

**MINUTES OF THE MEETING OF
THE WESTERN ASSOCIATION OF
AGRICULTURAL EXPERIMENT STATION DIRECTORS**

Fort Collins, Colorado

July 28-29, 1988

SUMMARY OF ACTIONS

July 28-29, 1988

1.	Adopted the agenda as modified	1
2.	Approved the minutes of March 23-24, 1988 meeting as corrected . . .	2
3.	Approved a salary increase of 4.5 percent for the Director-at-Large . . .	2
4.	Extended the contract for the Director-at-Large through 1992	2
5.	Accepted the Treasurer's report on the Western Director-at-Large Account	3
6.	Accepted the Treasurer's report on the Western Directors Association Special Account	3
7.	Approved the recommendation of the Executive Committee to accept the proposed budget as presented for FY88-89	3
8.	Heard the RIC report and approved recommendations to:	
a.	revise projects;	
	W-126 Integration of Physiological and Morphological Criteria for Alfalfa Breeding	69
	W-166 Characteristics and Feed Value of Barley and Western Protein Supplements for Swine	70
	W-169 Minimizing Occupational Exposure to Pesticides	70
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	WRCC-69 Coordination of Integrated Pest Management Research Programs for the Semiarid Regions of the Western United States	73
	WRCC-70 U.S.-Canada Trade Agreement: Impacts on the Economy of the Pacific Northwest	73

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	WRCC-37 Maximizing the Effectiveness of Bees as Pollinators of Agricultural Crops	71
	WRCC-69 Coordination of Integrated Pest Management Research Programs for the Semiarid Regions of the Western United States	73
	WRCC-70 U.S.-Canada Trade Agreement: Impacts on the Economy of the Pacific Northwest	73
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10.	Accepted the 1988 class of neophytes in the Western Association of Agricultural Experiment Station Directors	15
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13.	Accepted the slate of candidates for offices and representatives to committees	21
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WESTERN ASSOCIATION OF
AGRICULTURAL EXPERIMENT STATION DIRECTORS

MINUTES

July 28-29, 1988
Marriott Hotel
Fort Collins, Colorado

ATTENDANCE:

Alaska	James V. Drew	Utah	Doyle J. Matthews
American Samoa	Pemerika Tauillili		C. Elmer Clark
Arizona	L. W. (Pete) Dewhirst	Washington	James J. Zuiches
	Eugene G. Sander		Dennis L. Oldenstadt
	George W. Ware	Wyoming	C. Colin Kaltenbach
	Vic Christopherson		Alvin Gale
California	William W. Allen		Lee Bulla
	David E. Schlegel	ARS	R. Dean Plowman
	Wilford R. Gardner		Jan van Schilfgaarde
	Seymour D. Van Gundy	CSRS	John Patrick Jordan
Colorado	Merle H. Niehaus		John Naegele
	Robert D. Heil		William D. Carlson
	Helen F. McHugh		Collien Hefferan
Hawaii	Ned P. Kefford	ECOP/ESCOP	William Kerrey
Idaho	Gary A. Lee	ERS	Bob H. Robinson
	Richard Heimsch	WRDC	Russ Youmans
	Peggy Pletcher	FS	Roger R. Bay
Maryland	Filmore E. Bender	NAPFSC	A. A. (Al) Dyer
Micronesia	Ishmael Lebehn	CVD/AAVC	Loren D. Koller
Montana	Russell B. Muntifering	CARET	Frances McConnell (CO)
	James R. Welsh		Dick Joyce (OR)
Nevada	Bernard M. Jones		Marcia Hollandsworth (MT)
	Ronald S. Pardini		Mary Skeen (NM)
New Mexico	John C. Owens		Larry Pedrett (NV)
	David Smith		Bill Humphries (NM)
Northern Marianas	Antonio Santos		John McLain (NV)
	F. C. Quebral		Liz Allred (NASULGC)
Oregon	Thayne R. Dutson		Wilbur Wuertz (AZ)
	L. J. (Kelvin) Koong		Jerry Brehmer (AK)
	V. Van Volk		David Fuller (WY)
	Margy J. Woodburn		Walt Fillmore (MT)
	Roy G. Arnold		Steven Laroe (AK)
	Michael J. Burke		

1.0 Call to Order

Chairman Heil called the meeting to order at 8:05 a.m. on Thursday, July 28, 1988.

2.0 Introductions and Announcements

The attendees introduced themselves.

3.0 Adoption of Agenda

The motion was made and seconded to adopt the agenda as modified. MOTION CARRIED. A copy of the agenda is included as Appendix A, pp. 29-30.

