



Vast strippable coal reserves are found over a huge region between the Midwest and the Rocky Mountains. Sites indicated show power-generation potential.

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coal developments was rejected as "premature."

"This is quite wrong," McKelvey told *SCIENCE NEWS*. "We wanted at the symposium to raise the very questions the government study should be answering." He is not certain the task force will ever raise these questions meaningfully; instead of a Federal agency-dominated study, he says, "this is really a job for an independent critic." Best suited for the job, he believes, is an interdisciplinary team of scientists from universities in the region. He maintains such a group would have the capability to make a "pointed critique" of the coal developments similar to a study of the California Water Plan made by the University of California.

McKelvey says the powerful development-oriented agencies, such as Interior's Bureau of Reclamation and the Department of Commerce's Old West Regional Commission, are likely to

dominate the interagency task force.

Bruce B. Hanshaw of Interior's Geological Survey, staff chief for the task force, disagrees with the critics. "Our study," he says, "is going to be the biggest attempt ever to look at the whole ball of wax in connection with a natural resource development." Not only environmental studies but also studies of the demographic, social and economic impacts on the entire region will be made. He adds that his team is made up almost entirely of scientists (he is a geophysicist) and that it will bring high standards of objectivity to examining the coal developments. He also insists that regional interests will have ample opportunity for input to the studies.

Until he was given the task force assignment, Hanshaw had been a "working scientist" without administrative experience. He admits he does not yet know what the budget of the task

force will be or even where it will come from.

Perhaps most significant are statements by Dole and by Interior Secretary Rogers C. B. Morton indicating their belief in the inevitability of development, certainly an assumption the task force will have to accept. Thus the option of no development, or even of only limited development, appears to be closed in advance. McKelvey says there has been so little experience in strip-mine reclamation in the area that there is no assurance it can be done even with the best of intentions. "There is so little topsoil, the area is so subject to drought cycles and so arid," he says, "that it is still largely speculative as to whether reclamation of strip mines is economically feasible." He says there is also a possibility that industrial water will be taken from the Yellowstone River and its tributaries to a point where in a dry year the flow would be reduced by one-half, with consequent severe damage to stream-side ecosystems or to irrigation farming. Power plants also pose a threat of high levels of air pollution (a threat that would be considerably diminished if coal gasification were the option chosen). Further, McKelvey says that if part of the power output of a generating complex were transmitted to the West Coast, the transmission line network required would be so immense that it would pose severe ecological problems in the scenic mountain areas it would traverse.

Because many environmentalists have more faith in state government control, they have joined populists in calling for creation of a giant, multistate wholesale public power district to supervise coal development. □

NRC group calls for rejecting 'concept of continuing material growth . . .'

The United States is in a natural resources bind that will probably get worse instead of better. The components of the bind are growing Third World competition for limited foreign resources and growing costs—in energy and environmental destruction—of utilizing domestic resources. The main answer to the problem may be conservation policies that would eventually lead to a stable and materially static economic order resembling the one proposed in *Limits to Growth*, the computer simulation of world trends released earlier this year by a Massachusetts Institute of Technology systems dynamics team (*SN*: 3/25/72, p. 202).

These are the general conclusions drawn from a study released last week by the National Materials Advisory Board of the National Research Council. The study was prepared for the National Commission on Materials Policy, appointed in 1971 to advise the President and Congress on raw materials policies. The diverse interdisciplinary team conducting the study was headed by Preston Cloud, professor of biogeology at the University of California in Santa Barbara.

Says the study's summary: "We are now almost completely dependent on foreign sources for 22 of the 74 non-energy mineral commodities considered essential for a modern industrial society. . . . Meanwhile, consumption is pushed upward both by growing populations and by increasing per capita demands. . . . [and] 'Third World' voices for an equitable share in earth's material goods grow ever more insistent." The study alludes to an Interior Department report which predicts that by the turn of the century, "even with substantially enlarged domestic production and recycling," there will be a raw materials deficit of 54 percent of total demand.

A new and more realistic materials policy, the report continues, might reject "the concept of continuing material growth as an axiom and keystone. . . ." Such a policy instead would examine the possibility of limiting growth "where [growth] does not add demonstrably to quality of life." Further it would count environmental, social and energy costs "along with obvious fiscal costs, as the total price we must pay for continuing material affluence."