What I do over my summer vacation…

as an EHSB intern

an informal presentation from

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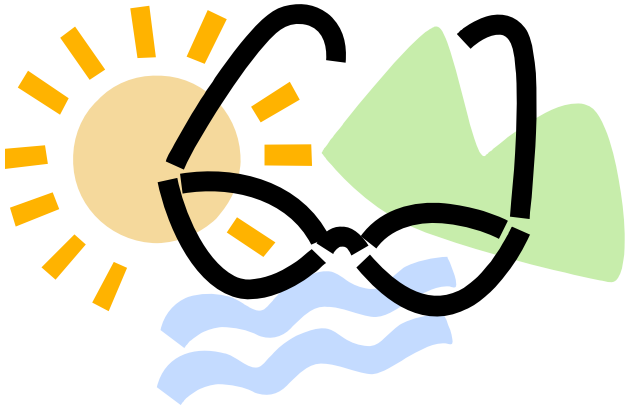
July 22, 2008



Major Summer Activities

- Assist in outbreak write-ups

- **Develop a comprehensive and user-friendly EndNote database of water literature**

- Support ongoing activities regarding Water Safety Plans

- Attempt to understand the protocol of the US Public Health Commission Corps

Internal “Water Library”

Databases

- PubMed
- MEDLINE
- EMBASE
- EconLit
- AGRIS
- WHO Databases
- *Web of Science*
- *UNESCO*
- *US AID*
- *World Bank*

Major search terms

(with a focus on developing settings)

- Water Safety Plan
- Sustainability
- Appropriate or Alternative Technology
- Workforce or Training or Personnel etc..
- Monitoring, Evaluation
- System effectiveness
- Cost recovery or Finance mechanism
- Health Impacts
- Risk Management

See EndNote for demonstration

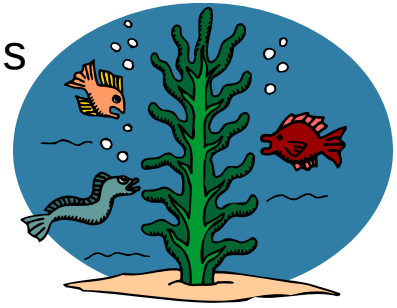
Example: Source Risks

Climate / Weather [5]

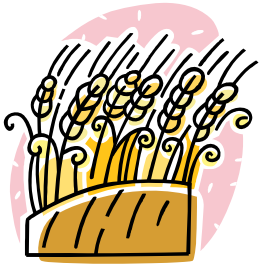
Urbanization [1]

Mining [3]

Algal blooms [4]



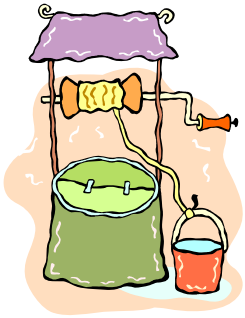
Agriculture[2]



Pesticides [6]

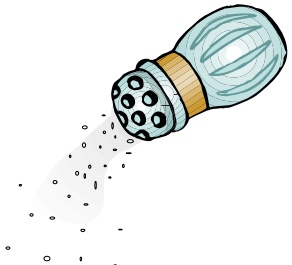
Surface water

Groundwater



Recharge [9]

Nitrate Transport [8]



Salinity [7]

Example: Source Risks

1. **Geriesh, M.H., K.-D. Balke, and A.E. El-Rayes, *Problems of drinking water treatment along Ismailia Canal Province, Egypt.* Journal of Zhejiang University, 2008. Science. B. 9(3): p. 232-42.**
2. **Avery, L.M., et al., *Survival of Escherichia coli O157:H7 in waters from lakes, rivers, puddles and animal-drinking troughs.* Science of the Total Environment, 2008. 389(2-3): p. 378-85.**
3. **Chen, A., et al., *Well water contaminated by acidic mine water from the Dabaoshan Mine, south China: chemistry and toxicity.* Chemosphere, 2007. 70(2): p. 248-55.**
4. **Rizak, S. and S.E. Hrudey, *Drinking-water safety - Challenges for community-managed systems.* Journal of Water and Health, 2008. 6(SUPPL. 1): p. 33-41.**
5. **Hudnell, H.K. and Q. Dortch, *A synopsis of research needs identified at the Interagency, International Symposium on Cyanobacterial Harmful Algal Blooms (ISOC-HAB).***
6. **Chen, Y., L. Zhu, and R. Zhou, *Characterization and distribution of polycyclic aromatic hydrocarbon in surface water and sediment from Qiantang River, China.* Journal of Hazardous Materials, 2007. 141(1): p. 148-55.**
7. **Subba Rao, N., *Factors controlling the salinity in groundwater in parts of Guntur district, Andhra Pradesh, India.* Environmental Monitoring & Assessment, 2008. 138(1-3): p. 327-41.**
8. **Obeidat, M.M., et al., *Analysis and evaluation of nitrate levels in groundwater at Al-Hashimiya area, Jordan.* Environmental Monitoring & Assessment, 2007. 135(1-3): p. 475-86.**
9. **Yadav, S., R. Singhvi, and B.K. Sharma, *Recharging of borewells and analysis of harvested rooftop rainwater in houses of Udaipur city.* Journal of Environmental Science & Engineering, 2007. 49(3): p. 225-8.**

Lessons Learning

- Practice of blending lessons from public health and environmental engineering
- Complexity and value of communicating through figures and logic models
- Challenges of focused searching for future uses
- Appreciation of librarians and keywords
- Existence and proper placement of a “collar device”
- 5,000+ interesting perspectives on water issues