

Streamlining the NEPA Process

Rebecca A. Miller, R.G.

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Recommended Design Strategy

- ◆ Permit Audit
- ◆ Develop the Need (underlying)
- ◆ Communicate, Communicate, Communicate
- ◆ Design to the Environment
- ◆ Gather Defensible Data Early On
- ◆ Brainstorm - Use Value-Engineering/NEPA Integration
- ◆ Constrain the Number Alternatives
- ◆ Process Audit

2/8/2006

Permit Audit

- ◆ If current operation, make sure you are operating legally
- ◆ Perform a permit audit
- ◆ Update your existing permits to compliance
- ◆ Find out what new permits are necessary

Developing the Need Statement

- ◆ Should establish the evidence that a problem exists, or will exist if projected population growth is realized
- ◆ Find the underlying need
- ◆ On surface, the operator needs to make money
- ◆ Deeper, the US needs to develop another energy source
- ◆ Underlying need is that the US needs to have an abundant energy source that is not controlled by other countries

Communicate, Communicate, Communicate

- ◆ Owners - **Engage** the public, agencies, environmentalists, and NGOs
- ◆ **Advertise** the social and economic benefits; encourage public grassroots efforts
- ◆ **Professional facilitator** will help ALL stakeholders to develop a list of responsibilities and get consensus
- ◆ **Capture issues and concerns** as they come up in conversation
- ◆ Make sure Memorandum of Agreement are in place when multiple agencies are involved

Recommended Design Strategy



Design to the Environment for Closure

- ◆ Design to the environment not vice versa
- ◆ Scientists **MUST BE MADE TO** coordinate with designers throughout design phases
- ◆ When you have this coordination **THEN BRAINSTORM** to start design and data recovery
- ◆ **Avoid, minimize**, then design industrial controls to **mitigate** any outstanding impacts
- ◆ Design for **closure and sustainable** development

Gather Defensible Data Early On

- ◆ **Gather existing information**, i.e. other planning documents and other studies that might help
- ◆ Document historic impacts to natural resources
- ◆ Document existing historic and prehistoric sites

Document Historic Sites and Historic Impacts to Water Quality



Document Species Early On

- ◆ Conduct wetlands delineation for Clean Water Act 404 permit
- ◆ Document existing vegetation, wetlands, T & E species
- ◆ Keep log of species siting as exploration occurs
- ◆ Find out if a Endangered Species Act Section 7 survey is necessary early on, some take 2+ years

Keep your cats in doors during surveys

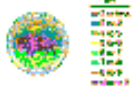
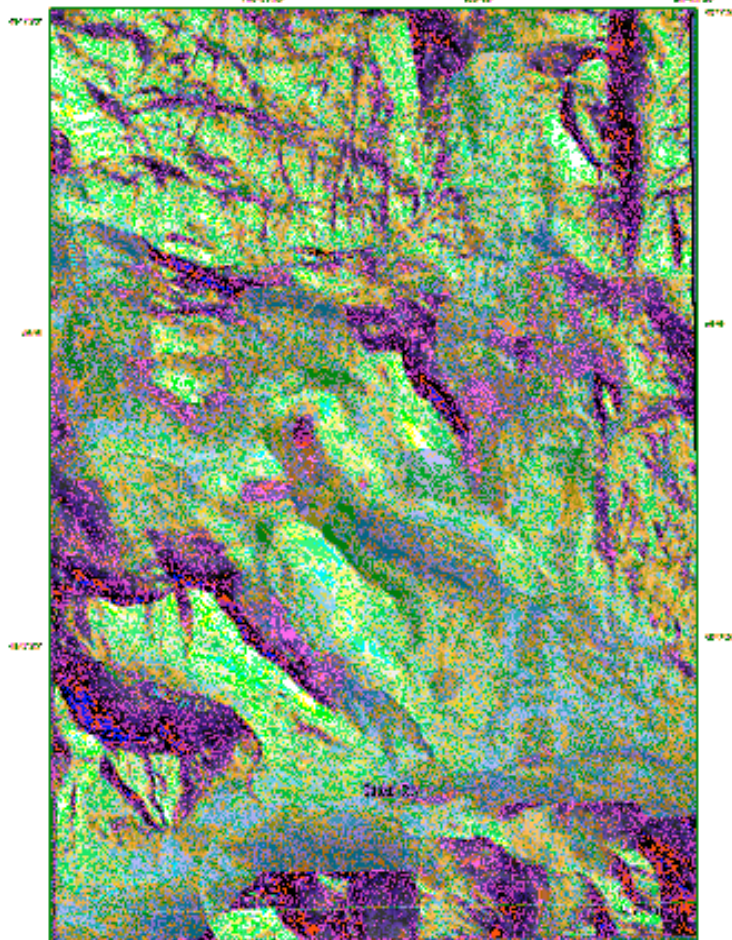


