



Water Rights in the Palestinian-Israeli context

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# **This Presentation**

- Part (1) : an overall picture
- □ Intro to Regional Water Stress specifically Palestine
- □ Historical Briefing
- □ Israel's control of water resources
- **The Issue of water rights**
- □ International Law
- Parties Positions
- Part (2): Water aspect in Status-que (current Situation)
- **Oslo Agreement**
- **Article 40**
- □ Israel Facts on the Ground
- **Case Studies**
- **D** Palestinian Vision
- \*GSWB Water Link
- \* WGC

#### **An Overview of the Shared Water Resources**



Israel and Palestine share the Jordan River with three other riparian countries: Lebanon, Syria and Jordan.

Israel and Palestine also share four groundwater aquifer basins (three in the West Bank, and one in the Gaza Strip/coastal area).

Lebanon and Syria possess significant water volumes external to the Jordan River basin. 1967-1968: Military Orders on Water: 92; 158,291

MO 92 -15 AUGUST 1967

#### ORDER CONCERNING JURISDICTION OVER WATER REGULATIONS

MO 158-19 NOVEMBER 1967

#### ORDER CONCERNING AMENDMENT TO SUPERVISION OF WATER LAW

**MO 291-19 DECEMBER 1968** 

ORDER CONCERNING SETTLEMENT OF DISPUTES OVER LAND AND WATER



On 28 September 1995, Oslo II Interim Agreement is signed, and Article XXXI.
Annex III of the Interim Agreement (the *Protocol Concerning Civil Affairs*), and principally in Appendix 1, Article 40 (entitled *Water and Sewage*).

➤ the recognition by Israel of Palestinian water rights in the West Bank;

➤ laid down agreements on the coordination of the management of water supplies and of wastewater treatment and disposal for the interim period; JWC

 $\succ$  and specified additional water resources which should be made available to Palestine during the same period.

General agreements were also included on mutual cooperation, and on the protection of water resources and infrastructure.

Negotiations between Palestine and Israel on permanent status have not been concluded, as yet.

#### **Oslo- Water Supply**



Future Demand: PWA estimate based on Demand for 2010 = 723 MCM Deficit to current =444 MCM

#### Israel's Control & Water Rights

- Israel's control over 85% of all available water resources leaves Palestinians with four times less water per capita than Israel.
- > Palestinians are denied <u>all</u> access to the Jordan River to the east, and to most productive zones in the Western Aquifer Basin to the west.
- In Gaza, the quality of water is disastrously low and must be addressed.





Green Line (1967 re-Occupat

attler-Only Road

sraeli Colony Bloc

Palestinian City or Refugee Camp

sraeli Wall

### Article 40 , The Interim Allocation and the Additional Quantity-West Bank

Palestinian "Oslo II allocation" from the aquifers in the West Bank and actual Palestinian use.

Oslo II Article 40 All data as MCM/yr.	Eastern Aquifer	North-eastern Aquifer	Western Aquifer	Total
	54 (+ 78)*	42	22	128 (+78)

\* Eastern Aquifer or other agreed resources

Only one third of the additional amount has been made available during the interim period by drilling new wells.
 Palestinians have not been allowed to drill in the Western Aquifer Basin.
 Most wastewater projects have been denied approval
 No comprehensive dispute mechanism exist in the JWC



# Existing Water Supply after 13 years of Oslo arrangement



Future Demand: PWA estimate based on Demand for 2010 = 723 MCM Deficit to current =444 MCM

- The Gaza Aquifer has been overexploited for decades.
- Recharge and discharge
- Contamination and sea water intrusion
- Heavy demand

This has now reached critical proportions, and must be stopped very soon.

- There is a need to:
  - heavily reduce total pumping rates from the Gaza Aquifer;
  - reduce water utilization by agriculture, over time;
  - find other water sources; and
  - introduce desalination as soon a possible.



# Gaza: The Present Scenario: mismanagement

#### **Demand/Use**

**Domestic/Municipal** 65 MCM/year

Agricultural 90 MCM/year (over-abstraction) Gaza Aquifer 155 MCM/year (overabstraction)

**Supply** 

[Total: 155 MCM/year]

[Total: 155 MCM/year]

## **Gaza: The Indicative Scenario for 2012**

**Demand/Use** 

Supply

**Domestic/Municipal** 85 MCM/year

**Industrial Demand** 5 MCM/year

**Agricultural** 65 MCM/year

Gaza Aquifer 60 MCM/year

**Desalination** 27 MCM/year

**Other Sources** 53 MCM/year

[Total: 155 MCM/year]

[Total: 140 MCM/year]

*In 2025 the future demand is estimated to be 205 MCM/year*]

	allocation (%)	
water source		**
Jordan River	0	100
Eastern Aquif.	60	40
N.Eastern Aquif.	35	65
Western Aquif.	6	94
Coastal Aquif.	35	65
Other resources	0	100
OVERALL	11	<u>89</u>
Total resources	270 MCM	2300 MCM
Per Capita	70 m³/y	353 m³/y
· ·	- · · · ·	

"equitable and reasonable"?

#### **The Present Inequitable Water Distribution**





#### The Interim Agreement: Before and After: ...Further deterioration of Palestine's position



\* Data for the mid-1980s are from the United Nations report of 1992, entitled Water Resources of the Occupied Palestinian Territory

**The Palestinian Case on Water** 

- Customary international water law requires that joint water resources should be shared by the Parties:
- in an equitable and reasonable manner;
- without creating significant harm to the other Party;
- with prior notification of works likely to affect the other Party.

