First leases issued for wilderness land

In an unprecedented and controversial action, the Bureau of Land Management under the U. S. Department of Interior has issued the first leases allowing energy companies to explore for oil and natural gas in a designated wilderness area.

The leases cover a total of 7,000 acres of public lands in southwestern New Mexico, including 1,174 acres in the 34,000-acre Capitan Wilderness. The area was designated a wilderness on December 19, 1980 in one of the last official actions of the Carter administration.

The leases were approved by the federal agency on the advice of a regional office of the U. S. Forest Service, which had completed a generic assessment for the public lands outside the wilderness but had not conducted the environmental assessment required for the wilderness area. Until such studies occur and are evaluated, the energy companies are bound by an interim agreement called a "no surface occupancy stipulation." They are allowed to conduct only directional or slant drilling into the wilderness area from adjacent lands.

"This is totally irregular," said Peter Coppelman of the Wilderness Society. "This decision has monumental consequences in terms of setting a precedent for the way lease applications are handled." He says the procedure circumvented the legal process.

James C. Overbay, deputy regional forester for resources in Albuquerque, N.M., told SCIENCE NEWS that the environmental assessment is underway. He said the matter had been complicated because the lease applications were filed before the wilderness was established.

Two of the leases were awarded to Public Lands Exploration, Inc., now Corona Oil Co. A third lease went to Fred Yates of Yates Petroleum of Artesia, N.M. Don Williams, a vice president with Corona Oil, explained that in June 1980, his company had filed a lease application for open acreage on federal lands. On May 28, 1981, he received notification that the wilderness had been established but that because the bids spanned the boundary rather than being totally inside the wilderness area, four options were available: The company could drop the wilderness acreage from the bid, it could wait for the environmental assessment to be completed on the wilderness land, it could trade for other open acreage, or it could take the lands originally included in the bid with the stipulation that surface exploration could not be conducted until the environmental assessment was completed. The companies chose the fourth option.

Williams describes the land as "rank wildcat acreage" and says the company has no immediate plans for exploration. "We don't even know if the wilderness area is productive," he said, adding that one place in the leased area would be as likely as another.

Under a provision in the 1964 Wilderness Act, leases for oil, gas and mineral activity in wilderness areas may be issued until December 31, 1983. Energy companies granted leases before that date have 10 years from the date of issuance to begin exploration drilling. Environmentalists contend that the law does not mandate that leases be issued, and point out that as a matter of policy previous administrations have refused to open wilderness areas to exploration.

The issue of leasing has arisen in other areas, such as the Washakie Wilderness in Wyoming's Shoshone National Forest. The Forest Service, following the required procedure, has completed a draft statement of the environmental impacts of oil and gas exploration in the wilderness. The statement, which is out for comment, recommends leasing of 90,000 acres within the wilderness, of which 20,000 acres will be available for surface occupancy. For the Washakie, 145 lease applications are pending —*C. Simon*

Luck is 50% of the peer review process

Most federal grant givers subject requests for research funding to "peer review." The process involves asking independent scientists to rate a grant proposal — which explains how a research team would use its support — both on the proposal's research merit and on the reviewer's estimate of the ability of a grant applicant to accomplish its stated goals. Ratings are used to rank applicants, and as such, determine in large part who and what gets funded. But a new study of the peer-review process as employed by the National Science Foundation indicates that "the fate of a particular grant application is roughly half determined ... by apparently random elements which might be characterized as the 'luck of the reviewer draw.'"

A full report of the study, which investigated to what extent bias factors into peer review, was published by the National Academy of Sciences. A more focused summary appears in the Nov. 20 SCIENCE. According to Stephen Cole, Jonathan Cole and Gary Simon, their findings should "not be interpreted as meaning that the entire process is random or that each individual reviewer is evaluating the proposal in a random way." Rather, they suggest the review process is naturally subjective and will therefore always depend on who is picked to do the reviewing. Their work actually showed a grant application's fate was relatively unaffected by who would conduct the research and at what institution.

"[G]iven the importance of chance in the current process, clearly the more proposals a researcher submits the higher the probability of being funded. In fact, eminent scientists may be more likely to be funded than less well-known ones," they say, "not because their probability of success is greater for each submitted proposal, but because they submit many proposals and are not deterred by an individual rejection." —*J. Raloff*

More on yellow rain

Further evidence that fungal warfare agents have been used in Southeast Asia (SN: 10/17/81, p. 250) has been presented in a hearing of the Senate's arms-control subcommittee. Three more samples containing trichothecene-family toxins have been recovered from sites of alleged "yellow rain" attacks in Laos and Kampuchea.

The Army claims all samples, including a series of uncontaminated specimens (from areas outside yellow-rain sites) were retrieved by trained personnel and transported appropriately. However, at least one toxin-contaminated sample changed hands more than a few times before reaching Chester Mirocha's lab at the University of Minnesota for chemical analysis. Collected by a Hmong refugee before fleeing Laos, the sample was given a SOLDIER OF FORTUNE reporter, who passed it through another party to Rep. James Leach (R-Iowa). He gave it to the State Department, which delivered it to Mirocha.

The State Department is implicating the Soviets with these toxins, whose wartime use is forbidden by a convention that both Russians and Vietnamese have signed. □

Vaccine okayed

A hepatitis B vaccine, which has been under extensive clinical investigation during the past several years (SN: 10/11/80, p. 231), was approved last week by the U. S. Food and Drug Administration. In fact, it is the first new viral vaccine approved by the FDA in a decade.

The vaccine, called Heptavax-B, will be marketed by Merck Sharp and Dohme starting mid-1982. Because it is made from the blood plasma of persons who have contracted hepatitis B, the vaccine will be expensive — about $75 to $120 for three shots over six months. However, its protection lasts at least five years, and the three-shot regimen has not produced any significant side effects.

The FDA initially recommends the vaccine only for people who are at high risk of contracting hepatitis B, notably surgeons, dentists, hemodialysis staff, hemodialysis patients, lab workers, relatives and contacts of hepatitis B virus carriers, some military personnel, male homosexuals and prostitutes. □