

Syrian Arab Red Crescent

Regional WASH Working Sub-group

11th of November 2020

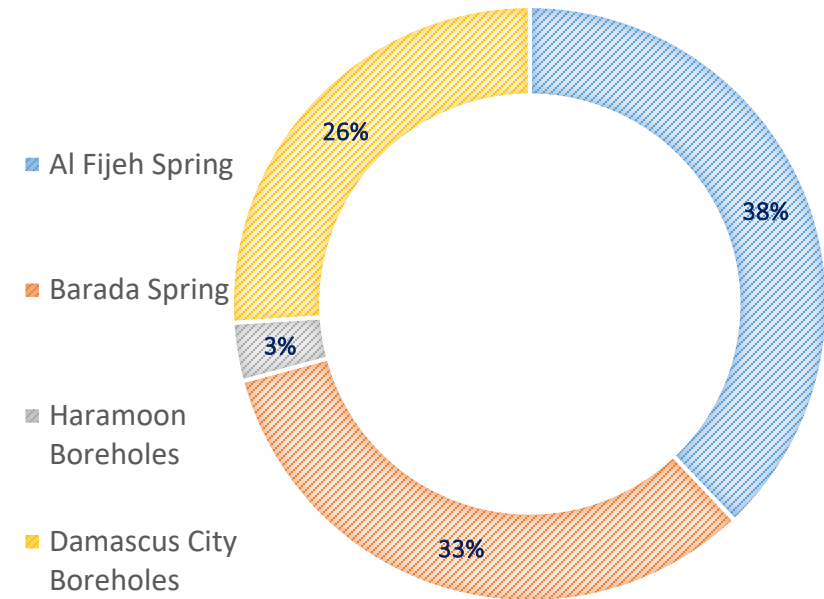
Damascus Water Cut Intervention

Presentation Plan:

1. Damascus City Water Sources.
2. The Situation of water services during crisis.
3. Damascus Water Emergency Response Plan.
4. Lessons Learned.

1. Damascus City Water Sources:

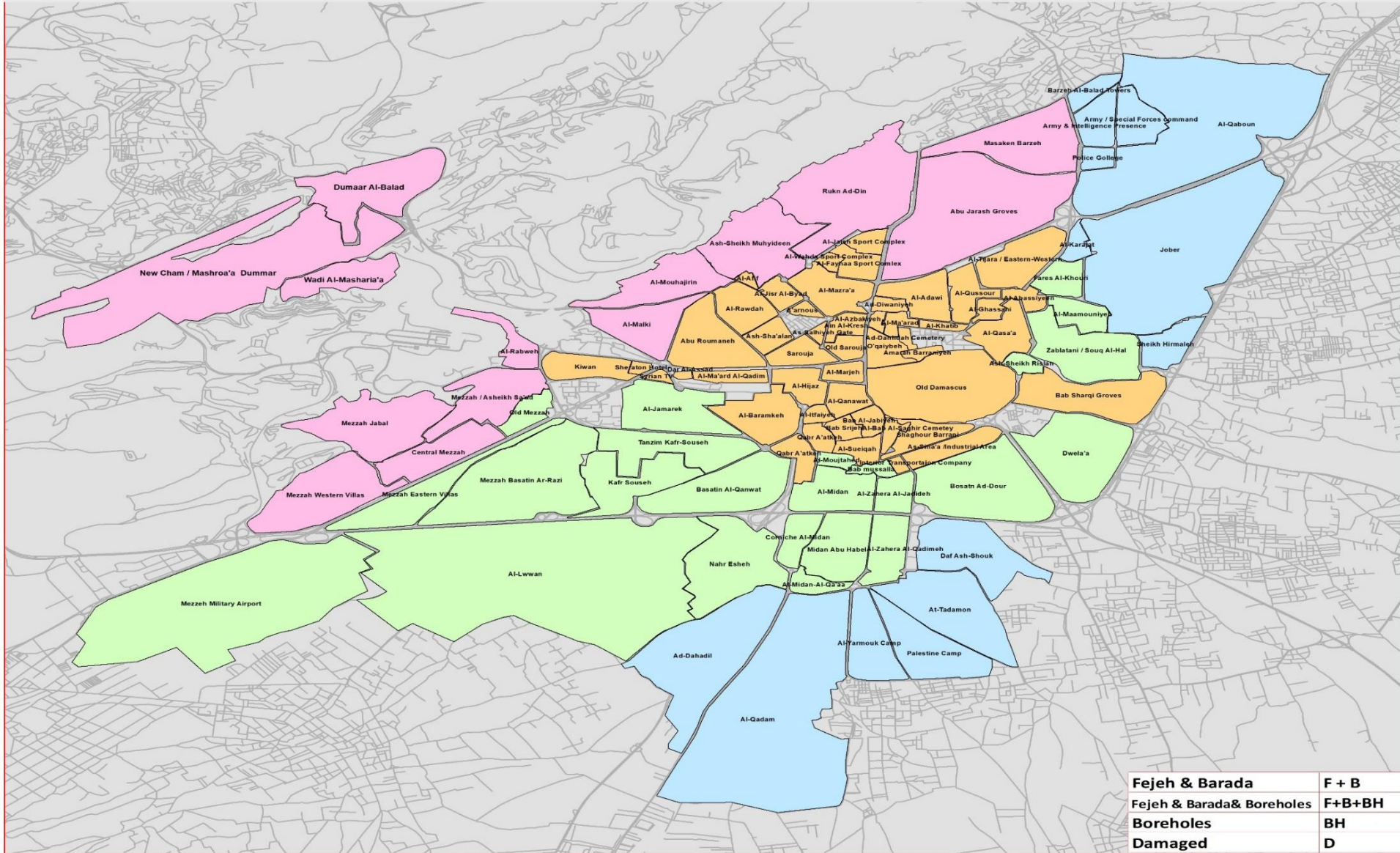
Source	Capacity during dry season	Location
Figeh Spring	179'500 m ³ /d	20 KM north west of the city
Barada Spring	155'500 m ³ /d	50 KM from Damascus city
Haramoon Boreholes	15'000 m ³ /d	West side of Rural Damascus city
Damascus City Boreholes	123'000 m ³ /d	





