

# KGS Annual Meeting

## Emerging Environmental Issues

Karen E. Thompson, P.G.  
Smith Management Group  
karent@smithmanage.com



# Emerging Issues – CONTAMINANTS

- \* Water Soluble Pharmaceuticals
- \* Updated Exposure Data
- \* Updated Risk Evaluations



# Environmental Remediation

- \* Using Site Conceptual Models
  - \* More scientific based investigations
- \* Engaging all “players” in process
  - \* Property Owner
  - \* Client
  - \* Regulators
  - \* Community
- \* Favoring in-situ remediation vs. more traditional approaches of excavation or pump and treat



# Remediation Continued

- \* Increasing the use of more traditional geological investigative techniques:
  - \* Geophysical surveys
  - \* Creation of cross-sections
  - \* Sample collection of parameters beyond the contaminate to determine water chemistry



# Surface Water Quality

- \* TMDL development
- \* Water Lab Certifications
- \* Storm Water
- \* Watershed Protection Policies



# WATER QUANTITY

- \* Agricultural Uses -Pivot Point Wells
- \* City water supplies
- \* Industrial water supplies
  
- \* *WHO gets the water first during droughts?*
- \* *How is the STATE monitoring withdrawals?*



# HOW IS KGS ANSWERING THE CALL?

- \* Databases
- \* Mapping
- \* New Research
- \* Participation in public meetings, comment periods, and committees to ensure the information provided by KGS is being properly used.



# WHAT NEEDS TO BE DONE?

- \* Collection of basic data in much of the state regarding soil, water, and bedrock characteristics that impact environmental remediation, water resource development and protection, and geotechnical.
- \* Need for development and evaluation of newer GIS and hydrologic data modeling techniques that can help address some of the tougher issues.

