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Mr. Jim Bradley Subcommittee on National Parks & Public Lands Room 812, House Annex #1 Washington, D.C. 20515

Dear Jim:

In response to our discussions January 17 in Washington D.C., and earlier by telephone, I'm sending my thoughts about legislation to strengthen wilderness management. I've suggested several items, including the need for wilderness research to solve management problems and take advantage of wilderness areas as the most natural remaining lands in our nation. Wilderness areas are dedicated to remain natural and thus provide unique opportunities for ecological research, monitoring and assessment, pertinent to land management everywhere and to questions surrounding global warming and associated ecosystem response.

Following are my suggestions for the proposed legislation:

A multi-agency focus is needed: There is a need to strengthen wilderness management in all four federal wilderness managing agencies—Forest Service, National Park Service, Fish and Wildlife service, and the Bureau of Land Management and cooperation with state wildlife agencies. In fact, strengthening the coordination among these agencies and encouraging more uniform standards for management is an important goal that could yield benefits and economies for all wilderness management. In 1983 the University of Idaho hosted the first National Wilderness Management Conference resulting in the development of a National Wilderness Management Plan, based on a facilitated group process and which was endorsed by all four federal agencies (copy enclosed). In 1989 there was another National Wilderness Management conference in Minneapolis at which Dr. Ed Krumpe of our Department of Resource Recreation and Tourism, and a coordinator of the first national conference, reported on progress toward the multi-agency goals of the plan (copy enclosed). Indeed, there has been much more cooperation by the agencies. The national wilderness management correspondence courses led by the BLM at Colorado State University for wilderness managers in all the agencies should further strengthen coordination through common education. Other wilderness management training by Forest Service and BLM are now commonly attended by managers from at least those two agencies.

Wilderness areas managed by the Forest Service and Bureau of Land Management are affected by management of their fish and wildlife by the state wildlife agency. In many cases the wilderness is treated by such agencies as merely extensive hunting and fishing opportunities. Coordination may not be what it should be. Wilderness legislation might require cooperative agreements or joint plans between the appropriate state and federal agency for management of wildlife in wilderness areas.

My point is that, if a bill focuses only on wilderness management in the Forest Service it will directly impact only about one-third of our nation's wilderness. A bill targeting such things as manager education and training, public education, joint planning and cooperation and things that apply to or include many agencies would have a more wide-spread effect. A bill that directly strengthens the wilderness management infrastructure and cooperation in all the agencies, would be most desirable and effective.

Focus on standards for wilderness administration, not the bureaucracy of administration: In previous discussions you've mentioned the bill might establish a Director for wilderness management in the Washington office and regional offices of the Forest Service. I'm concerned about some undesirable effects of legislation aimed at expanding structure (bureaucracy), rather than job accomplishment. Without funding, such direction could pull valuable effort (positions and funding) away from the field where they are needed. I'm not opposed to giving wilderness more visibility and stature in our public land management agencies, but I am concerned about potential side effects such as further diluting wilderness management resources and adding unnecessary bureaucracy. A middle ground might be to grant authority to the Forest Service to establish a Washington office wilderness directorate, and regional directors as needed to implement strengthened management. We all know that administration of wilderness areas is an accident of their location, and not design. That topic needs to be visited. It isn't reasonable to expect wellcoordinated management for a wilderness administered by two regions, six national forests and twelve ranger districts, the situation with the Frank Church River of No Return wilderness. That administrative arrangement was determined by where the wilderness boundaries happened to fall.

More important legislative guidance might focus on developing appropriate wilderness administration to match the diversity in the wilderness system. Again, agencies need to be directed to establish appropriate standards of wilderness administration, to protect legally mandated naturalness and solitude. Standards to ensure that might call for some minimum level of wilderness management commensurate with use, i.e., visitors per acre, proximity to populations, commercial use by outfitters, grazing permittees, mining,

¹ One of my colleagues who spends a lot of time in wilderness commented that you hardly ever see a professional resource manager in wilderness. What you see is summer helpers, paraprofessionals and volunteers. We need more professional help on the ground in wilderness.

education, research activity, etc. Developing such standards would be a major effort that would require participation of everyone concerned with wilderness protection and management, i.e., universities, wildlife agencies, environmental community, recreationists, permittees, etc. Finally, agencies are not now able to implement the monitoring required under existing laws. Funding to support monitoring in the field to see if management is working is needed by all agencies.