الهلال الأحمر العربي السوري
Syrian Arab Red Crescent

Damascus Sectors



Legend

- F + B** sector A
- F+B+BH** sector B
- BH** sector C
- D** sector D

Fejeh & Barada	F + B
Fejeh & Barada& Boreholes	F+B+BH
Boreholes	BH
Damaged	D

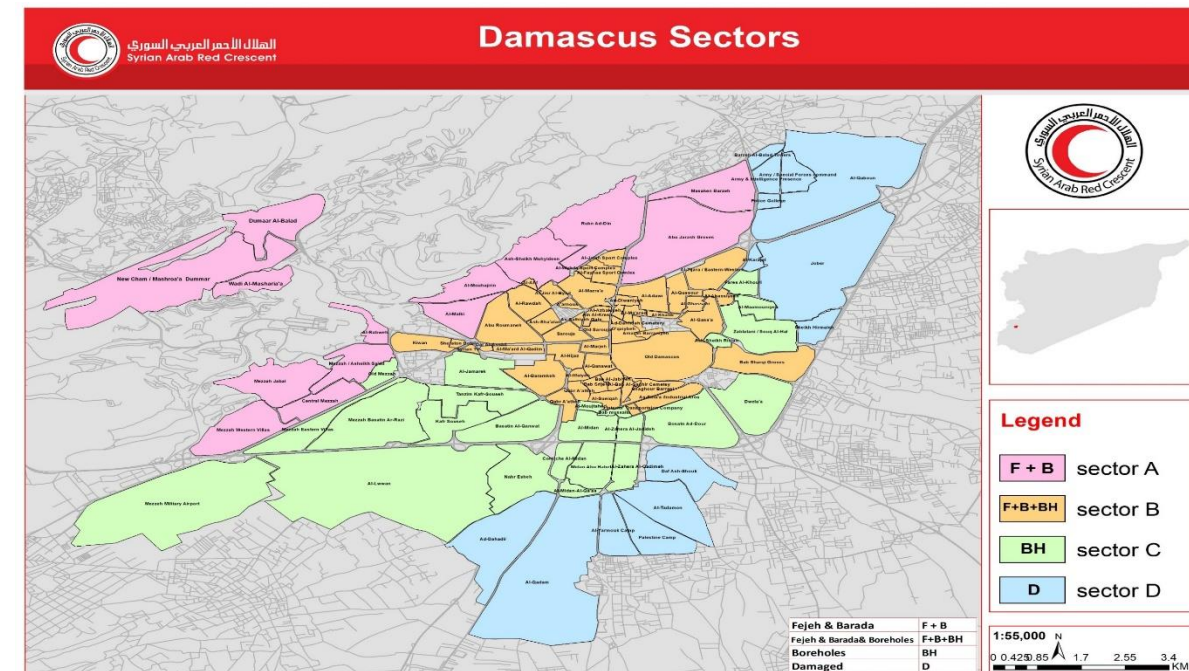


2. The situation of water services during crisis:

- 2014 till 2016 Figeh spring and part of Barada spring main pipeline were under opposition control.
- Barada spring, Haramoon boreholes and Damascus boreholes were under the government control.
- Figeh spring and Barada spring main pipeline were hard to reach areas.
- During the mentioned period water was used for political reasons and it affected the civilians of Damascus.
- On December 2016, 4.5 to 5 million people in Damascus and its surroundings main water sources had been cut, starting from 22nd of December for 40 days.
- The role of humanitarian actors (SARC, ICRC, NorCross & UNICEF) in cooperation with Damascus water board.

On December 2016, 4.5 to 5 million people in Damascus and its surroundings main water sources had been cut, starting from 22nd of December 2016 until 29 Jan 2017.

Water Source	Normal Situation (Dry Season)	During Conflict
Fijeh & Barada Spring	335'000 m ³ /d	0
Haramoon & Damascus Boreholes	138'000 m ³ /d	138'000 m ³ /d
