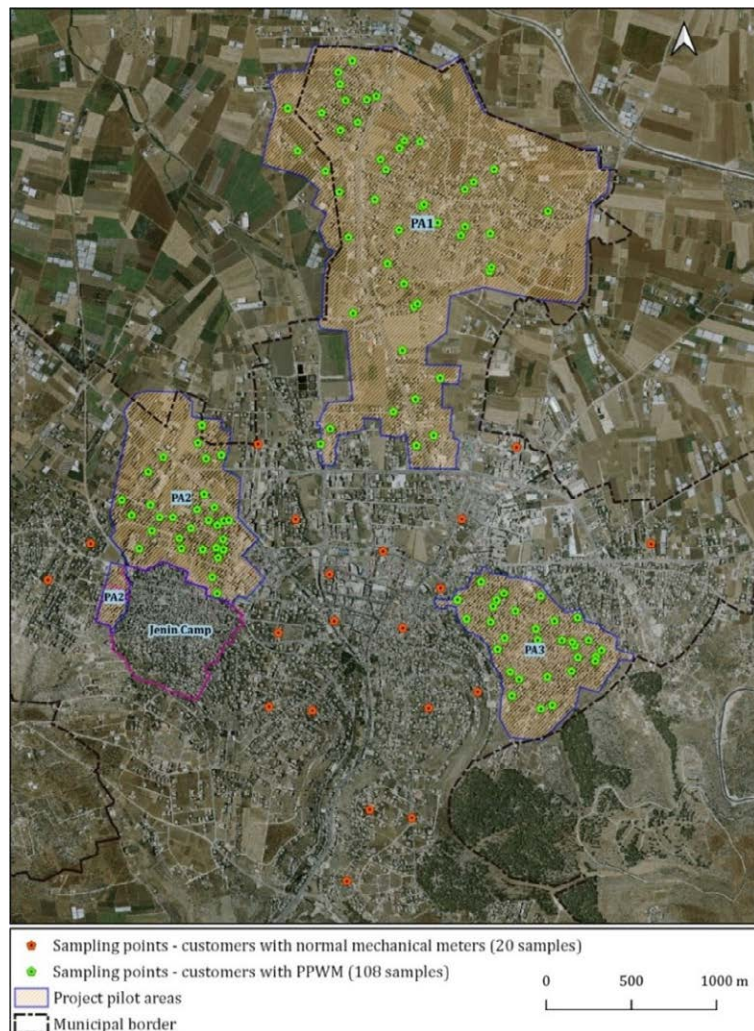
Survey area	3 pilot areas (PA1, PA2, PA3)
Number of Sampling	108 residential households (PA1: 46, PA2: 31, PA3: 31)
Target Customer	Households with piped water supply from JM and having pre-paid water meter
Survey type	Household interview with a questionnaire sheet by interviewers
Question category	1) Customer satisfaction of JM's water service 2) Willingness to pay in case of any increase of water tariff 3) Request to JM's water service
Surveyors employed	4 interviewers, 1 data entry operator

Survey schedule	Survey period: 14th June – 13th July 2021
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The following table shows the details of the survey in the City-wide area.

Survey area	City-wide area (Outside of the three PAs)
Number of Sampling	20 residential households
Target Customer	Households with piped water supply from JM and having mechanical (post-paid) water meter
Survey type	Household interview with a questionnaire sheet by interviewers
Question category	1) Customer satisfaction of JM's water service 2) Willingness to pay in case of any increase of water tariff 3) Public's opinion on PPWM if the Project decides to install PPWM 4) Request to JM's water service
Surveyors employed	4 interviewers, 1 data entry operator
Survey schedule	Survey period: 24 th – 26 th June 2021

Sampling map for Pas and for out PAs



12.1 Status of water access

As for daily water access, 56.6% of respondents answered Yes in winter, and 49.5% of respondents answered Yes in summer. For those who did not have access to water every day, the large number of the respondents in winter (63.4%) and in summer (60.4%) had access to water for 2 days in a week, with most of them using it for an average of 12-24 hours (**Error! Reference source not found.**).

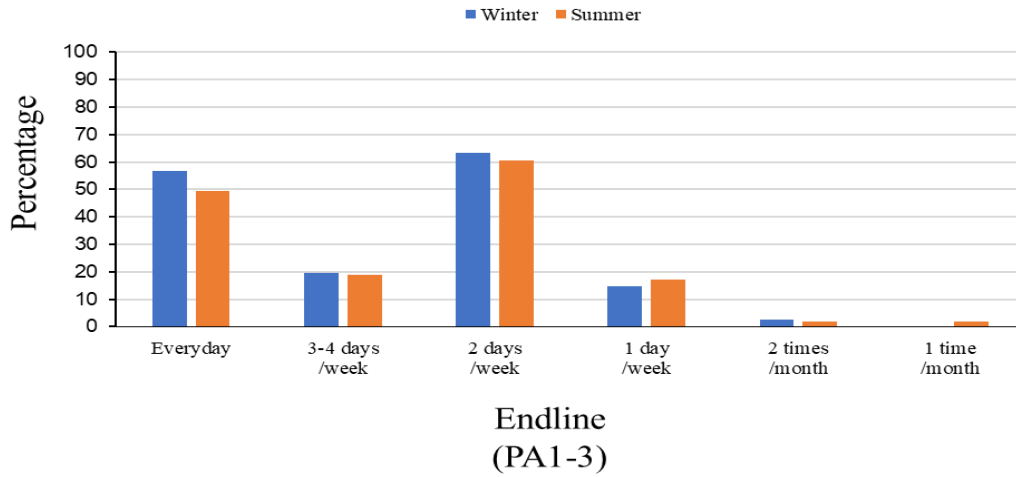
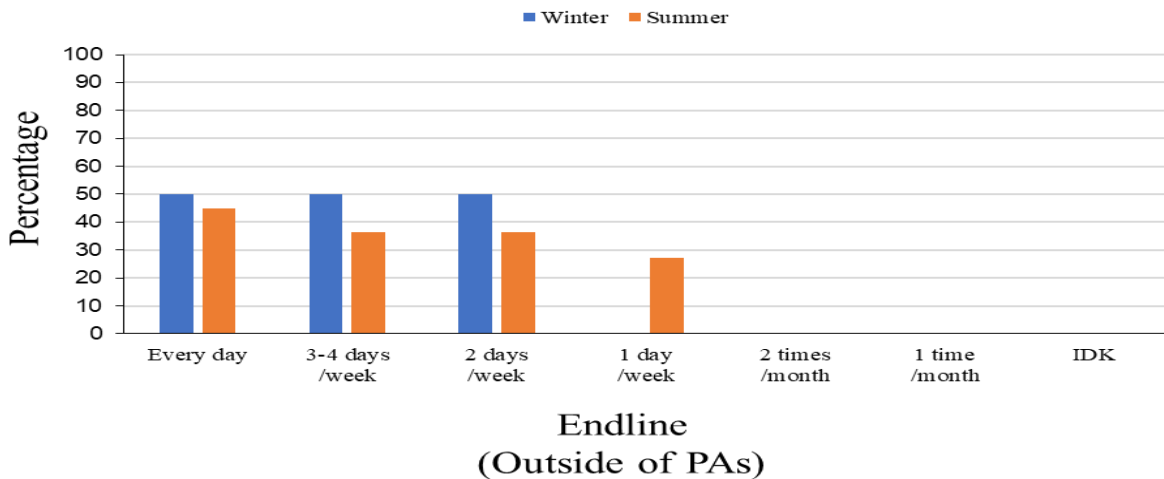