4.0 Approval of Minutes of March 23-24, 1988 Meeting

The motion was made and seconded to approve the minutes of the March 23-24, 1988 meeting as corrected. MOTION CARRIED. The corrections are to the page references in the Table of Contents, Summary of Actions and List of Appendices. Corrected copies will be mailed following the meeting.

5.0 Identification and Orientation of Neophytes

Tail Twister G. A. Lee conducted the preliminary orientation of neophytes to the Association.

6.0 Report of Chairman/Executive Committee

Heil reported that the Executive Committee had met Tuesday, July 26, 1988. Pertinent items discussed during the Executive Committee meeting will be brought to the floor throughout the meeting and will be so identified.

The Executive Committee recommended a 4.5 percent salary increase for the Director-at-Large, 4.0 percent was based upon a survey that was made of the states in the WDA plus 0.5 percent for a merit increase. It was moved and seconded to approve a salary increase of 4.5 percent for the Director-at-Large. MOTION CARRIED.

Boyd has requested an extension of his contract with the WDA for up to three years. The Executive Committee recommended that the contract for the Director-at-Large for the Western Region be extended through 1992. The motion was made and seconded to extend the contract for the Director-at-Large for the Western Region through 1992. MOTION CARRIED.

7.0 Treasurer's Report -- R. B. Muntifering

The Treasurer's Report distributed and presented by Muntifering is included as Appendix B, pp. 31-33.

Muntifering reported that the balance reported on the Director-at-Large Account is \$7,784 more than reported in March; \$7,634 is due to income realized in support of the Victor Estop exploratory program to study natural predators and natural enemies of the Russian wheat aphid. Three states have been assessed for the program and their payment of \$694 each is still outstanding; \$150 represents the payment on the ESCOP Water referendum assessment from Guam. Guam paid \$150 to the Director-at-Large Account and \$150 to NASULGC. The Treasurer paid NASULGC \$300 (an overpayment of \$150). NASULGC has been requested to reimburse the Treasurer's office for the overpayment.

Boyd indicated that, although the Director-at-Large Account reflects a balance of \$41,942.86, there has not been a transfer of payment for the April-June quarter and the Colorado account shows a negative balance of \$33,374.

The motion was made and seconded to accept the Treasurer's report on the Western Director-at-Large Account. MOTION CARRIED.

Muntifering reported that, at its meeting, the Executive Committee had passed a motion to put in place the appropriate assessment that would add \$5,000 to the Special Account.

The motion was made and seconded to accept the Treasurer's report on the Western Directors Association Special Account. MOTION CARRIED.

Boyd reported that the budget for the Director-at-Large office, as presented to and approved by the Executive Committee, is approximately \$182,000. It reflects salary increase and an increase in the equipment/repair contingency fund from \$6,000 to \$10,000. The Executive Committee recommended increasing the off-the-top funding from W-106 by \$1,220 to \$45,000. It is estimated that the regional activities in the office represent somewhere between one-quarter and one-third of the total effort and, therefore, perhaps W-106 should carry the cost of that effort.

At the time the Director-at-Large office was established at Colorado State University, \$29,944 was transferred to Colorado from California; \$11,522 from the WDAL fund and \$18,422 from W-106. The office has been in the process of transition and is reaching the point where the DAL office expenses are stabilized.

It was moved and seconded to approve the recommendation of the Executive Committee to accept the proposed budget as presented for FY88-89. MOTION CARRIED.

8.0 Reports from Liaison Representatives

8.1 Cooperative State Research Service Report -- J. P. Jordan

The CSRS Report, presented by J. P. Jordan, is included as Appendix C, pp. 34-36.

Jordan reported that exhibits developed by the Agricultural Experiment Stations are welcomed at the Administrator's office. Some are scheduled for display outside the CSRS office.

The interactions between CSRS and ARS are extremely good. There are many common goals and objectives between the two agencies.

Carlson indicated that the Plant Science Centers have been frustrated in many respects. This year, there are three centers which have been selected. Each of the agencies that have been involved have supported one

of the centers. CSRS will continue to provide support for the next year. It is not known from year to year how support will be carried on.

8.2 Economic Research Service Report -- B. H. Robinson

Robinson presented the ERS Report which is included as Appendix D, pp. 37-55.

8.3 Agricultural Research Service Administrator's Report -- R. D. Plowman

Plowman emphasized that relationships between ARS and the SAES are not competitive and adversarial. Both ARS and SAES have objectives and goals in common. It is important that the ARS and the SAES understand each other's mission, objective, and charge. The ARS and SAES will be much stronger together than separately. When ARS scientists work on a campus, they are an asset to the agricultural research effort in that state. ARS scientists working on campuses are working in conjunction with an effort there and are cooperators with the state people. Therefore, ARS should be supporting those SAES efforts in every way possible.