Gather Defensible Data Early On

- ◆ Document existing water quality/quantity (make sure quality is classified correctly)
- ◆ Get at least 2 years of baseline water quality data
- ◆ Make sure your existing water is classified correctly

Water Quality/Quantity Characterization

Cooke City Quadrangle, Montana



Surface and Ground Water pH
(range: 2.5 to 9.3)



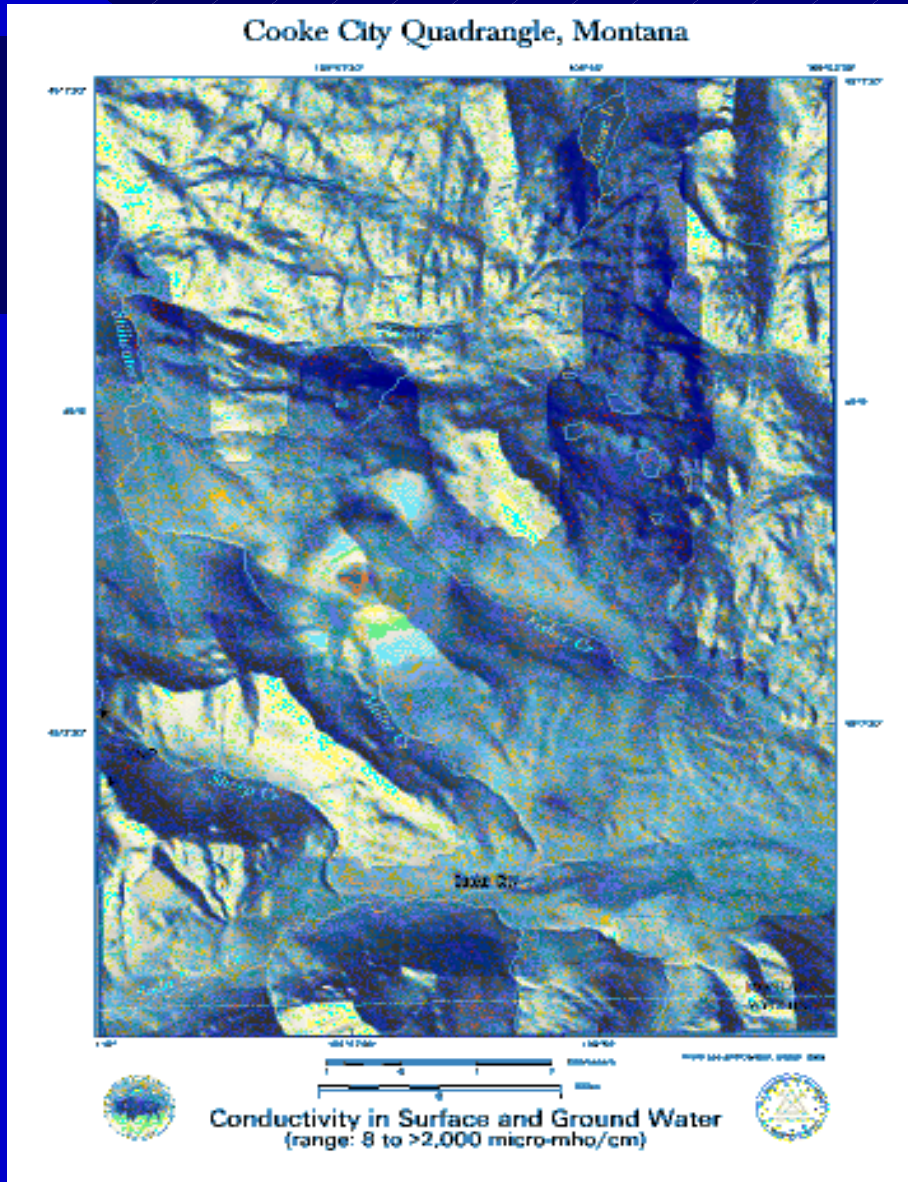
**Surface and Ground Water
pH**

New World Mining District

**Warm colors indicate
acidic pH**

**Cool colors indicate
neutral pH**

Water Quality Characterization



**Conductivity in
Surface and