Figure 12-2: Water access situation of winter and summer in PAs.

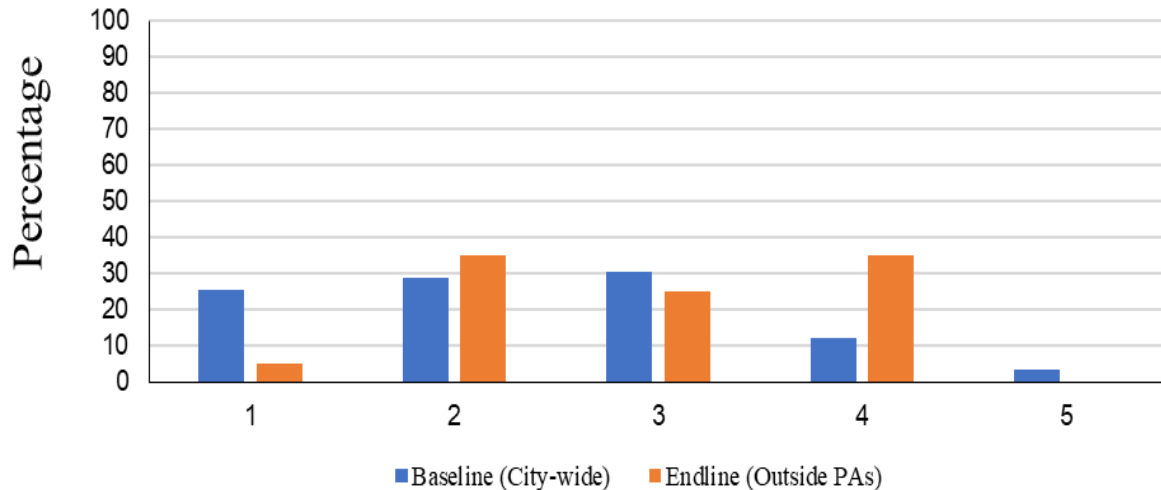
As for daily water access, 50% of the respondents answered Yes in winter and 45% of respondents answered Yes in summer. As for those who did not have access to water every day, 2 days and 3-4 days accounted for 100% in winter and 72.8% in summer, and water access in summer was slightly lower. Also, the number of respondents who answered 1 day in summer (27.3%) was higher than that in winter (0%), indicating that the water access is more difficult in summer than in winter. 35% of the respondents answered that the water supply situation in JM has improved compared to the past.



Water access situation of winter and summer outside PAs

12.2 Water service satisfaction

Regarding the satisfaction with water supply service of JM, the percentage of 3 to 5 out of 5 (the highest score) was 45% at Baseline survey and 60% at End-line survey, which was higher at End-line survey (Figure 12-4).



Customer satisfaction level about water supply

15. Project Logo

With help of the project, Jenin Municipality launched a project logo contest for the project in 2018 and advertised in newspapers.

Project Logo Contest by Jenin Municipality

The Jenin Municipality is launching a project logo contest for the following project. Project Full Name: "Project for Strengthening the Capacity of Water Service Management in Jenin Municipality"

- Project nickname: J.WaSIP (Jenin's Water Service Improvement Project)
- Funding Agency: Japan International Cooperation Agency (JICA)
- Project Summary: It is a three years project which began in October 2017, implemented by the Jenin Municipality and supervised by the Palestine Water Authority (PWA). The project goals include i) Decreasing real water loss by reducing leaks, bursts, and overflows, ii) Decreasing apparent water loss by reducing unauthorized consumption including illegal connections, and malfunctioning water meters, iii) Improving the overall management system of the water services, staff performance, cost and benefit analysis, and customer service, iv) Improving customers' weekly/daily access to drinking water, and v) Increasing water bill collection rate.

The designers are free to use their creativity in proposing the best logo, however the followings must be noted in the designed logo:

- 1) The logo should reflect at least three of the project goals as mentioned above.
- 2) The entire logo must be your original work and not copied from others or from the internet or other resources.
- 3) Hand designs or by designing apps are both acceptable.
- 4) The logo should present attractive colors preferably reflecting the nature of Jenin City and should include unique symbols of Jenin City.
- 5) The project nickname (J.WaSIP) should be clearly included in the logo, without any space between the letters. The capital letter of 'J' can also be displayed as the small letter of 'j' if it fits better within the proposed design.
- 6) No need to include names of JICA or Jenin Municipality, or PWA in the logo.
- 7) The logo must be printable with good quality, and readable at any size after printing.
- 8) Size of the logo: 3cm by 3cm. No requirements on the shape of the overall logo.
- 9) Only the winner will be contacted within two weeks after the contest deadline.

- 10) The selection committee has no obligation on responding on inquires for selection methods.
- 11) Send only one logo.
- 12) Send JPG format of your designed logo by email to: w.wasipjenin@gmail.com

Deadline: August 31, 2018

The winner will receive an award of 200USD for the best logo.

For more information please call contact Mohammad Azmoty, JICA Local Expert at 0562003314.

Several designed logos were received. In the end, the selection tea, decided the winner and after some modifications, the logo was decided for the project.