ARS and SAES have different roles. ARS is required by law and directive to be the prime supporter of the action and regulatory agencies of the Department of Agriculture and other areas of the government. The ARS mission then requires that ARS scientists respond to the needs of such groups such as the Animal and Plant Health Inspection Service, the Food Safety Inspection Service, Soil Conservation Service, Federal Grain Inspection Service, and outside groups. ARS works closely with the managers of those agencies to try to understand their needs and responds to the need to develop new technology for them.

In addition, ARS is directed to research problems that are national in perspective. Many of those problems are also state and local problems. Therefore, it is incumbent on ARS to use available resources in a most effective manner. In order to do so, we need to plan jointly so that we're combining the talents of ARS with those of the SAES to serve the whole system better. There is no way to do that without having excellent relationships with the SAES and work closely in the planning and execution process.

To accomplish the joint planning and execution more effectively and efficiently requires identification of critical issues important to all. There aren't enough resources to do all the things we think we ought to do. Therefore, what is done must be done in the most efficient way possible.

How joint planning and execution can be done more effectively and efficiently

is something for discussion. There are some critical issues that are important to all of us that we'd better be doing something about. The National Plant Germplasm program is important to the entire country. At a

recent meeting there was high enthusiasm and good morale among all participants. Yet, there are gaps. As costs become high, we always look for things that we can cut out, draw back on, or give to somebody else. The Plant Germplasm Program is the backbone and foundation for all of our crop improvement. It requires a joint effort and we need new initiatives in getting that together a little better.

Another is the groundwater situation, efficient use of irrigation and all of the water issues that are now important, especially this year where we've had a lot of press about that. Most of you know that Bob Long has taken an initiative to try to get a Federal-State effort together for the 1990 Budget. He is asking for \$40 million to address the subject. The planning document shows a real role for a lot of different partners. For one of the first times, we'll go to Congress this year, at least we'll go to the Department, and say here's a joint effort between federal and state organizations on this subject.

As I look back at some of the things that have happened in the past, I recall the six-year plan of ARS, which has become infamous. We didn't ask the SAES what you thought about it, we did it all by ourselves. A couple of years later ESCOP developed their plan and they did that all by themselves. I'm not sure, in retrospect, that was the right way to do it. I think we need to survive together, rather than alone. As ARS revises their plan, we intend to have more interaction with the SAES about it.

How should we go about increasing this planning effort? It will take some doing on both sides. Some signals have already been sent out about ARS participation in regional research projects. When ARS has program reviews, members of the SAES should be invited to participate in the reviews. At the same time, when the SAES conducts reviews, it would be useful if ARS was invited to participate.

How ARS is funded impacts programs in the SAES. When a program is started at a SAES, ARS dedicates money for scientists to that program. Over a period of years, inflation causes a reduction in how far the money will go. Then, there is a Gramm-Rudman cut, so there is less money in that program. When scientists are productive at ARS, they get promoted. They not only get promoted, but that money comes out of their discretionary funds, so they have less money to work with, so we've promoted and penalized them at the same time. Congress gives a pay raise without appropriating money to cover the raise. That comes out of the overall money. Soon, the unit begins to dry up, and there is no choice but to reduce the effort by moving personnel out or not filling vacant positions.

ARS does not get general increases from Congress. Instead, increases are targeted in areas where there is a lot of public outcry. ARS has many good solid programs that the agricultural system needs, but, because they are not in the outcry business, there are no funds for them and they dry up.

Congress even directs ARS to do work, as in the 1988 budget, without appropriating money for it.

Generally, ARS and the SAES have good relations. ARS intends to foster and even increase those good relations. I can assure you that I will be working with our own agency and with you to promote those objectives that we have in common.

8.4 Agricultural Research Service Western Area Report -- J. van Schilfgaarde

The ARS Western Area Report was distributed by van Schilfgaarde and is included as Appendix E, pp. 56-57.

8.5 Forest Service Report -- R. R. Bay

The Forest Service Report was presented by Bay, substituting for L. Lassen, and is included as Appendix F, pp. 58-59.

8.6 Western Home Economics Research Administrators -- M. J. Woodburn/C. Hefferan

Woodburn distributed the WHERA Report which is included as Appendix G, p. 60.