Groundwater**

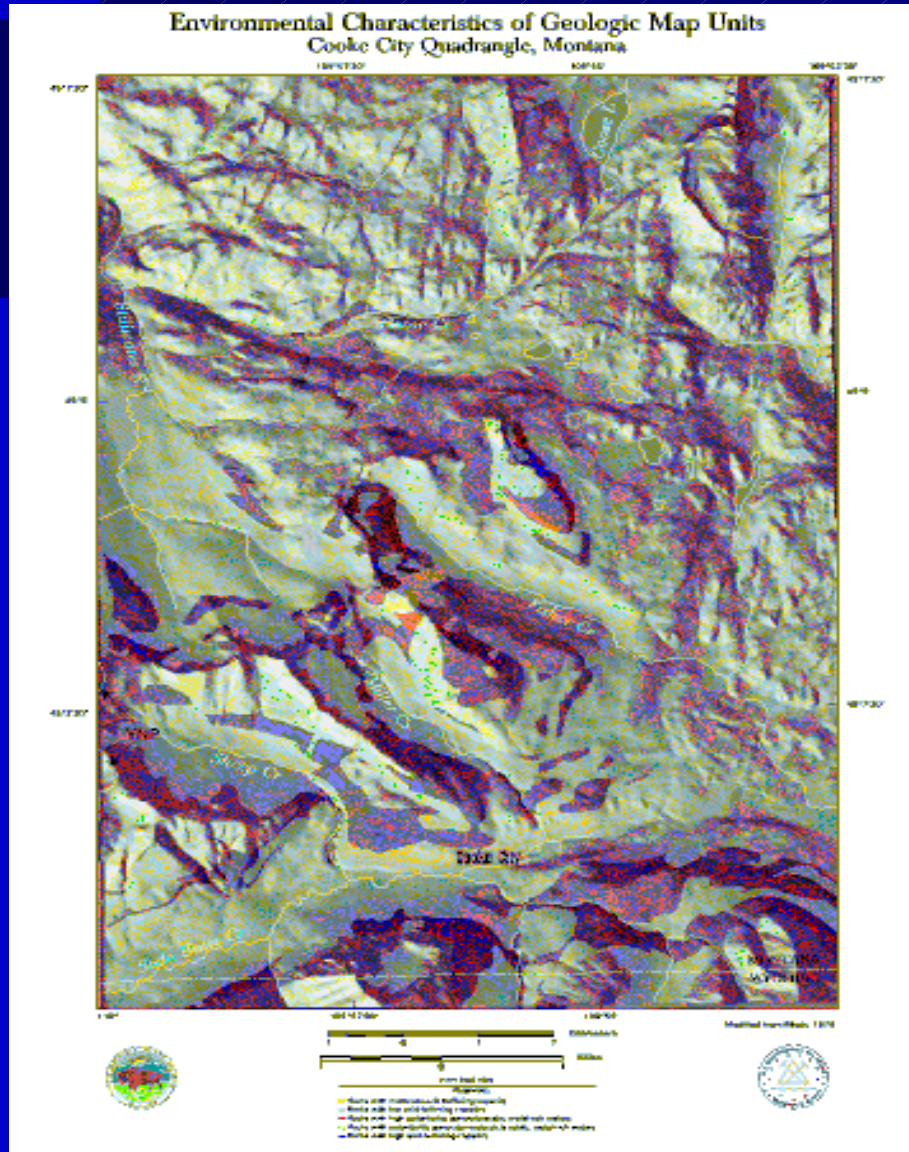
**New World Mining
District.**

**Warm colors indicate
higher conductivity
associated with
historic mining
disturbances in net acid
producing areas.**

Gather Defensible Data Early On

- ◆ Geology = hydrology KNOW IT
- ◆ Conduct mine waste characterization
- ◆ Include static and kinetic testing
- ◆ Conduct field test plots
- ◆ Model results to extrapolate into the future

Geologic Characterization



Environmental Geology

New World Mining District

Cool colors indicate carbonate lithologies with net acid buffering capacity.