16. Project jacket

Jacket were designed for safety and also with displayed logos of JM, JICA, and name of the project. They were used throughout the project by team members.



別冊資料 CD 4.2

**Pre and Post Installation Survey – Pilot Areas –
English Version**



Jenin Municipality

Project for Strengthening the Capacity of Water
Service Management in Jenin Municipality
(WaSIP)

**Report on PPWM Pre & Post Installation
Door-to-Door Visits
and
Customer Satisfaction Survey**

December 2021



Japan International Cooperation Agency

وكالة التعاون الدولي الياباني

A) PPWM Pre-Installation Door to Door Visit of Customers

Purpose of the DtD Visits

The main purpose of this activity is to increase the acceptance of customers for replacement of PPWM and to avoid objections on the installation day.

At the door visits, the activity ensures:

- i. To provide details how PPWM works, purchasing PPWM credit, maintaining PPWM and report damage, etc. (a preliminary training on use of PPWM)
- ii. To distribute related usage manuals with detailed written instructions.
- iii. To confirm customers understanding of the PPWM and their questions are answered before the installation day.
- iv. To explain PPWM installation schedule a couple of weeks before the installation and if any customers would have a preference of a different installation day (on a case base)
- v. To pinpoint possible difficult/disagreed customers and obtain their consensus for PPWM installation before the installation day.

Selected customers

All customers in PA areas excluding customers in New Camps and governmental institutions.

PPWM customers	Pre-installation survey	Period
PA1	753	March 2019 to Oct. 2019
PA2	526	Jan. 2020 to Feb. 2020
PA3	524	Oct. 2019 to Dec. 2019
Total	1,803	

Procedure and staff involved

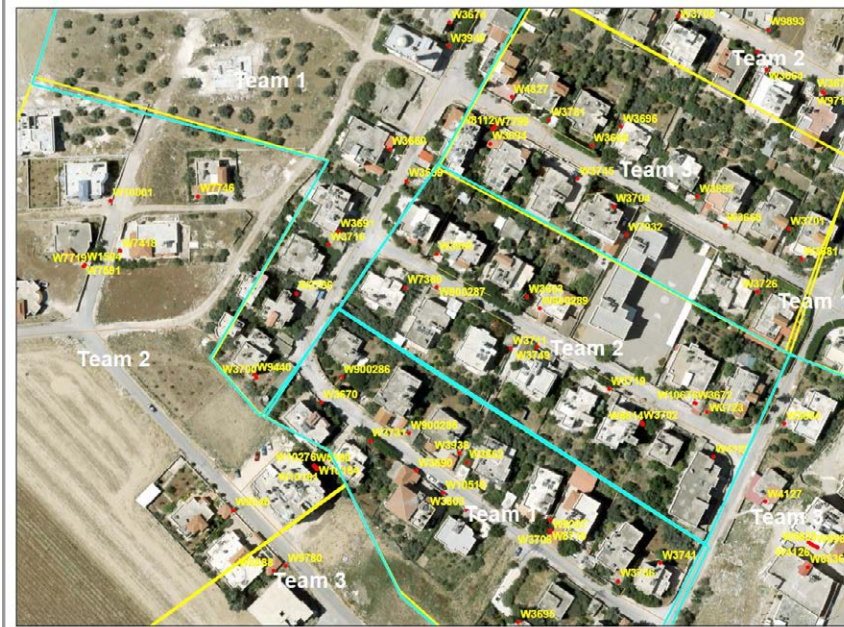
The involved staff included two staff from the Public Relations Department for the DtD visits and filling out the forms. GIS bases maps were also prepared for marking of the location of the customers. The survey also included data entry of the responses on excel files. Additional customer data such as house ID, name and phone numbers were also collected.

Sample Work Plan of the Pre-Installation Door-To-Door Visit (Work period, workload, team, and staff recruitment)

Required period and workload	Estimated pre-installation questionnaire time for each customer: 0.5 hour		
Teaming/Transportation			
Members		Customers per day	Other tasks
Team 1	1) JM PR Staff: 2 PR staff	6 to 8 customers (10am to 14pm)	Initial training, filling out forms 1 and 2 on the field, taking photos, pinpoint absent/disagreed customers for re-visits
Team 2	1) JM PR Staff: 2 PR staff	6 to 8 customers (10am to 14pm)	Initial training, filling out forms 1 and 2 on the field, taking photos, pinpoint absent/disagreed customers for re-visits
Data entry	Assistant PR	18- 24 customer data entry daily (8am to 4pm)	Data entry in GIS, scanning, photo filing, tabulating data
Transportation		JM Car	

a. Preparation and planning

1. Set up the area of visit for PPWM pre-installation
2. Extract customers from the AlShamel database for the selected area.
3. Prepare hardcopy map of the visiting area using GIS map of the CDS activity
4. Prepare questionnaire form and PR materials including the PPWM booklet, vending station (VS) location and service time.
5. Prepare PR materials such as PPWM booklet, VS time/schedule.



Sample map to use in location customers by water meter number of GIS for purpose of data entry

Contents of the PPWM booklet:
PPWM in Jenin
PPWM Benefits
Type of PPWM in PA Areas and How It Works
Water Fee and Credit Charges
Where to Purchase Credit for Your PPWM Smart Card (charging your card)
Customers Responsibility on Their PPWM
How to Maintain the PPWM from Damages or Misuse
Where to Report If Notice Any Damages in the PPWM or Misfunction
Installation Timetable
PPWM Screen Notifications

Additional information:
Location of Tested PPWMs in Pilot Areas
Results of Accuracy Test of Three Types of Water Meters
Other Activities by the Project
Water supply Map of Jenin



b. Pre-Installation Plan (Pre-Installation Questionnaire (Form 1))

- 6. To explain PPWM installation in- person by door-to-door visits.
- 7. To hear customer’s opinion or expectation on the PPWM installation schedule/time/day.
- 8. To pinpoint possible difficult/disagreed customers and obtain their consensus before installation day.
- 9. The collected data will be scanned and recorded in GIS format for location base storing of the collected data.

c. Preliminary customer training on proper use of PPWM (Instruction Checklist (Form 2))

- 10. To provide details how PPWM works, credit charge, maintaining PPWM and damage report, etc.
- 11. To distribute related usage manuals with detailed written instructions.
- 12. To ensure that the customers understand the PPWM and their questions are answered before the installation day.

