Topographical West Bank Water Cross-Section Graphic

Map 7: Topography and Israeli Security: Utilizing the 4,200-Foot Mountain Barrier to Protect Israel's Vulnerable Coastal Plain Hashemite Kingdom → The West Bank (Judea and Samaria) Pre-1967 Israel Coastal Plain 3,000 ft -2,500 -2,000 Mt. Nebo - 1 500 -1,000 - 500 -0 --500 Tel Aviv --1.000 -1,500 45 miles 3 4 1 ' Figure 4. Water issues -RAIN WATER COLLECTION Roof/Gutter analogy. Applicable to the Golan Heights and Judea & RAIN Samaria A. Rain falls on mountains (roof). MOUNTAIN B. Rainwater flows down mountain range into fertile valley (as off FRESH WATER roof without a gutter). В C. Rainwater can be held MOUNTAIN back by Arab dams VALLEY functioning as a gut-FRESH WATER ter, preventing the water from irrigating GUTTER OUNTA the Israeli agricultural areas.

Defensible Borders for a Lasting Peace by JCPA, 2008

Mark Langfan, The Use of Plexi Pieces 1992

Legend to Numbers:

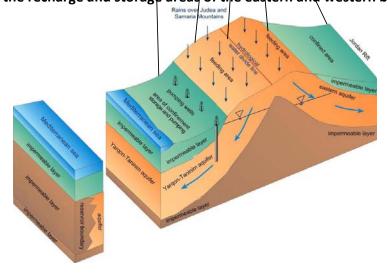
- 1 Tel Aviv Coastal Plain
- 2 Western Samarian Aquifer "Feeding Area"
- 3 West Bank Mountain Watershed Line
- 4 Eastern Slope "Feeding Area"
- 5 Jordan River

The Israeli Palestinian Water Conflict: An Israeli Perspective

by Dr. Haim Gvirtzman, 2012

Figure 12: A schematic cross-section of the Mountain Aquifer showing the recharge and storage areas of the eastern and western basins.³³

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Topographical West Bank Water Cross-Section Graphic

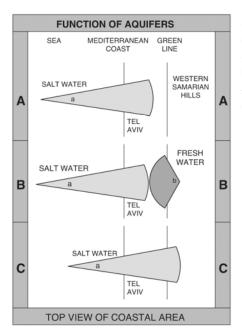


Figure 2. Saline/Fresh Water Balance/ Imbalance. Applicable to Judea & Samaria (Westbank) and Israeli coastal aquifers

- A. Salt water pushes in.
- B. Fresh water pushes out.

 Consequently, there currently exists
 a balance of saline/fresh water in the
 Israeli coastal aquifer.
 (In a demonstration the plexi pieces

can be moved back and forth to convey sense of balancing and equilibrium.)

C. If the Palestinians use the fresh water that falls in the West Bank that now flows freely into the Israeli coastal aquifers, the balance will be destroyed and salt water will push in and destroy the Israeli coastal aquifer.

Mark Langfan, The Use of Plexi Pieces 1992

Still, unused potential water resources are few, except for those of Western Samaria that feed the aquifers of the Israeli coastal plain and are vital for the Israeli economy. Any massive interference with the natural flow of these resources toward the coastal plain could not only deprive that densely inhabited and cultivated region of a substantial part of its water resources, but could also cause serious damage to the existing equilibrium vis-a-vis saline sea water in parts of the aquifer in the vicinity of the Israeli coastline.

In recent years Israel's water consumption has totaled an average of 1.8 million cubic meters per annum; of this, agriculture consumed approximately 1.3 million cubic meters. The aquifers of the coastal plain are fed to a great extent by rain water falling on the western slopes of the Samarian Highlands. These waters percolate through pervious rock formations westward into the groundwater resources of the coastal plain, and provide 300-350 million cubic meters, or 17-19 percent of the total annual water supply. Were a Palestinian Arab political entity to develop an effective modern system of wells on the western fringes of the West Bank (a few kilometers east of the present western boundary of the West Bank), Israel would have to find alternative sources for a large quantity of water that flows freely into its territory and upon which the population and agriculture of the Israeli coastal plain depend to a large extent.