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SLIDES: Lessons from the Pinedale Anticline Adaptive Management Process

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Lessons from the Pinedale Anticline
Adaptive Management Process

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The Wilderness Society, Northern Rockies Office
The Wind River Mountain Range and some of the Upper Green’s pronghorn antelope population
Cut by the Green and New Fork Rivers and nestled between 4 mountain ranges, the Upper Green River Valley is home to the:

- Longest recorded migration for both mule deer and pronghorn antelope
- Largest publicly-owned block of big game winter range in the Greater Yellowstone Ecosystem
- Largest mule deer herd in the U.S.
- One of the west’s last best strongholds for sage grouse
Jonah Natural Gas Field, 2002
The Jonah Gas Field, bordering the Pinedale Anticline, today has over 500 wells. The BLM is analyzing a proposal for up to an additional 3,000 wells at 10-20 acre spacing (twice the current density).
The Pinedale Anticline Project is permitted for 700 producing wells. Drilling is proceeding at rapid pace.
BLM’s ROD for Pinedale Anticline Project Permitted:

- 700 Well Pad Locations
- 276 Miles of Roads
- 400 Miles of Pipelines
- Compressor Station facilities

2003 Winter drilling on crucial mule deer winter range on Pinedale Anticline
Positive Attributes of Pinedale AEM Process

• Recognized the high degree of uncertainty with impacts and trends.

• Involved the right people from the outset.

• Was trying to be truly adaptive while also acknowledging and reminding participants of constraints.
Challenges and Weaknesses with Pinedale AEM Process
1. Overly ambitious and charged with too broad a role

- Come up with monitoring programs for wildlife species, ground water, surface water, air quality, visibility, cultural and historic resources.

- Interpret the results of that monitoring and develop recommendations for changes in management.

- Design a transportation system for a project area nearly 200,000 acres in size.

- Design a program to monitor reclamation of well pads, pipeline right of ways, and compressor station sites.
2. Lack of adequate or even any baseline information

- No foundation of knowledge or data to ground discussion of options or to build from.

- Made it difficult to devise processes for “mid course corrections” since didn’t have clear benchmark to gauge what the current trend or future course was likely to be.
3. **Failure to integrate time lag component into adaptive programs**

- No ability to constrain development – either where it was occurring or how fast – based on time lag for useful monitoring information.

- So the AEM structure was set up where the scale/pace of development did not match the amount of monitoring completed and the level of confidence in understanding impacts.
4. **Inadequate Staffing and Funding by BLM**

- No full time AEM Coordinator hired, as ROD had recommended.

- BLM didn’t fund the monitoring and left it to industry to pay for most of the data collection and studies.
5. The schedule of meetings overwhelmed some critical participants

• Meetings were generally held during a weekday and during the daytime.

• No travel funds were earmarked for private citizens participating on AEM working groups.

• Frequency of task group meetings and time commitment was intense: weekly over nine months
Lessons from Pinedale AEM

Recommendations for BLM Adaptive Management Programs
1. Start small and pace/scale the level of development with level of learning

Adaptive management is a series of scientifically driven actions that use the monitoring and research results to test predictions and assumptions in management activities, and use the resulting information to improve them. Adaptive management works iteratively with management **beginning at a relatively small scale**, followed by research and monitoring, followed by evaluation, followed by enlightened management.
2. Define in detail what the adaptive management process will and will not address

Adaptive management is a central element of the plan, yet it is the aspect which causes me the greatest concern. Simply put, I wonder whether it will result in a management philosophy that has the potential to change over time, thereby making it difficult to respond to at the state level. I am left to wonder what data will be generated to drive or justify that change…

I understand some disturbance within the big game migration patterns is inevitable, but I would recommend further study to determine the disturbance threshold of the planning area. In addition, I suggest making projections and developing proactive solutions to address these problems instead of resorting to ill-defined adaptive management.

-- WY Governor Dave Freudenthal (Comments on Jack Morrow Hills CAP DEIS)
3. Ensure a solid baseline prior to starting Adaptive Management
4. Make sure there is a solid agency commitment to fund monitoring
5. Have a “fall back” plan should monitoring or management actions not be fully carried out
6. Set up adaptive management process so that private citizens can effectively participate
Pinedale Anticline Area in Wyoming’s Upper Green River Valley