Note:

※ The final readings (**Form 3**) also needs to be filled out by the PPWM installation team on the same day of the installation.

※ A few months after the PPWM installation, a post-installation questionnaire (**Form 4**) will be also conducted in order to evaluate the public satisfaction of the PPWM. A separate team will be organized to conduct the questionnaire by the 10% of the installed customers as a sample for measuring the customer satisfaction after use of PPMW.

Pre-Installation Questionnaire (Form 1)

Customer ID/ House ID / Name of Interviewee Phone Number Date of Interview Name of Neighborhood:
<p>1. About PPWM Project</p> <p>1.1 Have you heard that JM is going to install PPWM for your area? Yes <input type="radio"/> No <input type="radio"/> If Yes: from JM <input type="radio"/> neighbors <input type="radio"/> Community leaders <input type="radio"/> project activities in the area <input type="radio"/> other <input type="radio"/></p> <p>1.2 The water meter of your premise will be replaced with PPWM by JM. Do you have any comments? Positive comments <input type="radio"/> Negative comments <input type="radio"/> Indifferent comments <input type="radio"/> No comments at all <input type="radio"/> Details of the comment:</p>
<p>2. PPWM Device</p> <p>2.1 Do you know about these types of PPWMs: PP Velocity: Yes <input type="radio"/> No <input type="radio"/> Some extent <input type="radio"/> PP Volumetric: Yes <input type="radio"/> No <input type="radio"/> Some extent <input type="radio"/> PP Ultrasonic: Yes <input type="radio"/> No <input type="radio"/> Some extent <input type="radio"/></p> <p>※Interviewer: Please explain about each type briefly after the answer as below: <u>PP Velocity:</u> 1) With mechanical parts, it can be damaged. 2) The accuracy is reduced according to age. 3) Air is counted even though it does not likely affect the measurement. 4) Cheaper <u>PP Volumetric:</u> 1) Dirt problems are severe. 2) Air is counted even though it does not likely affect the measurement. 3) Cheaper <u>PP Ultrasonic:</u> 1) Water with air and air bubble is not measured. 2) Without mechanical parts, life is longer. 2) It is less likely to be blocked by any dirt or sand particles. 3) More expensive</p> <p>2.2 PP Ultrasonic is been selected as the best choice and will be installed in your premise. After hearing the comparison, do you understand why it is the best choice? I understand that Ultrasonic is the best choice <input type="radio"/> I need more explanation <input type="radio"/></p>
<p>3. PPWM Implementation</p> <p>3.1 What is your expectation of JM at any stage of the replacement: a. Time of the replacement: Weekday <input type="radio"/> Weekend <input type="radio"/> Morning Time <input type="radio"/> Afternoon Time <input type="radio"/> Evening Time <input type="radio"/></p>

Project for Strengthening the Capacity of Water Service Management in Jenin Municipality

b. Woman in the replacement team: No need Needed

4. PPWM Charge and Use

✘Interviewer: Please explain how to use PPWM and the charging card and locations based on the instruction material.

4.1 After explaining, do you understand now how to use the PPWM/card and charging the card? Yes No

4.2 Where do you prefer to charge your prepaid card? ✘Multiple answer is OK.

JM AlJalil supermarket on the street Haifa St. charge center Downtown charge center Other

5. PPWM PR Activities




5.1 What method you would like to be reached for the PPWM project information?

Public meetings workshops door to door JM website Phone call SMS Neighborhood committee Social Media Others




6. Satisfaction

6.1 What factors will make you satisfied with the PPWM installation procedure?

PPWM Pre-Instruction Checklist (Form 2)

<p>Team #:</p> <p>PPWM Instruction Checklist (Form 2)</p> <p>Date of Installation/Replacement: (mm/dd/yy)</p> <p>Customer ID/House ID:</p> <p>Neighborhood: <u>Khroube</u> <input type="radio"/> <u>Sobah Alkheir</u> <input type="radio"/> N. Street</p> <p>Address in the neighborhood</p> <p>Name of the Water Meter Owner:</p> <p>New PPWM No.:</p> <p>Customer Phone Number:</p>	 <p>“Project for Strengthening the Capacity of Water Service Management in Jenin Municipality”</p>   <p>Japan International Cooperation Agency</p>																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 2px;">The customer is informed:1. An introduction on the PPWM’s type, how it works, and its parts</td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 2px;">2. Water tariff fee and PPWM ownership</td> <td></td> </tr> <tr> <td style="padding: 2px;">3. How to use the water meter and how to charge</td> <td></td> </tr> <tr> <td style="padding: 2px;">4. How to maintain the PPWM from damages, or misuse</td> <td></td> </tr> <tr> <td style="padding: 2px;">5. The initial available credit of water for first time use</td> <td></td> </tr> <tr> <td style="padding: 2px;">6. How and where to charge the card</td> <td></td> </tr> <tr> <td style="padding: 2px;">7. Where to report if notice any defect in the PPWM or malfunction</td> <td></td> </tr> <tr> <td style="padding: 2px;">8. What to do if the charging card is stolen or lost</td> <td></td> </tr> <tr> <td style="padding: 2px;">9. JM website complaint system and live chat</td> <td></td> </tr> <tr> <td style="padding: 2px;">10. Apply for different services at the PCSC</td> <td></td> </tr> <tr> <td style="padding: 2px;">11. Customer’s other questions are answered.</td> <td></td> </tr> </table>		The customer is informed:1. An introduction on the PPWM’s type, how it works, and its parts		2. Water tariff fee and PPWM ownership		3. How to use the water meter and how to charge		4. How to maintain the PPWM from damages, or misuse		5. The initial available credit of water for first time use		6. How and where to charge the card		7. Where to report if notice any defect in the PPWM or malfunction		8. What to do if the charging card is stolen or lost		9. JM website complaint system and live chat		10. Apply for different services at the PCSC		11. Customer’s other questions are answered.	
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10. Apply for different services at the PCSC																							
11. Customer’s other questions are answered.																							
<p>Survey Staff</p> <p>Name:</p> <p>Position:</p> <p>Signature</p>	<p>Customer</p> <p>Name:</p> <p>Signature</p>																						

Final Water Meter Reading before Replacement (Form 3)