Total	473'0000 m³/d	138'000 m³/d



3. Damascus Water Emergency Response Plan (ERP):

1. ERP main goal.
2. ERP main objectives.
3. Emergency Plan Execution:
 - Applying immediate procedures (Life saving)
 - Applying Emergency procedures.
4. Long Term (post crisis intervention).

ERP Main Goal:

- Provide the minimum acceptable quantity with good quality of Water to Damascus and it's surroundings.

Essential Criteria for ERP:

- Define and collect information about water and sanitation system.
- Define the role and responsibilities for institutions and humanitarian organizations working in the WASH field
- Set up clear communication lines.
- Assure the security of the technicians and workers at water facilities.
- Define alternative water sources.
- Provision of chemicals (Sodium and Calcium Hypochlorite).
- Provision of maintenance accessories.
- Provision of alternative power source (generators).
- Enhancing Water Sources and water facilities security.
- Enhancing Water Sources security.
- Support water quality assurance and monitoring system.

Emergency Plan Execution:

Applying immediate procedures (Life saving)

Applying Emergency procedures.

Long Term (Post Crisis Intervention)

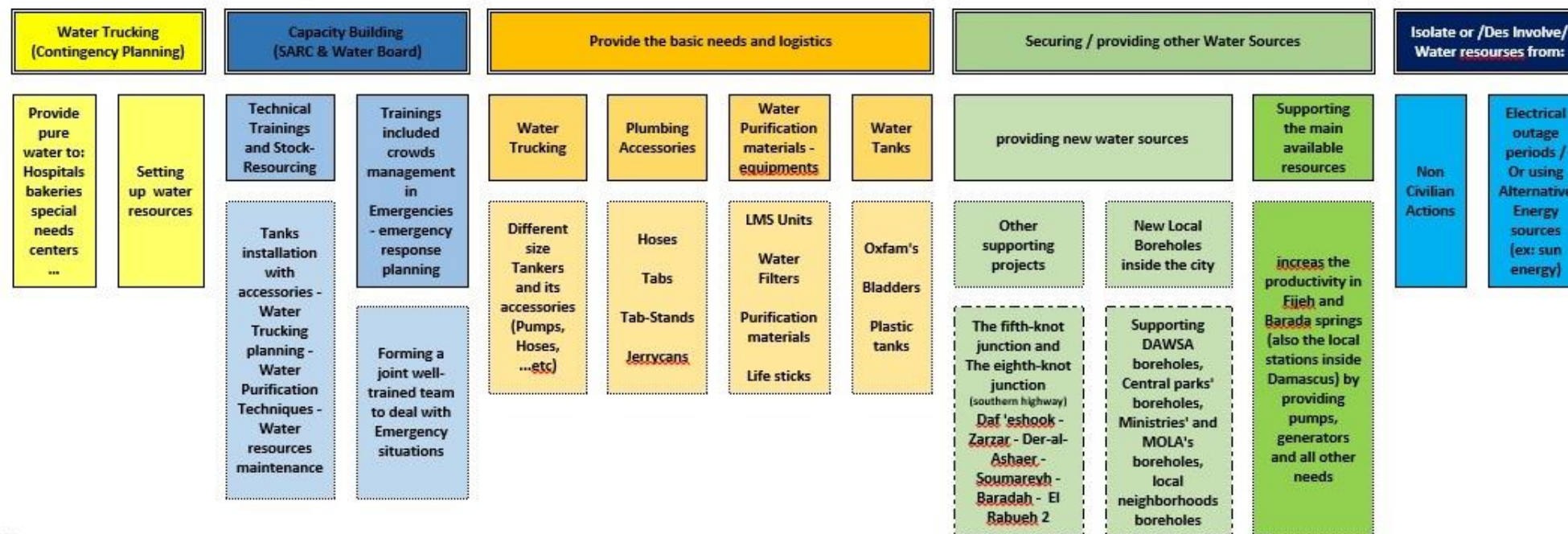
Rehabilitation of the main water source and restore the service progressively