Hefferan provided information about two items that involve the research activities of both research and the research administrators in home economics in the West:

(1) Nationwide, the home economics research administrators, through their four regional groups and through the home economics research subcommittee of ESCOP, have just completed a two-year project which will culminate in a publication to be released by September 1, 1988. The publication identifies the home economics research priorities and builds upon the ESCOP research priority setting activities. There are two major portions in the publication; one relates to food, nutrition, diet and health and the other to family and community well being. The report summarizes an array of accomplishments within home economics research at the land-grant universities. It identifies a series of research opportunities in those areas. In addition, the report will look at a variety of other initiatives, particularly in the areas of food science and rural revitalization and look at the role of home economics research in those areas. There are two things to know about this report when you're dealing with the home economics researchers on your campus. 1) It is not intended to be a be-all end-all compendium of home economics priorities in research. In fact, one of the concerns of the HERS ESCOP Subcommittee is that people will look at it and see the absence of some traditional areas of home economics. That is by design. It is an expansion and an explanation and an application of the ESCOP priorities as they relate to home economics. 2) Because the report

represents the ideas of the four different regions, there are several important things in the West that are not reflected very clearly in the report, the most important having to do with water quality and general environmental concerns.

(2) An inventory of participation of Experiment Station researchers in projects outside their region showed that, within the broad areas of home economics, social science and food science, there are more researchers from the west participating in projects from other regions as a proportion of the total number of researchers than any other region. This is particularly important within home economics because of the isolation and the small programs. It is clear that, to the researchers in your stations, participation in these projects is very important.

8.7 Council of Veterinary Deans/Association American Veterinary Colleges -- L. D. Koller

The report on the Council of Veterinary Deans/Association American Veterinary Colleges presented by Koller is included as Appendix H, pp. 61-63.

Dewhirst commented that, each year, the President eliminates the Special Animal Health Grants from his budget. For a number of years there has been a discussion as to whether those funds should be melded into the regular Hatch Formula Funds. There is reluctance to do that in many cases. For example, there is no assurance that they would be maintained for animal health. On the other, they are more vulnerable as a comparatively small program than they are if incorporated into a larger program.

Koller stated that the CVD/AAVC have tried for several years to have the competitive grants funds included as part of the regular budget without any success.

8.8 National Association of Professional Forestry Schools and Colleges -- A. A. Dyer

Dyer distributed the report of the Western contingent of the National Association of Professional Forestry Schools and Colleges which is included as Appendix I, pp. 64-67.

8.9 Western Resident Instruction Directors -- M. Burke

Burke reported that there are four areas that are on the Western RI agenda for the next year.

(1) RICOP will be initiating a position for a Director-of-Resident Instruction-at-Large, probably to be housed in Washington, DC. The RICOP Executive Committee is currently working on the position description. A first

responsibility will be program coordination and program development at a national level. The person will spend a great deal of time doing liaison work with the SAES Directors-at-Large, Extension, and various Washington agencies, both in and outside of the USDA.

Institutions which have academic programs in agriculture are being solicited for funds to support the position. At present there are twenty-three institutions that will provide support at a level of \$2,000 per institution and there are twenty-three institutions that are wavering on contributing support. The national RICOP organization feels that they have sufficient funds in hand to go ahead with the appointment.

(2) RICOP, nationally and in the region, is following an action agenda. RICOP wants to set up a series of regional meetings, one in the West, which would include about sixty people. Half of those people would be from industry, both production and non-production agriculture. Topics for discussion would be: (a) the image of agriculture and its impact on attracting students into this area. Part of that image is the job availability picture. (b) development of faculty, and (c) curriculum development.

(3) Interinstitutional cooperation in the development of curriculum. During the next months, RI directors will try to identify those curricula that could stand as regional curricula that are unique and strong. The focus will be on the undergraduate program. This is essential because two kinds of resources are declining; dollar resources, and people. Numbers of students are going to be declining until 1992 and will probably never reach the 1977 levels in the foreseeable future. A mechanisms to be evaluated in developing this is the Western Undergraduate Exchange, which is a new WICHE program which allows students to move to other states and enroll at 150 percent of in-state tuition. The National Student Exchange program will also be examined. Curricula needs to be standardized to develop feeder programs. A survey document and memo will be distributed shortly. Institutions will be asked to evaluate their programs and respond by October 1, 1988. By November 1, the materials will have been assimilated and a draft brochure will be developed for discussion at the 1988 NASULGC meeting. It is hoped, in the near future, to identify some regional curricula that are unique to the West that can be recommended in each of our home institutions for students to enter.