Final Water Meter Reading before Replacing with PPWM		
<p>The final water meter reading is confirmed as below:</p> <p>Date of Reading/Replacement: (mm/dd/yy)</p> <p>House ID:</p> <p>Neighborhood: Khroube <input type="checkbox"/> Sobah AlKheir <input type="checkbox"/> N. Street <input type="checkbox"/></p> <p>Address:</p> <p>Name of the Water Meter Owner:</p> <p>Type of Regular Water Meter:</p> <p>Water Meter No.:</p> <p>Final Reading:</p> <p>New PPWM No.:</p>		
 <p style="text-align: center;">"Project for Strengthening the Capacity of Water Service Management in Jenin Municipality"</p>   <p style="text-align: center;">Japan International Cooperation Agency</p>		
<p>The following photos were also taken:</p> <p>Photo 1: Water Meter <input type="checkbox"/></p> <p>Photo 2: Water Meter showing the surroundings <input type="checkbox"/></p> <p>Photo 3: PPWM <input type="checkbox"/></p> <p>Photo 4: PPWM showing the surroundings <input type="checkbox"/></p>		
<p>Replacement Staff</p> <p>Name:</p> <p>Position:</p> <p>Signature</p>	<p>Customer (if Present)</p> <p>Name:</p> <p>Signature</p>	<p>Customer Service Section</p> <p>Name: Khaled Abu Obeid</p> <p>Position: Section Head</p> <p>Signature</p>

Arabic Translation of Form #1

استبيان ما قبل تركيب عداد الدفع المسبق (نموذج 1)

رقم المشترك رقم البيت
اسم الذي تجري معه المقابلة رقم الهاتف
تاريخ المقابلة: اسم الحي

1 عن عداد الدفع المسبق
1. هل سمعت ان بلدية جنين ستقوم بتركيب عدادات دفع مسبق للمياه في منطقتك
نعم لا اذا نعم من: البلدية من الجيران رئيس لجنة الحي أنشطة المشروع في المنطقة اخرى
1.2 على فرض انه سيتم استبدال عدادك الحالي بأخر مسبق الدفع من قبل البلدية ما تعليقك؟
تعليق ايجابي تعليق سلبي غير مبالي لا توجد تعليقات على الاطلاق
تفاصيل التعليق

2 . عداد الدفع المسبق
2.1 هل تعرف عن انواع عدادات الدفع المسبق هذه
عداد السرعة : نعم لا الى حد ما
العداد الحجمي : نعم لا الى حد ما
عداد الالتراسونيك : نعم لا حد ما
الباحث: كما يظهر ادناه الرجاء الشرح عن كل عداد باختصار بعد الاجابة
عداد السرعة: 1. يوجد فيه اجزاء ميكانيكية، يمكن ان يتعطل 2. الدقة تقل حسب العمر 3. يتم احتساب الهواء على الرغم من أنه من غير المحتمل أن يؤثر على القياس (4. رخيص الثمن
العداد الحجمي: 1. مشاكل الاوساخ كثيرة 2. يتم احتساب الهواء على الرغم من أنه من غير المحتمل أن يؤثر على القياس 3. رخيص الثمن
عداد الالتراسونيك: 1. لا يحتسب الهواء الداخل مع الماء ولا حتى فقاعات الهواء 2. بدون اجزاء ميكانيكية، والعمر الافتراضي للعداد أطول 2. من غير المحتمل ان يتم اغلاقه بالاوساخ او جزيئات الرمل 3. اعلى تكلفة
2.2 عداد الالتراسونيك تم اختياره كأفضل الخيارات وعلى فرض انه سيتم تركيبه لك وبعد سماعك عن المقارنة بين العدادات هل فهمت لماذا هو أفضل الخيارات؟
فهمت ان عداد الالتراسونيك افضل خيار احتاج مزيد من الشرح

3. التنفيذ
3.1 ماذا تفضل في أي من التالية وقت التنفيذ
أ. وقت الاستبدال : أيام الاسبوع نهاية الاسبوع الفترة الصباحية فترة ما بعد الظهر الفترة المسائية
ب . وجود مرأة في فريق الاستبدال : لا يوجد حاجة بحاجة

4. شحن عداد الدفع المسبق واستخدامه
* الباحث : الرجاء الشرح حول كيفية استخدام عداد الدفع المسبق وشحن الكرت ومواقع الشحن اعتمادا على مادة الارشادات
4.1 بعد الشرح هل فهمت كيفية استخدام عداد الدفع المسبق وشحن الكرت ؟ نعم لا
4.2 اين تفضل شحن الكرت ؟ * اكثر من اجابة ممكنة
سوبرماركت الجليل مكتب شارع حيفا مكتب وسط المدينة اخرى

5. أنشطة العلاقات العامة لعداد الدفع المسبق
5.1 ما هي الطرق التي ترغب من خلالها الوصول الى معلومات المشروع
اجتماعات عامة ورشات عمل زيارة البيوت موقع البلدية الاتصالات الهاتفية لرسائل القصيرة لجنة الحي اخرى

6. الرضا
6.1 ما هي العوامل التي تجعلك راضيا عن اجراءات تركيب عداد الدفع المسبق

Arabic Translation of Form #2



لفويق
نموذج (2) قوائم اعدادات عداللاميامس بقل دفع

تاريخ التوليب \ سببدال

رقم المشترك | رقم البيت

الحي : خروبة ○ صباح الخيد ○ شارع الناصرة ○
لايوان داخل الحي

اسم صاحب العداد

رقم العداد الجديد

نصف المشترك

تميل ترك :

1	قيدمة عن نوع العداد مسبق الفع ولي في عمل ، وأجزائه
2	تخوة لياه ولم يالعداد
3	لخبي ةاستخدام العداد وش حنالرصيد
4	ليفت خلط على العداد لمن الكسر اوسوء استخدام
5	لرصيد لخواو استخدام للمرة
6	ليفت يبدش حن الياطة؟
7	لين يتلغ اذا ظت أيكس رفي اختلاف الاسبق للياه اوخلل مصنع ي؟
8	مادقت عل اذا ضاعت طبق العداد اوس رقت؟
9	نظامشك اوى على موقع الليطة لاخترونى والمحلثة للبلشرة يفشات)
10	بناق دم بطل بال حصول على خدمات لمحة في مركز خدمات لجمور
11	تمت بة على اسوق للمشترك رى

B) PPWM Post Installation Survey

Purpose

In order to measure the satisfaction of customers with their installed PPWMs, this survey aimed to visit the customers and interview their opinions about their overall experience with the PPWMs.

