

# Land Letter



## 5. CONSERVATION: Habitat guardians go high-tech to see big picture in regional protection plan (01/22/2009)

Patrick Reis, E&E reporter

Flush with cash after energy companies were required to fund conservation efforts in exchange for development permits, environmental groups are employing advanced technology to squeeze the most value out of every conservation dollar spent on Wyoming's prolific Jonah Field.

After agreeing to foot some of the \$24.5 million conservation bill that came as a condition of natural gas drilling permits on Jonah Field, BP America hired the Nature Conservancy to assess how that money could be used to most effectively protect the local sagebrush habitat.

Given relatively large chunks of money and at least 30,000 acres of landscape from which to pick ideal conservation sites, the Nature Conservancy has designed a program to protect species' habitat that may serve as a model for other conservation measures.

Under the program, satellite mapping is used to identify parcels of land that have high potential to support local species such as the sage grouse or pygmy rabbit. Then officials run algorithms through computers to determine which combination of parcels provides the most value. After those combinations are identified, Nature Conservancy officials attempt to procure conservation easements or buy the land outright.

The advantage of this approach, is that it allows conservationists to plan on a regional scale, according to Joe Kiesecker, the Conservancy's Rocky Mountain science director.

Mandatory conservation is typically tied to permitting processes, and there is a tendency to consider the best local parcels without regard to how that parcel fits into the greater conservation scheme, Kiesecker said. But because many species -- especially larger species such as wolves, cougars and elk -- need more than a single patch of sanctuary to survive, the piecemeal approach often falls short.

In contrast, the conservation plan on the Jonah Field is being conducted all at once, and the high-tech approach helps planners analyze the parcels in relation to each other to build a sustainable conservation network on a large-scale, Kiesecker said. "The value of any given habitat is the context within the landscape," he said.

Jonah Field is not the only place where wildlife advocates are temporarily trading hiking boots for microprocessors. In Hawaii, satellite mapping is helping researchers track the spread of invasive vegetation and protect the most sensitive areas. And in California, scientists are tracking kangaroo rats from space to assess how the endangered species in faring in a changing climate.

Proponents contend that if the best off-site conservation areas are selected, energy projects can be a net positive for wildlife, but not everyone is convinced.

Eric Molvar of the Biodiversity Conservation Alliance said he was unfamiliar with BP's effort with the Nature Conservancy but was concerned that the Jonah Field's habitat would continually be degraded, despite existing conservation efforts.

Molvar accused energy developers of striking one compromise on development and then immediately asking for more land. He also said that the damage done from drilling is underestimated -- especially in sagebrush habitat.

"Once you take out the sagebrush it takes at least 75 years to get it back," Molvar said. "During the meantime, these species are not going to find anywhere else to go. It's not clear whether they'll be able to come back."

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