Warm colors indicate net acid producing lithologies

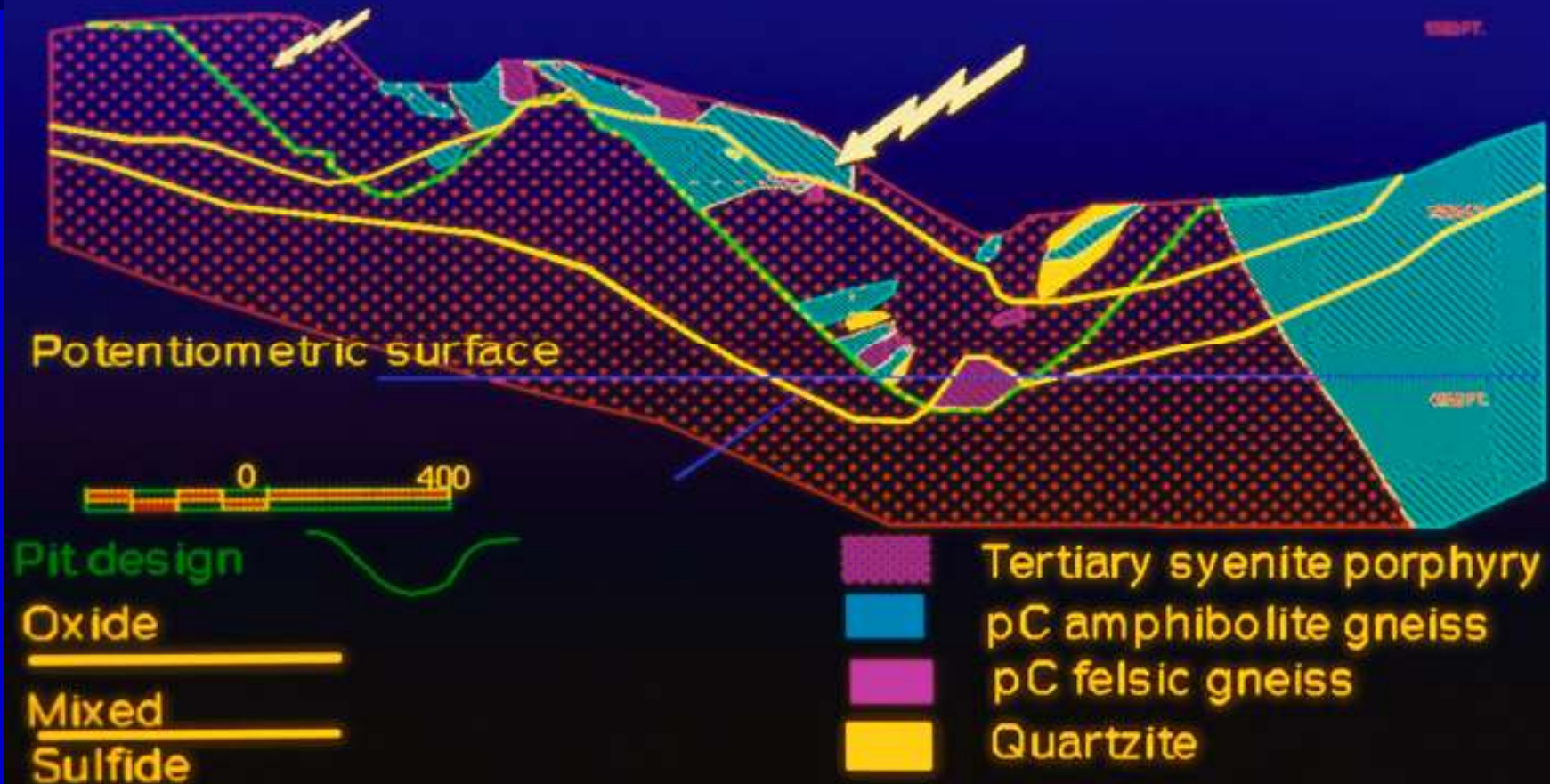
Geologic Characterization

Geologic cross-section

View looking north

North Alabama Pit

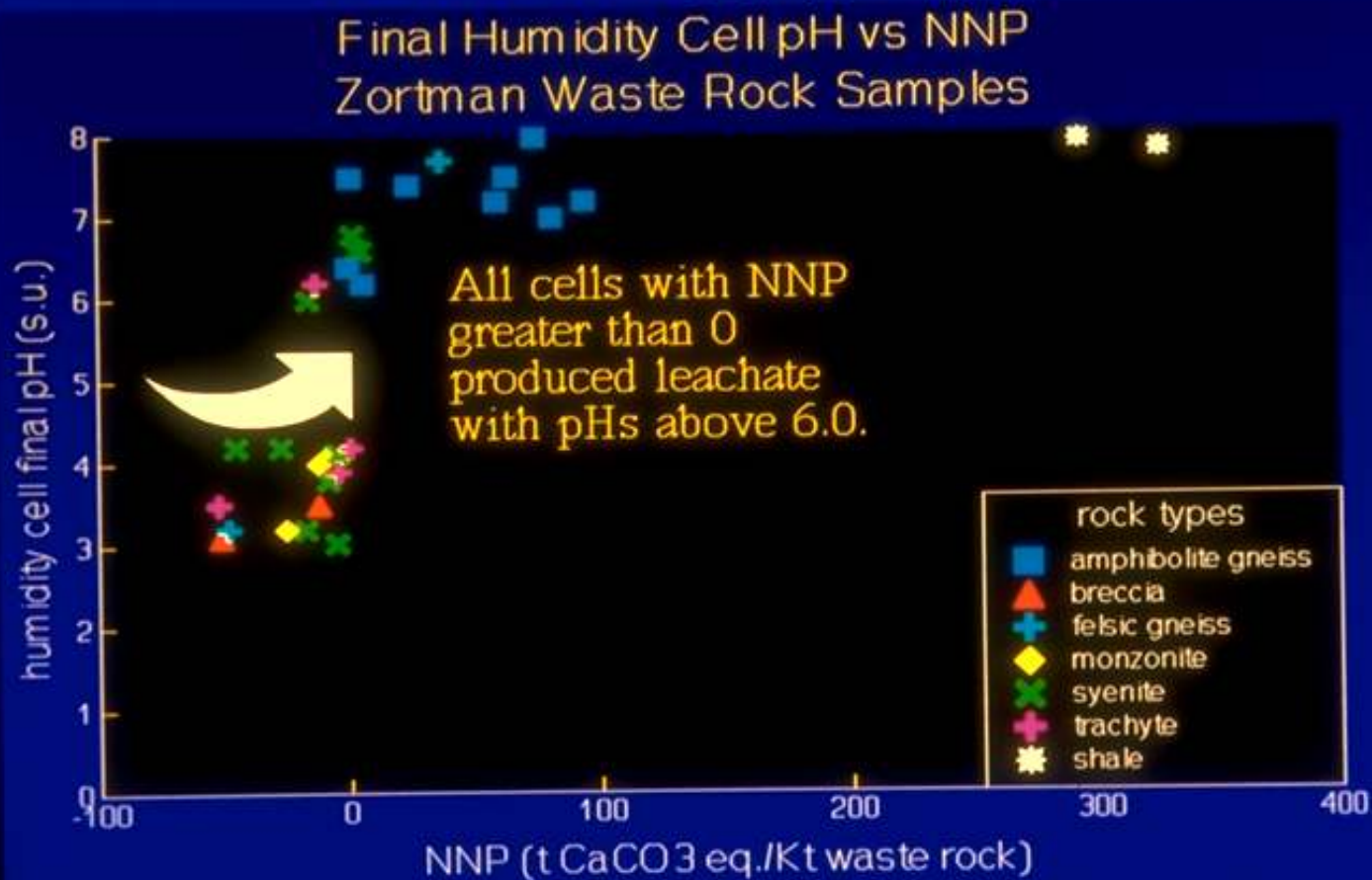
OK Pit



Mine Waste Characterization



Mine Waste Characterization



Design for the Viewshed



Value Engineering/NEPA Integration



Value Engineering/NEPA Integration

- ◆ Designers and scientists **MUST BE MADE TO** communicate during design (for emphasis)
- ◆ Always use a **facilitator** for stakeholders meetings
- ◆ **Brainstorm to develop the underlying need** for the action
- ◆ the **Need will drive the range of alternatives**; get consensus (Charles Eccleston paper)
- ◆ Brainstorm to develop a range alternatives
- ◆ Constrain the number of alternatives
- ◆ Try to predict potential consequences (impacts)

EA or EIS?



EA or EIS?

- ◆ For EA operator will need to develop a design that will **avoid, minimize, then mitigate impacts to below the level of significance**
