RTDF Fall Meeting
Groundwater Surface Water Workshop

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Why this Workshop?

• RTDF Membership voted for it
• Compliance with Environmental Indicators and potential Ecological Indicators
• Interaction may present unique considerations when evaluating remedial alternatives
GOALS

• Develop conceptual models that can be used for assessment and remediation
• Identify pragmatic tiered approaches to evaluation of impact
• Identify areas of consensus among disciplines
• Identify (innovative) remediation technologies
Conceptual Schematic - Surface Water System Processes

Focus: GW, SW and Sediments between

Modified from Exponent, 1997
Some Questions for the Workshop

- Conceptual Models
  - Are there one or more conceptual models that can be used to test hypotheses about GW impact to the environment?
  - What are the significant physical, chemical and biological parameters that should be considered?
  - What role does natural attenuation play in GW-SW interaction?
  - Are there environmental settings where generally GW-SW interaction is crucial? Where it is insignificant?
Some Questions for the Workshop

• Assessment
  • Is there a hierarchy of screening methods to streamline the assessment process?
  • Can a plume de minimus zone be defined in relation to the surface water size/habitat?
  • How important are GW “hot spots”
  • How do you separate GW impacts from other sources?
  • Can you quickly determine the relative significance of GW compared to other watershed contributions
Workshop Process

• Presentations on specific environmental setting
• 30 minute discussion
  • Conceptual Models (integrate hydrodynamics, ecology, biogeochemistry)
  • Confounding factors
  • Assessment Tools/ Tiered Approaches
  • Remediation alternatives
    • No Action
    • Natural Recovery
    • Amended Caps
    • GW treatment or containment

• Last Day Final Session - consensus issues