Selected customers

While the pre-installation door to door visits (DtD) were completed for all customers before the installation, this post-installation survey interviewed about 10% of the PPWM customers in each PA area as seen below.

PPWM customers	Pre-installation survey	Post installation survey	
PA1	753	70	Sep.2019 to Nov. 2019
PA2	526	62	Jun. 2020
PA3	524	60	Jun. 2020
Total	1,803	192	

Method of survey

Interviewed customers were selected randomly after about 1 to 2 months of their usage and experience of the installed PPWM. It should be noted that there were some delays due to the outbreak of the Covid-19 which caused postpone of the surveys in PA2 and PA3. The staff filled out the questionnaire form according to the given responses from the customers. The questionnaire form is included in end of this report. There were 14 questions such as acknowledge of the type of installed PPWM, satisfaction with the installation implementation, use of PPWM, and overall satisfaction.

Area

The area included the selected customers in all three pilot areas of the project.

Procedure and staff involved

The involved staff included two staff from the Public Relations Department for the DtD visits and filling out the forms. GIS bases maps were also prepared for marking of the location of the selected customers. The survey also included data entry of the responses on excel files. Additional customer data such as house ID, name and phone numbers were also collected.

PA areas	Duration	Staff	Involved staff	Activity
PA1	Sep to Nov 2019 (total 5 days)	JET + JM	2 PR staff 1 water section/GIS staff	-Map preparation (JET) -Field visits (JM+ JET's assistance) -Data entry (Mainly JET with training of JM)
PA2	June 2020 (Total 4 days)	JM with assist of JET	2 PR staff 1 water section/GIS staff	-Map preparation (JET's assist) -Field visits (JM) -Data entry (Mainly JM with supervision of JET)
PA3	June 2020 (Total 4 days)	JM	2 PR staff 1 water section/GIS staff	-Map preparation (JM) -Field visits (JM) -Data entry (JM with supervision of JET)

Brief findings

1) Customers in all three PA areas understood the reason of selection of the PP Ultrasonic PPWM by JM and have been positive for such selected PPWM been installed at their promises.

2) There were no objections about the procedure of the PPWM implementation in terms of the days and time of installation, the team, the distributed informative PPWM booklet and manual on how to use the PPWM.

3) All customers in PA2 and PA3 responded satisfied with the PPWM because there was no need for meter readings and bill deliveries to their premises. A few were unsatisfied in PA1 (first area of the installation customers) which means the city is now more understanding of such benefits of the PPWM system as the project progressed from PA1 to PA2 and PA3 areas.

4) 98% of the customers were satisfied with their installed PPWM and had not major issues as for card charging and the PPWM device. JM puts more effort to solve customer complaints once it is received and has now a 24/7 hours phone number available for complaints.

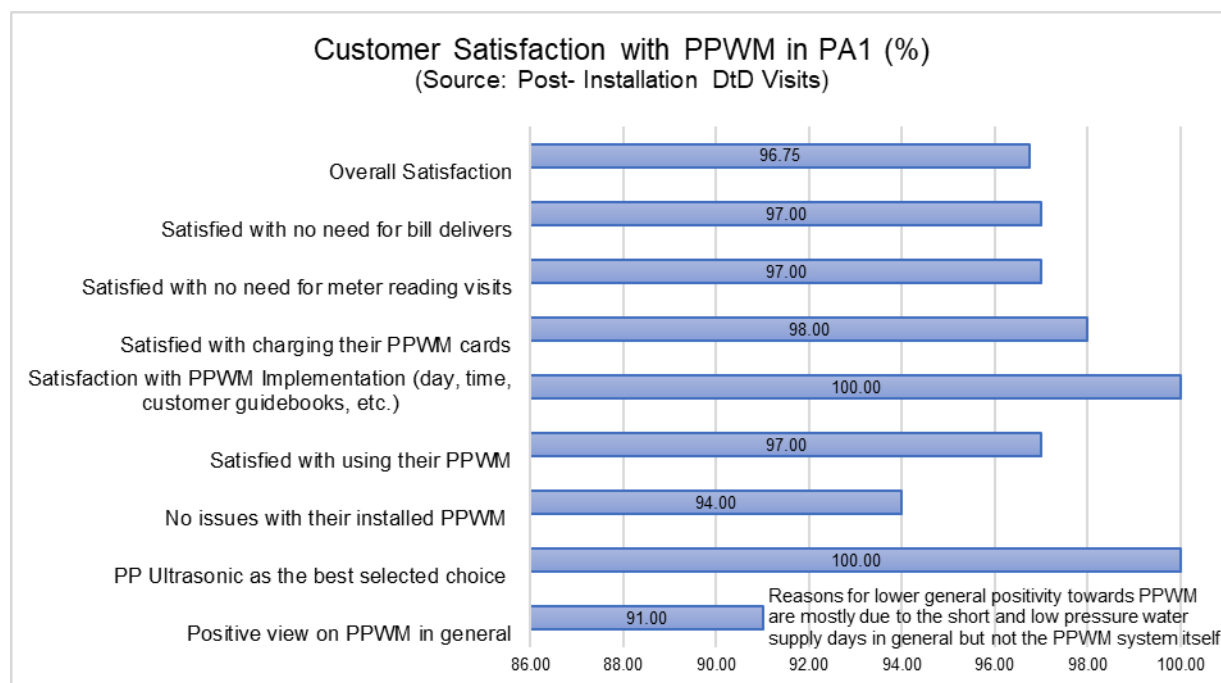
5) The overall satisfaction is 98%. The reasons for the remaining 2% were mostly due to the shortage of water supply rather than their experience with PPWM system. More attention needs to be put in improving the water supply.

