



Union pour la Méditerranée  
Union for the Mediterranean  
الإتحاد من أجل المتوسط



INSTITUT MÉDITERRANÉEN  
DE L'EAU IME



SEMIDE  
EMWIS

## Mediterranean Water Knowledge Platform



سلطة المياه الفلسطينية  
PALESTINIAN WATER AUTHORITY

## Water Information System Development Evaluation & Way Forward

Presented by

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Hashemite Kingdom of Jordan  
MINISTRY OF  
WATER AND IRRIGATION



# Basic History

- **EMWIS Activities (Eric Presentation)**
- **November 2010 (National Workshop to discuss the NWIS) (Water sector in Palestine and EMWIS)**
- **PWA with support from UNICEF start unifying water and Water related data and information.**
- **2011 1<sup>st</sup> version of WIS used by PWA staff.**
- **MOU between PWA and PCBS of statistics.**
- **2013 2<sup>nd</sup> Version of NWIS used by some water stakeholder in Palestine (EQA, PCBS,Universites ..).**
- **2014 PWA start linking WSP with NWIS.**

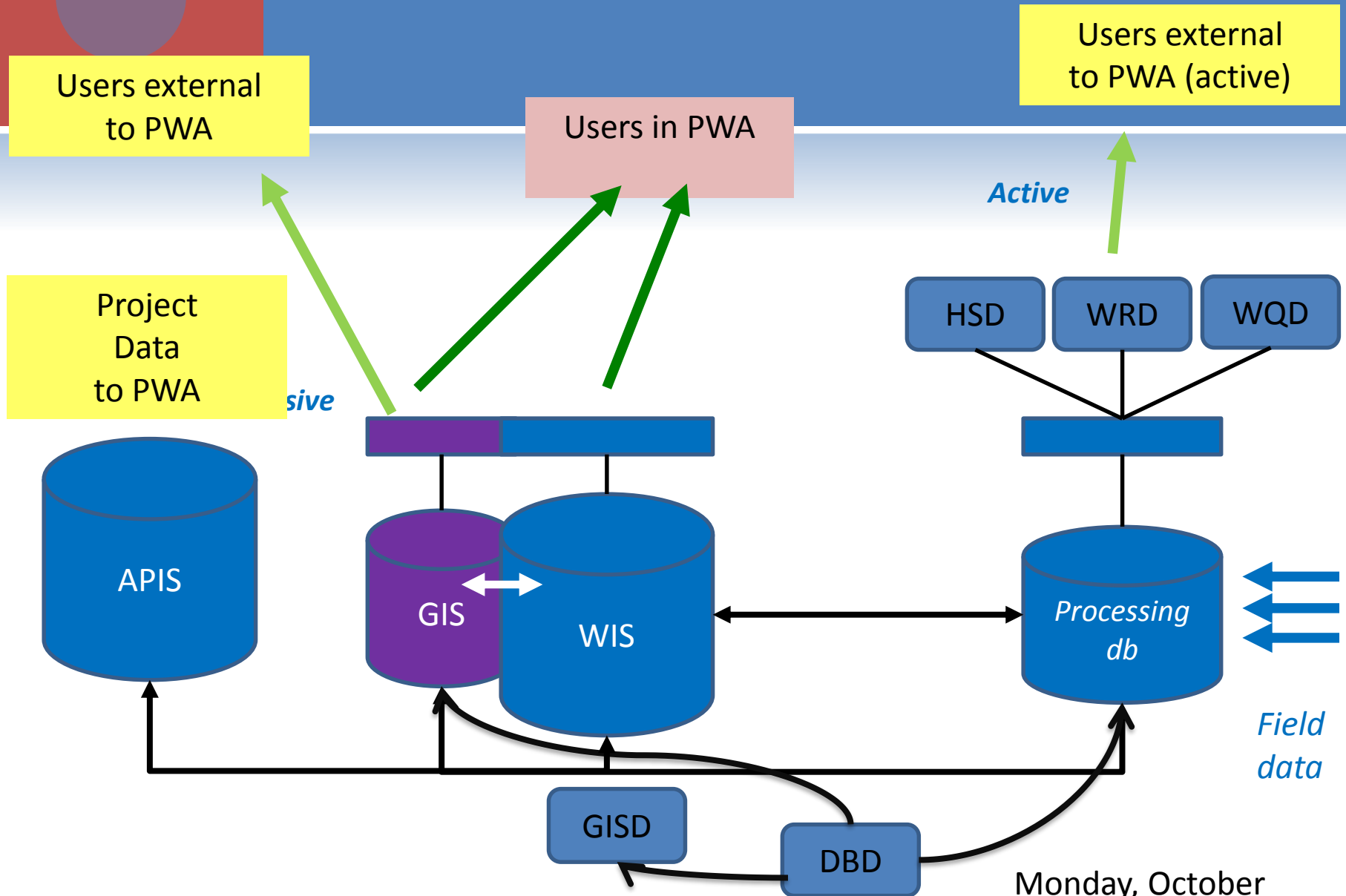
# Basic History

- **2015 PWA start developing the link between Spatial Data and water related data.**
- **2016 1<sup>st</sup> NWIS processing the spatial data with water and water related data.**
- **2016 PMD become part of NWIS**
- **2017 launching National Spatial Water Information System (MWARED).**
- **Now NWIS functionality available online through NWIS.pwa.ps:82 and gis.pwa.ps**

