## Groundwater at Risk

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- General impression of program from "newcomer"
- Few Scientific comments on Groundwater Theme

## General Impressions of Program

- Tackle many problems, interact with many countries and organizations,
- Approach in GW: develop objectives, sponsor workshops/conferences and training sessions, produce guideline documents.
- Comments on Approach & Implementation:
  - Method of Collection and Dissemination of Information
    - Cost effective, efficient, and sufficiently recent?
  - Archiving
    - Ensure against loss of wealth of individual knowledge
    - Ensure against future overlap
    - Enable "new" users to understand approach and achievements
  - Manage Flexibility of Objectives within Theme
  - Stocktaking

## **Comments on Groundwater Issues**

- 'GW Risk" Theme: Raised awareness
- GW contamination is one of the most important future water issues on the global scale...
  - Identification (IHP V), <u>Investigation & Remediation</u>: Keep Investigation & Training on Agenda:
    - Characterization (esp. using geophysical techniques) & modeling (esp. fractured/karst/coupled systems)
    - Remediation & monitoring
      - In-situ bio and chemical approaches
      - Containment/stabilization
      - Remediation monitoring approaches

## **Comments on Groundwater Issues**

- Fragmented Approach to GW Inquiry and Management:
  - Theme 1(atmospheric-unsaturated-groundwater zones) and IHP VI
  - Coupled Parameters/Processes within GW system
    - Hydrological-Geochemical-Microbiological
    - Complex and Dynamic

Thank you