### **The Israeli Proposal at Camp David**



## **The Palestinian Proposal [1]**



## **The Palestinian Proposal [2]**



# 1967 Borders including East Jerusalem the Capital, a fair solution to the Refugees issue and the need to water right solution

## Viability:

## **U**Water demand (reallocation)

Territorial Link : The need to the water link between WB & GS

Importance of the Jordan valley (Refugee, Agriculture and Economic) The need to construct a West Ghor Canal.

#### **Existing Water Supply**



Future Demand: PWA estimate based on Demand for 2010 = 723 MCM Deficit to current =444 MCM



#### Water Link WB-GS

- □ A physical link between the West Bank and Gaza is needed to create a viable state
- □ This may need to contain water infrastructure, in order to:
- o Transfer groundwater from the West Bank to Gaza; and/or
- o Transfer desalinated water from Gaza to the West Bank.
- □ The NSU has studied six possible versions of such a link, relating to water
- □ This work is important for the leadership to decide on a route to be selected for the territorial link -----





The Jordan Valley	Palestinian	Israeli	A Jacitica School Transform A	WEST BANK BASEMAP EASTERN SLOPES
LAND			Endecard An efficient	
Population	56000	~10000	Reca A Baltern Khotofalutya	Built-Up Areas Palestinian Built Up Area
Number of villages / settlements	~20(44)	37	Al Anglewyn	Road Network
Irrigated land (dunums)	53,156 <sup>[3]</sup>	<b>26,400</b> <sup>[4]</sup>	Annue er Frister	Constrained Read
Land remaining for irrigation	77,000 <sup>[5]</sup> - 170,000	0	Ballown Preider Ball Day	Borders 4th June 1967 Border
WATER			Den Trank a Assertation Milledom Bigsterupen C. Value Value	Governorate Boundary Interim Agreement Areas in the We Area A (West Bank)
Control over brackish springwater	0	88	A Pagenan Tertegenska Ser	Area B (West Bank)
No. of Wells <sup>12</sup>	91	18	Alf on Hon	Nature Reserve (West Bank)
Consumption, by source (MCM/y)			n Julian State Sta	Contour Lines: Contour Lines: Contour (100m)
Lower Jordan River	0	0	ar Midu Ber Ford	// Interval (25m)
Springs	256	0	Protection again to a second again the second again ag	
Wadis	0	7[7]		
Groundwater	12 <sup>16</sup>	34[8]	nutýn Eb Benna	
Wastewater re-use	0	0		<u>f</u>
Total water consumption	37	41		Rosen
	Irrigated / Irrigable land [dunums]	Water quantity [MCM/y]	Badw in Mutampin Badw in Mutampin The State Stat	and the second s
Rough Estimate of Irrigated Agriculture Water Requirement in the JRV	250,000 dunums	~ 250 MCM/year	and the second s	*
Current usage (Israeli and Palestinian)	80,000	79-85.5 (consumed)	An entry and a second s	Palaminian National Asthoning Minicity of Floraning Geogenphic Center and Turbnind Sap August 2005

# **The West Ghor Canal**

- The lower Jordan River suffers from very poor water quality
- This implies that water from Lake Tiberias should reach the West Ghor through a canal (i.e. not in the existing river bed)
- The NSU has completed the work looking to all options available





# The Desalination Initiative

"New water" should not be developed to replace the water which exists currently, and to which Palestine has legitimate rights.

Imposing Solutions *!Caesarea/ Hadera case* :

The obvious and most cost- effective choice is to provide supplies to Israel's coastal population, rather than pumping such resources more than 1,000 metres vertically to demand centres in the West Bank. This would also satisfy important concerns relating to costeffectiveness.

# **The Palestinian Case on Water**

- The major water resources available to Palestine are:
  - the Eastern Aquifer Basin;
  - the North-eastern Aquifer Basin;
  - the Western Aquifer Basin;
  - the Gaza Aquifer (part of the Coastal Aquifer Basin);
  - the surface waters of the Jordan River.
- All of these are shared with Israel. Customary international water law requires that these should be shared by the Parties:
  - in an equitable and reasonable manner;
  - without creating significant harm to the other Party;
  - with prior notification of works likely to affect the other Party.



# Reallocation and the Transition Period

- The signature of an agreement based on equitable and reasonable use will not have immediate effect, for various reasons, e.g.:
  - paucity of infrastructure;
  - rate of return of refugees;
  - repopulation of occupied areas;
  - growth in demand in various sectors.
- A lengthy period will therefore be available for Israel to adjust its development of "new water" to compensate for water ceded to Palestine in the agreement.



Time

## **Bilateral Transition: Current Scenario**



## **Bilateral Transition: Step 1**



Time

## **Bilateral Transition: Step 2**





# Conclusion

- Water stress is experienced by all countries in the region and more so in the Palestinian Territories.
- The daily per capita allocation of water is highly disproportionate between Israelis and Palestinians whose allowance is far below WHO international standards.
- In the context of water and sewage arrangements, the Oslo Interim agreement has been utilized as a mechanism to impede Palestinian water development.
- The present water distribution is deeply inequitable and unreasonable. An agreement based on Int. Law must be achieved, ideally in the Permanent Status Agreement.
- An equitable reallocation can be achieved without harm to Israel through the mechanism of a reallocation transition period.
- A viable Palestinian State is not possible without reacquiring a rightful share of water.
- A water crisis exists in Gaza that must be addressed without delay.