# Governance

- **NWIS Is developed under the new water law for Palestine June 2014 .**
- **MOU's signed by PWA with some stakeholder (PCBS,MOA, EQA,Metrological Dept,MOH)**

# Data flows & responsibilities...



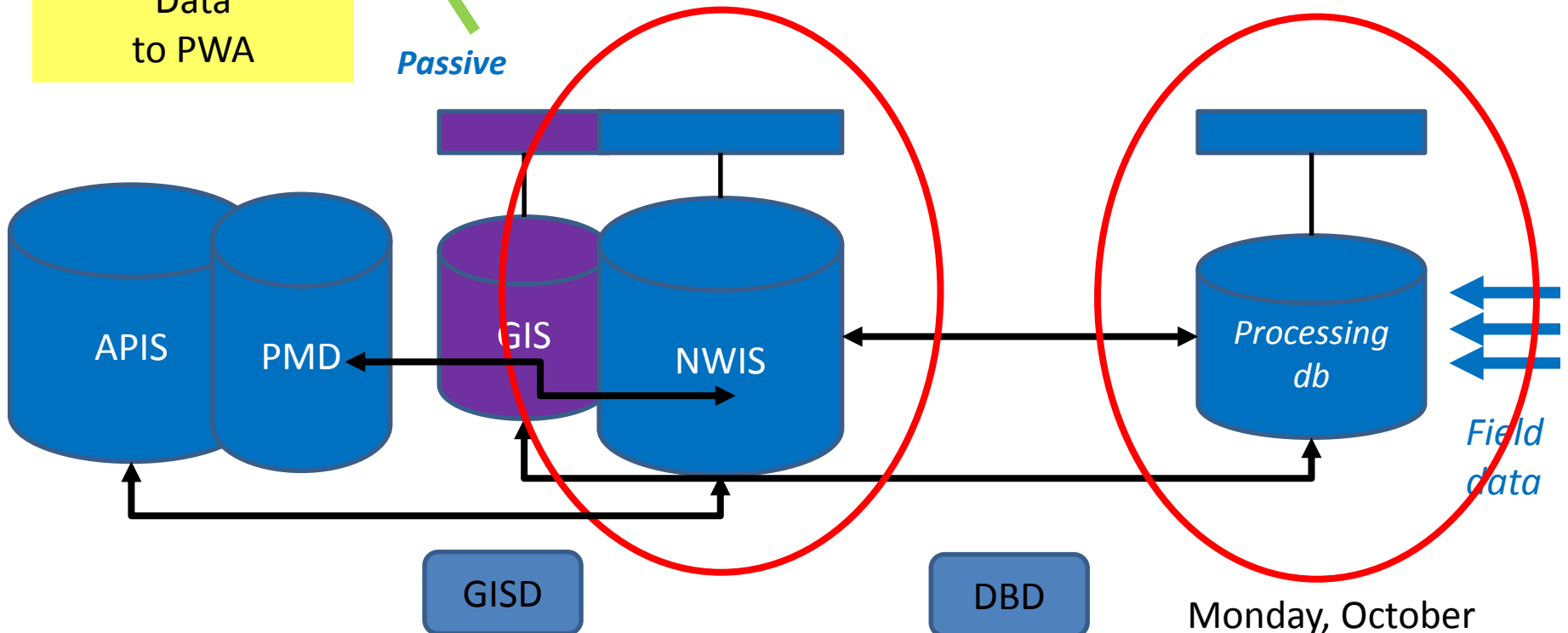
# Data flows & responsibilities...

Users external to PWA

Project Data to PWA

*Passive*

*Active*



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# First Version of NWIS- Palestine 2011

Water Information System | [karel](#) | عربي

**Supply & Consume System**

Governate:  Municipal / Council:  Information form of water for year:

Municipal - Council Information

Number	108
Municipal / Council	الشيوخ
Governate	
Head Of Municipal / Council	
Council Accountant	
Form Filled By	
Phone Number	02-2561002
Fax Number	02-2561002
Email	
Form Fill Date	

Water Information System | [karel](#) | عربي

**Supply & Consume System**

Governate:  Municipal / Council:  Information form of water for year:

The amount of water sold to citizens through the Council

Total Water in Cube Meter	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total
كمية المياه المنتجة من أبار البلدية													0.000
كمية المياه المنتجة من الينابيع													0.000
كمية المياه المشتراة من دائرة المياه													393550.000
كمية المياه المشتراة أو المنتجة من أي مصدر آخر													0.000