- The plan was prepared to start the immediate rehabilitation of main water sources and main tunnels and pipelines once the area is safely accessible.
- The projects were categorized according to:
 1. Procedures required and projects timeline.
 2. Priority and importance level.
 3. Estimated cost.
 4. Partners support.
 5. End result of the project.

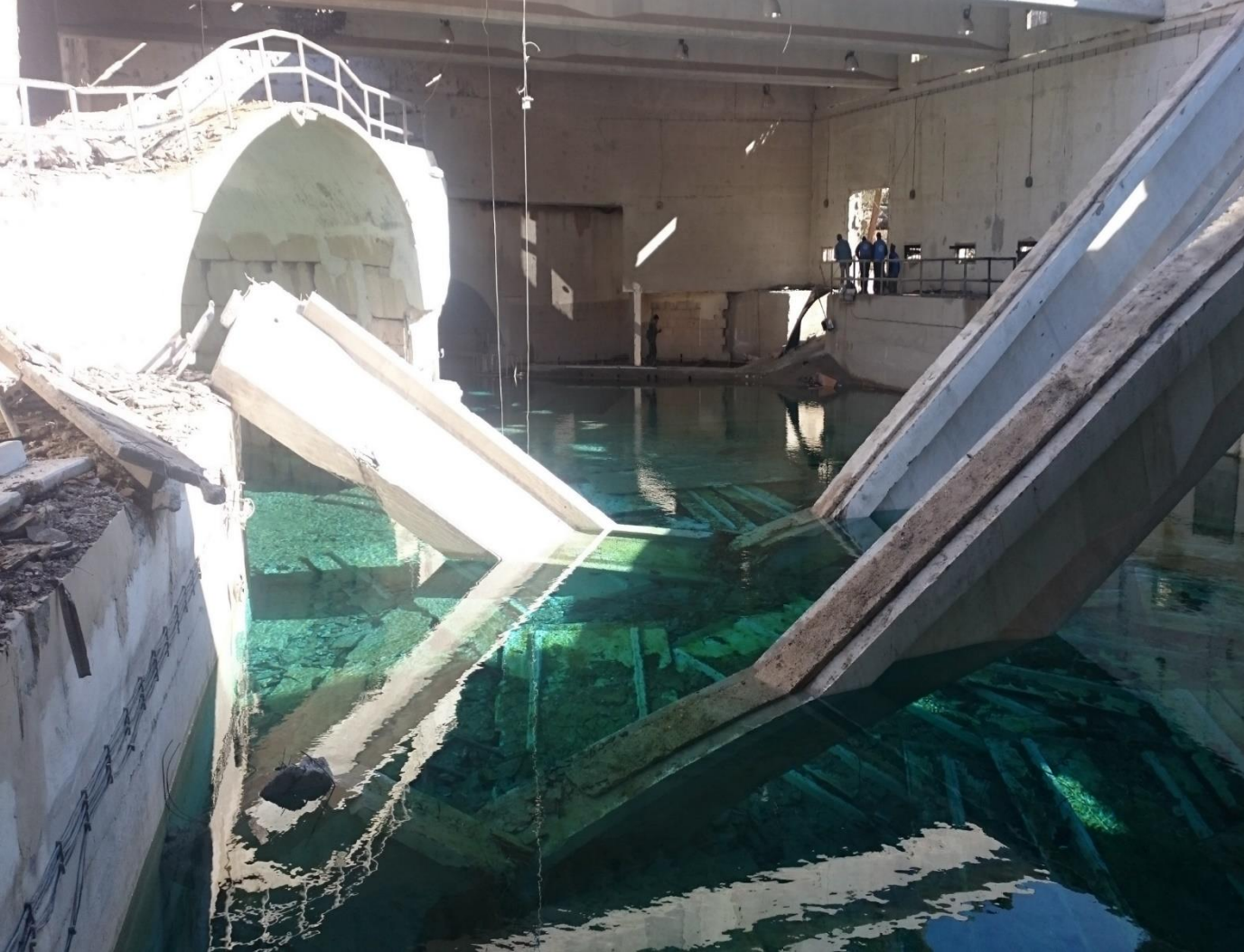


SARC - Water Project – Damascus Branch Team

EMERGENCY PLAN 2015



Pictures Before Intervention



The Fiegh Spring supporting beam after collapse just beside the Roman temple
الجسور الحاملة لسقف صالة نبع الفيحة الرئيسية بعد إصابتها وانهارها بجانب المعبد الروماني

تم التقاط الصور من قبل فريق مياه دمشق في شهر كانون الأول 2016



Damages of the main Figeh pumping station building
الأضرار في محطة الضخ الرئيسية لنبع الفيحة

تم التقاط الصور من قبل فريق مياه دمشق في شهر كانون الأول 2016



Damages of Barada spring transmission pipeline

الأضرار في خط جر مياه نبع بردى

تم التقاط الصور من قبل فريق مياه دمشق في شهر كانون الأول 2016

Pictures during & after the intervention



Filling SARC water truck
from a trusted water source
Damascus water board.

تعبئة الصهريج بمياه من منهل تابع
لمؤسسة مياه الشرب بدمشق

تم التقاط الصور من قبل فريق مياه
دمشق في شهر كانون الأول 2016



Rehabilitation of the wells in
Damascus area.

تأهيل آبار في منطقة دمشق

تم التقاط الصور من قبل فريق مياه
دمشق في عام 2017



Rehabilitation of the transmission tunnel from Figeih spring to
Damascus

تأهيل نفق جر المياه من نبع الفيحة إلى دمشق