- Matching funds for cooperative efforts: One of the important trends in public land management the past decade has been the development of public involvement in management programs. A wide variety of management activities are now carried out through partnerships with interested groups and users. There has been a strong effort by agencies to solicit outside grants and funds to drive these partnerships, but a reliance on outside contributions to support this involvement--volunteer efforts, partnerships, cooperative agreements, joint efforts and other special arrangements to complete projects--limits agency initiative in directing efforts toward other needed work. Donors target projects that interest them, and responding to such opportunities may take resources away from agency priorities. Managers need sufficient resources to respond to matching opportunities, to solicit matching efforts for agency priorities, and to do other work, too. I would encourage legislation establishing a matching fund for which wilderness managers could compete in order to implement partnership efforts directed at agency priorities. I predict a result would be tremendous growth in cooperative wilderness management efforts, completion of backlogged work that wouldn't naturally be targeted by donors of cooperative effort, and an associated increase in public involvement in wilderness management work.
- Assess-then strengthen and expand wilderness research: Wilderness areas are vastly under utilized as opportunities to address some of the most important environmental and scientific issues at the ecosystem and landscape levels. Wilderness areas are large enough, and have legislative protection of naturalness and solitude to provide security for such long-term studies. For example, only in wilderness areas can we find complete winter range-summer range habitats for large mammals, whose behavior is thus unaffected by agricultural crops and to only a small extent by human disturbance. Wilderness affords the best possible opportunity to assess global pollution and warming and its effects on vegetation, habitat and wildlife. Where else can we measure almost completely natural baselines, whether it be levels of pollution, natural succession in patterns of vegetation, wildlife populations, predation and habitat relationships and so forth. Such information is valuable to basic natural science, environmental monitoring and assessment at local, regional and global scales. It would help answer urgent questions surrounding resource management as we struggle nationwide to establish attainable air and water quality standards, viable wildlife populations and sustainable forests, and their relationship to best management practices, human settlement, development and land use.

The above situation begs for <u>assessment of the status of wilderness research and the factors shaping, impeding or encouraging it</u>, whatever they are. I believe the key issues to look at are not just money but the organizational structure under which wilderness research

is possible, including funding sources and access to them, policies governing wilderness research, wilderness management policies affecting research, and awareness of needs and opportunities by managers and the public. It would be very unfortunate if legislation to strengthen wilderness management did not take advantage of the opportunity to assess, restructure and strengthen wilderness research. Even to skeptics about the value of wilderness, the use of such areas for research and the findings that could be gleaned from such studies, are recognized as valuable in helping make wilderness areas worth the other opportunity costs of setting them aside.

I have two major recommendations pertinent to research for any wilderness management legislation.

A. Request and fund a major assessment of the status of wilderness research nationwide, focusing on: What kind of research is being done? Who is doing such research? What factors are shaping the extent and direction of wilderness research, including such things as available financing, organizational structure, research and management policies, and so forth? What are the most important opportunities for use of the nation's wilderness areas for scientific purposes and are they being fulfilled? (That is, what are the most important kinds of studies for which wilderness is suited and are they being conducted?) What does a committee of prestigious scientists recommend as to future direction and organization for wilderness research?

The National Academy of Sciences is the proper body to undertake such an assessment since they are the nation's most prestigious scientific organization and routinely assess performance on important scientific issues and by organizations. Such an assessment should not be restricted to the Forest Service but should look at wilderness research nationwide under all federal jurisdictions, and should extend to research outside of wilderness but with wilderness implications. Legislation could request that the National Academy of Sciences appoint a prestigious committee from the scientific community and pertinent organizations to undertake such an assessment, and request that the Forest Service and/or the other agencies to provide funding for such an assessment. Alternatively, such a study could be directly requested, and funding negotiated from the agency without legislation, especially since the Forest Service has responsibility for conducting such research.

B. Establish a wilderness research system serving all four wilderness managing agencies and accessible to the entire scientific community. There is a great need to expand wilderness management research, beyond the few locations where it is conducted by the Forest Service to all regions of the country and the other wilderness managing agencies, universities and the larger scientific community. There is also a need to expand the scientific use of wilderness areas for environmental monitoring and assessment of change, purposes for which wilderness is ideally suited.

A proven way to expand wilderness research to all agencies, with direction to desired priorities, would be a research program through the land grant university system. For example, the McIntyre-Stennis research program now allocates \$17.65 million annually to 62 forestry schools in-state land grant universities according to the commercial timber and wood products harvested in each state (with at least a minimum level going to each land grant university). This program is administered by the Cooperative State Research Service (CSRS) of the U.S. Department of Agriculture (the current CSRS director is Dr. Patrick Jordon, (202/447-4423). An ideal program might allocate funding for wilderness related research to land grant universities under a similar system, with monies allocated proportionate to the acreage of classified wilderness in each state.

The appeal of the land grant universities is that they all include agriculture and natural resource colleges or departments and extension programs. Their mission includes outreach to practitioners. A supplemental benefit of a wilderness research program through the natural resource schools would be the establishment of new or additional wilderness related educational courses by professors who, by virtue of access to research funding, would then be able to focus some of their intellectual energy on wilderness topics. In the long run, this would also develop an educated citizenry, better informed about wilderness issues and the local, national and global environmental concerns that would be brought into focus through wilderness research on natural processes.

The goal is a wilderness research program, accessible to all agencies and university faculty in natural resource schools, focused on wilderness management problems, natural processes, environmental monitoring and assessment, to balance current research programs focusing on commodity purposes of land management. We need more research: to evaluate whether or not management actions and programs are having the desired effects (what works and what doesn't!); to understand wilderness visitors and vicarious users (where do they come from, what are they looking for, how acceptable are our management practices); to establish cause-and-effect relationships between human use and changes detected by our monitoring programs; and to transfer findings from all this research into programs that will preserve our wilderness legacy.

Thank you for the invitation to comment, Jim. I will be happy to provide additional information if requested.