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A mandate for watershed research

Nothing is more essential to life on this planet than water. And, for those of us who live in the West, no subject is more contentious. It seems impossible to ensure an adequate supply of water in one region without threatening another location.

Water affects our relationships with adjoining states and with neighboring countries. The competition for high-quality water between agricultural and urban users becomes continually more heated.

A crucial component of this running battle is the management of water sources. The Division of Agriculture and Natural Resources of the University of California sponsored a series of workshops, extending from May 1985 to October 1986, to identify critical issues in the management of our wildlands. Participants discussed research priorities on forestlands, rangelands, shrublands, and streambank management. In all instances, research and extension work related to watersheds received the highest priority.

At present, the state of California, through its agencies and universities, and the federal government spend less than \$3 million a year on watershed management research. It will take a lot more if we're going to develop the knowledge and technology necessary to maintain watersheds that provide the quantity and quality of water so important to California.

At the centennial celebration of the State Board of Forestry in early 1985, University of California President David P. Gardner emphasized three points to consider as we look for ways to provide the resources necessary for watershed management research and extension. We must: (1) work together more closely to identify critical needs; (2) broaden participation in the research and extension process; (3) find ways to share the burden of funding.

The series of workshops represented one step in the identification of critical needs. A second step was taken recently when the University, through the Wildlands Resources Center and the Water Resources Center, sponsored the first California Watershed Management Conference. Participation in this conference included every state agency and department and interest group responsible for or concerned with the management of watersheds.

In other action, the University in combination with the California Department of Forestry and the State Board of

Forestry initiated an integrated hardwood range management program (HRMP) in July 1986. This program exemplifies both the second and third points made by President Gardner.

We are using the resources from HRMP to fund research, not only at the University of California, but also at five campuses of the California State University System, at Loma Linda University, and in cooperation with two private consulting firms. We have also proposed an augmentation of the 1987-88 state budget for funds to support additional research in watershed management, especially in the areas of vegetative buffer strips, nonpoint pollution in streams, and soil erosion from forests and rangeland. This proposed multidisciplinary watershed management program would involve scientists on several University of California campuses, in Cooperative Extension, and at other universities, as has been done in the hardwoods management program.

These activities are evidence that the University of California and the state of California are responding as rapidly as possible to the critical needs in watershed research. It is also clear, however, that limitations on state expenditures will restrict the growth of the budget for this work. We need to look for new and imaginative ways of financing these programs. One possibility is that the public utilities concerned about watershed management might find a way of taxing themselves to support needed research and extension, much as agricultural commodity groups do now. Not only would it be one way of creating additional resources for research and extension activities, but it would also further the education of the people of California. One thing that we have always observed in interactions with agricultural commodity associations supporting research in the University is that a financial linkage is an excellent way to improve communication.

The people and the government of California have clearly expressed their concern that our water supply be as pure and safe as possible. Proposition 65, adopted by a strong margin in our latest election, was a powerful mandate for clean water. However, the supply of high-quality water begins with the watershed. Our research and extension programs and water development and water management efforts must begin at the same point.