تم التقاط الصور من قبل فريق مياه دمشق في عام 2017



Fiegh Spring temporary
coverage to protect the
spring from pollution
تغطية نبع الفيحة لحمايته مؤقتاً من
الملوثات

تم التقاط الصور من قبل فريق مياه
دمشق في عام 2017



Installation of FigeH spring main pumps
تركيب مضخات نبع الفيجه الرئيسية

تم التقاط الصور من قبل فريق مياه دمشق في عام 2017



Fieh Spring main pumping station building Rehabilitation

مشروع تأهيل مبنى محطة ضخ في منطقة الفيحة

تم التقاط الصور من قبل فريق مياه دمشق في عام 2017



Main water collection basin Rehanilitation

حوض تجميع مياه الينابيع في الفيحة

تم التقاط الصور من قبل فريق مياه دمشق في عام 2017



Rehabilitation of Ein Haroush Pumping station

تأهيل محطة ضخ نبع حاروش

تم التقاط الصور من قبل فريق مياه دمشق في عام 2017

Lessons Learned

- 1- Always have an emergency response plan, If you don't have any start now!
- 2- The importance of Human resources (QUALITY & quantity).
- 3- Prepare your plan correctly and make sure to follow these steps:
 - Have a working group (All the stakeholders should be involved).
 - Document and well describe the city water system.
 - Define the risks that might occur.
 - Define the procedures for controlling the risk effects.
 - Set up monitoring system to monitor the response procedures.
 - Check the efficiency of the response plan.
 - Review and develop your administration procedures.
 - Update your response plan regularly and your contact list.
- 4- Communicate your plan with the partners and donors to secure needed funds and support.



Thank you