# 1<sup>st</sup> GIS web application 2015

Palestinian Water Authority  
Data Bank Department

Enter address

**Data Extract**

Extract data and download zip file

1. Select area

2. Select layers to extract

- Incident Points
- Incident Lines
- Incident Areas

3. Select file format

File Geodatabase (.gdb)

Latitude:32.005576 Longitude:36.090461

	A	B	C	D	E	F	G	H	I	J	K	L
1	WELL_ID	POINT_NAME	LOCALITY	GOVERNA	WATER_U	CORRECTE	BASIN_GIS	ELEVATIO	Latitude	Longitude		
2	18-13/001	MIZPE JERICO No.2	WADI AL C	JERICO	Israeli	UC	Eastern		31.8013	35.40259		
3	18-13/002	MIZPE JERICO No.5	WADI AL C	JERICO	Israeli	LC	Eastern		31.83196	35.40245		
4	18-13/003	MIZPE JERICO No.6	WADI AL C	JERICO	Israeli	UC	Eastern		31.83916	35.41197		
5	19-13/071	JERICO No.2	AQBAT JA	JERICO	Israeli	PL	Eastern		31.84797	35.42911		
6	19-14/101	JERICO No.1	AQBAT JA	JERICO	Israeli	UC	Eastern		31.85924	35.43103		
7	17-14/001	MUKHMAS	MUKHMA	JERUSALE	Agricultur	LC	Eastern	17474000.	31.87088	35.26029		
8	19-13/005	KAMEL I'RAIQAT NO.2	JERICO	JERICO	Agricultur	PL	Eastern	19517000	31.84941	35.47612		
9	19-13/006	SBEERU HANHAN & RANTISI	JERICO	JERICO	Agricultur	PL	Eastern	19550000	31.84877	35.47961		
10	19-13/010	KAMEL I'RAIQAT	JERICO	JERICO	Abandone	PL	Eastern	19858000	31.84247	35.51213		
11	19-13/011	MUSTAFA ABU ZAID	JERICO	JERICO	Agricultur	PL	Eastern	19890000.	31.8385	35.5155		
12	19-13/012T	JERICO TAHAL NO. 12	JERICO	JERICO	Abandone	PL	Eastern	19600000	31.84263	35.48487		
13	19-13/014	MUSTAFA ABU ZAID	JERICO	JERICO	Abandone	PL	Eastern	19834000	31.84356	35.5096		
14	19-13/015	FAHED HISHMAH	JERICO	JERICO	Agricultur	PL	Eastern	19610000	31.84812	35.48595		
15	19-13/015A	JAWAD AL MASRI	JERICO	JERICO	Agricultur	PL	Eastern*	19610000	31.84812	35.48595		
16	19-13/017	'ALI HUSAINI	JERICO	JERICO	Abandone	PL	Eastern	19326000	31.84647	35.45594		
17	19-13/018	BASEL HUSAINI	JERICO	JERICO	Agricultur	PL	Eastern	19377000	31.85034	35.46134		
18	19-13/020	BASEL HUSAINI	JERICO	JERICO	Agricultur	PL	Eastern	19432000.	31.84789	35.46714		
19	19-13/021	BASEL HUSAINI	JERICO	JERICO	Agricultur	PL	Eastern	19496000	31.83958	35.47388		
20	19-13/022	BASEL HUSAINI	JERICO	JERICO	Abandone	PL	Eastern	19768000	31.83956	35.47388		
21	19-13/024	AL AWQAF WELL NO.1	JERICO	JERICO	Agricultur	PL	Eastern	19768000	31.83853	35.50261		
22	18-13/024A	C.B.T	JERICO	JERICO	Abandone	PL	Eastern	18379000	31.83853	35.49321		

Attribute Table

PWA.Wells 1 PWA.Reserviors

WELL_ID	POINT_NAME
18-13/001	MIZPE JERICO
18-13/002	MIZPE JERICO
18-13/003	MIZPE JERICO
19-13/071	JERICO No.2
19-14/101	JERICO No.1

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# current NWIS Activities

- Software development (coding, configuration)...

Graphs (incl. menus & templates)

- Time series processing (persistent, on-the-fly)

Data availability

- Developing Additional data retrieval functionality

For time series work in .NET partly using purchased software components (e.g. DevExpress)

- MWARED user interface: complete work in MWARED, connection with NWIS

# Demonstration of MWARDED

[NWIS.pwa.ps](http://NWIS.pwa.ps)

[GIS.pwa.ps](http://GIS.pwa.ps)

# Way forward

## Action to be taken

- **Develop the external access to NWIS via MWARDED and extend WIS database data storage option.**
- **Enhance Coordinate with stakeholder.**



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# Challenges

- **Water sector Reform and implementing of New Water law**
- **Staff turn over more than 10 personnel contribute to reach the current status.**
- **Expanding the implantation of the NWIS linking other governmental institution.**
- **No fund for the coming years.**



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[www.semide.net/initiatives/MWKP](http://www.semide.net/initiatives/MWKP)



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Ashraf Dweikat- Water Authority Palestine



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