PA1
Post-Installation Evaluation Results
Total: 70 surveys

Views	Responses	Reasons	Satisfaction
General view on the PPWM	Positive comments: 64 Negative comments: 3 Indifferent comments: 0 No comments at all: 3	Reasons for negativity: 1) Water does not reach to them Reasons for positivity: 1) No debt accumulation 2) No air measures 3) Consumption control 4) No reading mistakes 5) Better system 6) No minimum tariff	91%
Customers understand PP Ultrasonic as the best selected choice	Yes: 70 No: 0		100%
Satisfaction with PPWM Implementation	Installation day: 70 Installation time: 70 Installation work:70 Pre DtD visits: 70 PPWM handbook: 70		100%
Issues with their installed PPWM	No issues in using prepaid card on their PPWM: 65 No issues in charging their prepaid cards: 67	First time use only. Note: 1) Problem solved by quick CSS's visit. 2) A manual for first time usage and charging cards were prepared by the CSS.	94%
Detailed level of satisfaction with PPWM	Satisfied with using their PPWM: 68	Reasons:	97%
	Satisfied with charging their cards: 69	1) Not favor of self-service	98%
	Satisfied with no need for meter reading visits: 68	2) High consumption	97%
	Satisfied with no need bill delivers: 68	3) Reader/collector visits	97%

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	Satisfied with water availability in their home: 22 (31.42%)	were a good reminder	
Overall satisfaction		Reason for dissatisfaction: Need more supply days Low water pressure	96.75%



PA2
Post-Installation Evaluation Results
Total: 62 surveys

Views	Responses	Reasons	Satisfaction
General view on the PPWM	Positive comments: 62 Negative comments: 0 Indifferent comments: 0 No comments at all: 0	Reasons for positivity: 1) No debt accumulation 2) No air measures 3) Consumption control 4) No reading mistakes 5) Better system	100%
Customers understand PP Ultrasonic as the best selected choice	Yes: 62 No: 0		100%
Satisfaction with PPWM Implementation	Installation day: 62 Installation time: 62 Installation work: 62 Pre DtD visits: 62 PPWM handbook: 62		100%

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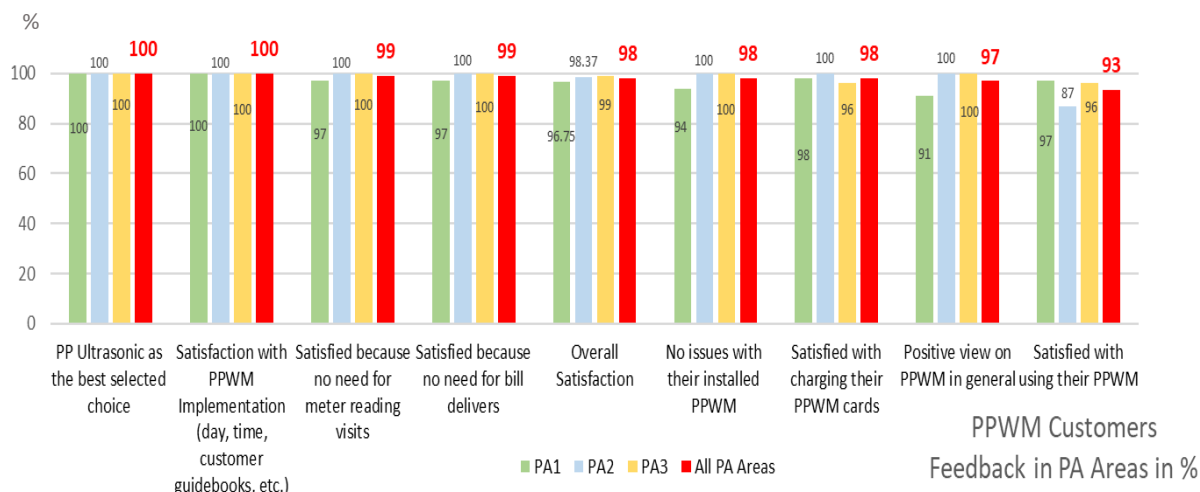
Issues with their installed PPWM	No issues in using prepaid card on their PPWM: 62 No issues in charging their prepaid cards: 62	First time use only. Note: 1) Problem solved by quick CSS's visit. 2) A manual for first time usage and charging cards were prepared by the CSS.	100%
Detailed level of satisfaction with PPWM	Satisfied with using their PPWM: 54	Reasons for negativity: 1) Not enough water 2) High consumption	87%
	Satisfied with charging their cards: 62		100%
	Satisfied with no need for meter reading visits: 62	Reasons for positivity: 1) favor of self-service 2) No debt 3) No bills	100%
	Satisfied with no need bill delivers: 62		100%
Satisfied with water availability in their home: 43 (69%%)			
Overall satisfaction	Satisfied	Reason for dissatisfaction: Not enough water High consumption	98.37%

PA3
Post-Installation Evaluation Results
Total : 60 surveys

Views	Responses	Reasons	Satisfaction
General view on the PPWM	Positive comments: 60 Negative comments: 0 Indifferent comments: 0 No comments at all: 0	Some comments: -needs continuous water supply Reasons for positivity: 1) No debt accumulation 2) No air measures 3) Consumption control 5) No errors	100%
Customers understand PP Ultrasonic as the best selected choice	Yes: 60 No: 0		100%
Satisfaction with PPWM Implementation	Installation day: 60 Installation time: 60 Installation work:60 Pre DtD visits: 60 PPWM handbook: 60		100%
Issues with their installed PPWM	Satisfied: no issues in using prepaid card on their PPWM: 60 Satisfied: no issues in charging their prepaid cards: 60	First time use only. Note: 1) Problem solved by quick CSS's visit. 2) A manual for first time usage and charging cards were prepared by the CSS.	100%
	Satisfied with using their PPWM: 58	Reasons:	96%

Project for Strengthening the Capacity of Water Service Management in Jenin Municipality

Detailed level of satisfaction with PPWM	Satisfied with charging their cards: 58	1) Not favor of self-service 2) High consumption	96%
	Satisfied with no need for meter reading visits: 60		100%
	Satisfied with no need bill delivers: 60	Reasons for positivity: 1) No debt 2) Water save 3) Self service 4) Control of consumption	100%
	Satisfied with water availability in their home: 58 (96%)		
Overall satisfaction	Satisfied		99%



Comparison of PPWM Customer Satisfaction in All PAs

Post-Installation Evaluation Questionnaire (Form 4)

Customer ID/ House ID	/
Name of Interviewee	Phone Number
Date of Interview	Name of Neighborhood:

1. PPWM Introduction

1.1 The water meter of your premise has been replaced with PPWM by JM. Do you have any comments?

Positive comments Negative comments Indifferent comments No comments at all

Details of the comments:

2. PPWM Device

✕Interviewer: Please explain about each type briefly after the answer as below:

