RTDF Fall Meeting Groundwater Surface Water Workshop

> Nancy Grosso, DuPont October 29, 2002

### 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

# 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