- ◆ Try to **avoid and minimize** most impacts to below the level of significance, then
- ◆ Design **mitigation** (industrial controls) for any outstanding impacts to below the level of significance
- ◆ If significant impacts are expected then plan to go straight to EIS and make sure your **alternatives are constrained by the underlying need**

Process Audit

- ◆ After NEPA document is in final draft form, ask agencies for NEPA process audit or perform it yourself
- ◆ Law suits are not lost for not following the NEPA process or interpretations of data
- ◆ Law suits are lost for using indefensible data (Data Quality Act) or not following the NEPA process according to the Administrative Procedures Act

Superfund issues?



Make sure that development of feasibility study will include information needed for reasonable decisions regarding treatment alternatives.

Treating pit water in situ is required by statute.

But ROD required water treatment plant.

Recommendations

- ◆ Make sure your existing site is operating legally with all necessary permits (permit audit)
- ◆ Communicate early and often with all stakeholders even at conceptual design and encourage public grassroots efforts
- ◆ Design to the environment
- ◆ Gather defensible data early on

Recommendations

- ◆ Brainstorm - Use Value-Engineering/NEPA Integration
- ◆ Constrain the number of alternatives based on need
- ◆ Make sure the NEPA process is followed (process audit)
- ◆ If EA, avoid, minimize, then design to mitigate
- ◆ If EIS, make sure the agencies constrain your alternatives

Have any Ideas for NEPA Reform?

The U.S. House Committee on Resources has launched a NEPA Reform Task Force to gather ideas on how this law can be improved. The Task Force leaders want and need your input

Use the link below to quickly send your ideas and suggestions directly to the Task Force so they can be included in process

www.partnershipforthewest.org/NEPA_reform.htm

Remember, someone is always watching



NASA, Hubble Telescope

Rebecca A. Miller, R.G.

- ◆ www.ramillerrg.com
- ◆ 602-391-3015
- ◆ ramillerrg@netzero.net

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