PP Velocity: 1) With mechanical parts, it can be damaged. 2) The accuracy is reduced according to age. 3) Air is counted even though it does not likely affect the measurement. 4) Cheaper

PP Volumetric: 1) Dirt problems are severe. 2) Air is counted even though it does not likely affect the measurement. 3) Cheaper

PP Ultrasonic: 1) Water with air and air bubble is not measured. 2) Without mechanical parts, life is longer. 2) It is less likely to be blocked by any dirt or sand particles. 3) More expensive

2.1 Do you know which type is installed in your place?

PP Velocity PP Volumetric PP Ultrasonic

2.2 PP Ultrasonic was installed in your place. Did you understand why it was selected as the best choice?

I understand that PP Ultrasonic is the best choice I needed more explanation

3. PPWM Implementation

3.1 Were you satisfied with the:

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Installation day Time Installation work the in-person visit before installation Instruction
PPWM usage manuals

4. PPWM Charge and Use

4.1 Do you have any difficulties or issues in using your prepaid card with your PPWM?

Yes Explain.

No

4.2 Where do you often charge your prepaid card? ✖Multiple answer is OK.

JM Supermarkets on the street Haifa St. charge center Downtown charge center Other

4.3 Do you face any issues in charging your prepaid card? Please explain.

Yes Explain.

No

5. PPWM PR Activities

5.1 What method were you more satisfied to be reached for the PPWM project information:

Public meetings Door to door JM website Phone call SMS Tour visits Others

6. Satisfaction

6.1 Were you satisfied with the whole procedure of the replacement?

Yes Why?

No Why?

To some extend Why?

6.2 Are you satisfied with using your PPWM?

Yes Why?

No Why?

To some extend Why?

6.3 Are you satisfied with card charge?

Yes Why?

No Why?

To some extend Why?

6.4 Are you satisfied that no need for meter readers visit at your home anymore?

Yes Why?

No Why?

To some extend Why?

6.5 Are you satisfied that no need bill delivers at your home anymore?

Yes Why?

No Why?

To some extend Why?

6.6 Are you satisfied with water availability on your home from the network?

Yes Why?

No Why?

To some extend Why?

Arabic Translation of Form #4 استبيان ما بعد تركيب العداد مسبق الدفع (نموذج 4)

رقم الاشتراك	.....
الاسم	..... رقم الهاتف
تاريخ المقابلة	..... الحي السكن

1. مقدمة عن عداد الدفع المسبق

1.1 هل لديك أي تعليق على قيام البلدية بتغيير عداد المياه الميكانيكي الخاص بك بعدد دفع مسبق؟

تعليق ايجابي تعليق سلبي غير مبالي لا تعليق

نص التعليق ان وجد:

2. عداد الدفع المسبق

✖ الباحث : من فضلك قم بالشرح عن أنواع العداد التالية بشكل موجز:

عداد السرعة: (1) يحتوي على أجزاء ميكانيكية من السهل ان تتلف (2) دقة العداد تقل مع مرور الزمن (3) يقوم بعد الهواء مما يؤثر على القراءة

ويؤدي الى زيادتها (4) رخيص نسبيا

العداد الحجمي: (1) يقوم بتجميع الأوساخ (2) يقوم بعد الهواء مما يؤثر على القراءة ويؤدي الى زيادتها (3) رخيص نسبيا

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عداد الأتراسونيك: 1) لا يقوم باحتساب الهواء 2) لا توجد أجزاء ميكانيكية وبالتالي عمر العداد يكون أطول 3) لا توجد إمكانية لحدوث أي انغلاق بسبب الأوساخ 4) السعر مرتفع نسبياً

- 2.1 هل تعلم ما هو نوع عداد المياه مسبق الدفع المستخدم في منزلك؟
عداد سرعه مسبق دفع عداد حجري مسبق دفع أتراسونيك مسبق دفع
- 2.2 العداد الذي تم تركيبه في منزلك هو عداد أتراسونيك مسبق الدفع. هل تعلم ما هو سبب اختيار هذا العداد كأفضل عداد مياه؟
نعم أعلم أن عداد الأتراسونيك المسبق الدفع هو الأفضل لا أعلم أحتاج أن تشرح لي

3. مرحلة تنفيذ / تركيب العداد مسبق الدفع.

- 3.1 هل كنت راضي عن:
يوم التركيب وقت التركيب أعمال التركيب الزيارة قبل التركيب التعليمات استخدام كتيب الشرح

4. عملية الشحن والاستخدام.

- 4.1 هل واجهت أي صعوبة في استخدام أو شحن العداد مسبق الدفع؟
نعم قم بالشرح.....
لا
- 4.2 عادةً أين تقوم بشحن كارت العداد مسبق الدفع - يمكن اختيار أكثر من مكان.
البلدية سوبر ماركت الجليل مركز الشحن في شارع حيفا مركز الشحن وسط المدينة أخرى
- هل واجهت أي مشاكل متعلقة بعملية الشحن؟
نعم قم بالشرح.....
لا

5. أنشطة العلاقات العامة بخصوص العدادات مسبق الدفع.

- 5.1 ما هي الطريقة المريحة لك للحصول على معلومات عن نظام العداد مسبق الدفع؟
الاجتماعات العامة زيارة المنزل موقع البلدية الإلكتروني المكالمات الهاتفية الرسائل الزيارات الميدانية أخرى

6. مستوى الرضا للمشاركين.

- 6.1 هل كنت راضي عن استبدال العداد القديم بعداد مسبق دفع؟
نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

6.2 هل كنت راضي عن تجربتك مع العداد مسبق الدفع؟ / أي تعليق ان وجد

- نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

6.3 هل أنت راضي عن عملية شحن الكارت الخاص بالعداد مسبق الدفع؟

- نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

6.4 هل أنت راضي عن عدم وجود حاجة لزيارات القراء في منزلك بعد الآن؟

- نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

6.5 هل أنت راضي عن الغاء الفواتير وعدم احضارها الى منزلك؟

- نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

6.6 هل أنت راضي عن توافر المياه الواصلة الى منزلك من الشبكة؟

- نعم لماذا؟
لا لماذا؟
الى حد ما لماذا؟

Project for Strengthening the Capacity of Water Service Management in Jenin Municipality



Sample photos of pre and post installation DtD visits