

**Perspectives on the Integration of Science in the BLM**  
**Denver, CO; January 19, 2005**  
**Meeting Notes**

**MEETING OVERVIEW**

**Host**

Charisse Sydoriak, Division of Science Integration, BLM National Science and Technology Center

**Note Takers / Research Team**

Vita Wright, Research Application Program Leader, Aldo Leopold Wilderness Research Institute, USFS Rocky Mountain Research Station, and  
Michael Patterson, Associate Professor of Wildlife/Recreation Management, College of Forestry & Conservation, University of Montana

**Purpose**

Improve relevance of study design and results by providing the research team with,

- an overview of science integration in the BLM, including current challenges
- thoughts on their research plan
- issues of national importance that require scientific information/integration
- suggestions for study areas and positions to interview at selected units

**Attendees**

Representatives from the

- BLM Washington Office;
- BLM State Offices in UT, WY, and CO;
- Grand Staircase Escalante National Monument;
- Grand Canyon-Parashant National Monument;
- Colorado Plateau Science Committee; and a
- USGS Fort Collins "Policy Analysis and Science Assistance" Team

**Note Organization**

The bulleted statements represent comments by meeting participants. As note takers, our intent was to capture all statements made, including those that either agreed with or contradicted previous statements. As a result, some bullets may seem either redundant or contradictory. We have categorized the comments in order to make it easier for readers to understand them.

## **PARTICIPANTS' THOUGHTS ON SCIENCE INTEGRATION IN THE BLM**

### **What is science?**

- Hard to define science
- Science – different definition to managers than researchers
- Monitoring data – not wasted; different kind of science
- “Science” vs “research” – different perspectives between research and management about what these terms refer to; in research culture, researchers are paid to think; managers are not paid to do that that; monitoring is not research; hard to separate research questions from management issues; managers – hard to understand what research is

### **Information and data overload – lack of synthesis/communication of existing knowledge**

- Too much information and don't know how to handle it
- Collect information/data, but little reflection/analysis
- Need better across program communication
- 20% of monitoring expenditures that used appropriate methods but never acted upon it (just filed it)
- Scads of information; sometimes reinvent the wheel
- Data overload – need to find out what already know before spending more money
- problem is how to mine monitoring data
- Ton of institutional knowledge in field – stored in heads; not communicated to other places in the agency
- Resource managers know a lot, but information not communicated outward; communication viewed as “not our job”; challenge is to find that information/knowledge

### **Time/workload**

- Pace – hard to have contemplation; BLINK – new tool to think without thinking

### **Public/Congressional views of science**

- Society questioning the value of science (see 1/17 Post article)
- Congress questioning investment in science
- Being pushed by interest groups – where'd you get data?
- Public – react based on emotion rather than ration
- Communicating with the public – Lot of managers have good science even if not the latest/best, but not good at communication; Lot of us grew up as resource managers; feel like we're good at it; “we're right, wear the white hat”

### **Balancing scientific with experiential knowledge**

- Science/information includes local wisdom

### **Role of science in decision making**

- Idea of having good information to make decisions
- NEPA; FLPMA
- How can we react to changing nature of science in our jobs?

- Agency lost track of social priorities that “have nothing to do with where we want to go”; “we’re focused on the wrong priorities”; social priorities often take precedence over ecological priorities; need to integrate ecological priorities into social
- Sociopolitical vs. ecological decision making; recommends venn diagram with economically feasible, ecologically sustainable, and socially acceptable; not much overlap in center of diagram

### **Need to recognize current successes**

- Some managers are already integrating science; some are satisfied with current processes
- Field managers want scientific information and will use it if get it
- Lot of folks have science background, many with advanced degrees
- Inv. with many science initiatives in BLM
- Folks in field have science background and apply science throughout careers (attend professional society meetings), but BLM is often criticized as not a science agency

### **Institutional capacity for science integration**

- Reverts to individual program specialists
- SCC trying to address science coordination and improve it, but not clear how they’re functioning
- 70s-80s – BLM had research staff to track science and coordinate between states to decrease duplication and take science needs to science providers; John Haugh is the remaining member of this group;
- John tries annually to check with each state to see who’s doing what and how much spent – for annual reports to NSF, etc.; hard for one person to pull this information together
- There is no program for science integration leads to lack of consistency
- Science not institutionalized; switch gears often
- Lack of staffing
- SCC – trying to make it more effective

### **Accountability**

- What has investment (\$1 billion) brought us?
- BLM-WO perspective \$200 million/year wasted on monitoring
- Asst Secretary – water – orders from OMB to look at research/science in DOI and what’s needed; DOI given red light on sciences – Asst Sec tasked to change to green light through science coordination
- Hard to sell science to Congress; Congress wants to see results (widgets) for \$\$, especially with GPRA; how to show benefits in future budget scenarios
- Must be cognizant of how much \$\$ spend and what getting for it

### **Diverse data collection techniques**

- USGS monitoring \$60 million, 60% worthless due to invalid techniques (FWS estimate was 80% worthless)
- Need consistent ways to collect information

### **Timing of science**

- invariably comes to managers a year late; politicians and managers need answers now; they are on to other things by the time research is mobilized
- Hard to sell science to Congress; science takes multiple years

### **Conflicting research results**

- Scientific answers not simple; have “dueling science”; concern that user groups and lobbyists can hire scientists to say what they want to hear
- Everyone can “buy own science”; like Dr. who will give you opinion you want to hear; conflicting scientific interpretations and conclusions

### **Views about scientific information**

- Old timers don’t believe it – learned everything they need to know 30 yrs ago in range school

### **Interest in improving science integration**

- The usual suspects are sitting around this table; anything to do with science, and this group is there
- Managers often not at meetings to discuss science integration; the meetings have those already interested in science integration
- These are all people who believe in this and make time for it

### **Relationships between managers and scientists**

- Need to increase linkage between managers and scientists

### **Need to show value of scientific information and tools to the users**

- Have to demonstrate that it has value
- Value added; need to look at how save money, such as through avoiding litigation

### **Input to Study Design** (this section needs to be completed)

- Couldn’t get managers due to negative connotation of study title

### **Need to build science integration into existing processes**

- Mission, legal mandates are process oriented; need to build science integration into processes rather than create a separate program; how to evaluate/inventory scientific information at start of process?

### **Science communication**

- scientists not good sales people (Jayne Belnap is an exception)
- Need more marketing of program; what doing and why; talked awhile about what doing and why

### **Awareness of resources to help with science integration**

- NSTC not visible to enough managers; need to market how it can help with processes