



Lebanese - German - Cooperation



Project: Safeguarding in the Water Supply of Beirut
-Protection of the Jeita Spring-

Project Period specified: 2 years (project start expected for April 2009)

Partner Organisations: Council for Development and Reconstruction CDR, Lebanon
Federal Institute for Geosciences and Natural Resources



Representative of CDR: Mr. Ismail Makki, Agriculture and Environment Manager

Project Region

The Caza of Kesrouan  situated directly to the north of the city of Beirut is a densely populated area consisting of many small localities spread across its mountainous terrains. The region is bound from the north by the Ibrahim River and from the south by Al Kalb River.



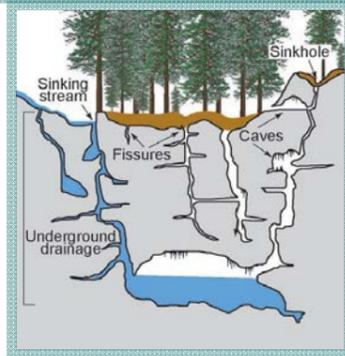
Characterization of the Region

- Steep gorges
- Seasonal water courses
- Permeable karstic rock formation



Groundwater Aquifer

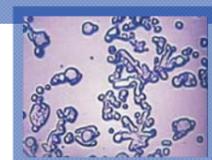
- Recharge trough
- Melting snow
- Surface water



Jeita Spring

Main source of drinking water for 1,5 mill. inhabitants of the city of Beirut

Recent analyses detected → Increasing coliform count



Problems

- Environmental pollution due to the absence of adequate wastewater collection and treatment infrastructure.
- Growing population
- No developed necessary sanitary services
- Households without proper sewer system

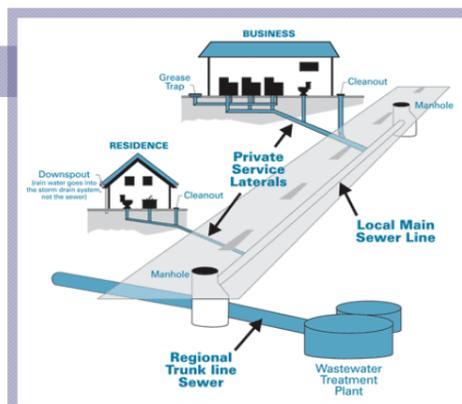
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Common Practise

- Septic tanks
- Inappropriately diverted into ditches
- Boreholes & water courses without treatment

Approach

- Adequate wastewater collection and treatment infrastructure
- A sewer system coverage of the catchment area with discharge in appropriate wastewater treatment plants



Prospects

- Reduce adverse health impacts
- Enhance the environmental conditions
- Improved drinking water quality