(4) All of the institutions are concerned about the image of agriculture. There has been evidence presented indicating that the image of agriculture to high school students isn't very good. We, as an agricultural industry, have a lot of work to do if we plan to have the human capital that an industry that is twenty percent of the gross national product is going to require in the years ahead. The problem is going to be particularly pressing because of *the shortage of people who will be graduating from high schools in the decades ahead.*

8.10 Western Extension Directors -- B. M. Jones

Jones presented the report of the Western Extension Directors which is included as Appendix J, p. 68.

Jones reported that the Cooperative Extension System had developed eight national initiatives to help the Cooperative Extension System focus its resources. A ninth initiative was added - "Youth at Risk". The initiative has been approved by ECOP and the details of the initiative are currently being developed. At a time when effort is being made to pull Extension and Experiment Stations closer together, Extension is moving into a different area. "Youth at Risk" involves substance abuse, teenage pregnancies, and AIDS - areas where Extension never dared enter in the past. The question to Experiment Station Directors is: If Extension people are addressing this as a critical need of the people and are moving into that arena, will there be research in universities to support the initiative? Overall, most of the CARET people strongly encouraged Extension to move ahead with the initiative.

Boyd questioned whether Extension or the Experiment Station was to make an appraisal of research currently being done on grants out of NIH and NSF in order to assess the needs for research by the Experiment Stations.

Dewhirst commented that, if a CRIS search were done it would probably show that work is currently being done on the subject.

Heil stated that the food science and nutrition group had suggested interacting with the medical researchers in order to establish linkages across agencies with common goals and responsibilities. As Extension moves in this direction, would there be an effort to link up with other federal and state agencies from both the research and education point of view and take a leadership role in addressing this issue? Jones responded that Extension has been strongly encouraged to work with other agencies.

Drew commented on the conflict that he sees emerging. On one hand, Extension needs to poll user groups, find what the people want, and then develop a program that meets the needs of the people. Those are reflected in the programs currently itemized by Extension. On the other hand, when there are no major increases in budget to handle these new areas, the money is taken away from other activities which are currently underway. There is a resulting upshot, particularly in states that do not have really big programs in any of the specified areas. The purpose for which Extension was founded in the first place was to take the extension education aspects of agriculture away from the research scientists, because the research scientists were being forced into putting so much effort into extension work that they were not able to get their research work done, which in turn provides the basis for the extension. What we are likely to see happening, if this moves on ahead, meeting the needs of the people as the people

demand services, is that most of our Experiment Station scientists and ARS scientists will be called on to do more and more Extension specialist work. When that happens, their effectiveness as researchers is reduced. At the same time, the Experiment Station Directors are in a very difficult position to combat that, because, in so doing, we are essentially telling our own constituents that Extension service will not be provided for them.

Jones stated that there is discussion about Extension personnel doing research. There is an ECOP publication which addresses the issue. The Western Extension Directors discussed the possibility of meeting with the Western Experiment Station Directors jointly to discuss the subject.

Jones stated that the initiatives will continue to change. The content of programs is narrowing and becoming more specific while the target is expanding.

9.0 Research Implementation Committee Report -- L. J. Koong

Koong presented the RIC report which is included as Appendix K, pp. 69-79.

With regard to WRCC-69, which will replace W-161 in October 1988, Schlegel reported that the W-161 Technical Committee had responded to a request in the 1987 second-year review by RIC that they submit a petition for a WRCC to take the place of W-161. A letter will be sent to the Directors asking them to name an individual from their stations to help design the continuation of the W-161 program. Currently, W-161 administers funds from a Special Research Grant. The funding is distributed on a peer review basis. There have been five commodities (alfalfa, range, potatoes, small grains, and tree fruits). In the WRCC, the commodities will not be restricted. The regional research project administration requires a great deal of duplication of paperwork. Through a WRCC, the same format will be followed and eliminate some of the paperwork. Directors will be asked to send a representative to a meeting to be scheduled in September to identify the programmatic areas for the next round of awards.

10.0 Reports from Representatives to Regional and National Committees

10.1 Committee of Nine -- M. H. Niehaus/D. E. Schlegel

Niehaus presented the Committee of Nine report which is included as Appendix L, p. 80.

10.2 Committee of Nine IR Project Off-the-Top Funding Recommendations -- D. E. Schlegel

Schlegel distributed copies of the Report of the Committee on Interregional Projects which is included as Appendix M, pp. 81-84.

Naegele reported that the other regional associations had debated the contents of the report. The Northeastern Regional Association approved the concept and deferred on the process. The Southern Regional Association also debated the issue. They accepted and supported the concept of National Research Support Programs and also deferred on the process. The North Central Directors Association also accepted and supported the concept. He indicated that it would be helpful to separate the acceptance of the concept of the existence of National Projects from the funding process. Funding issues have always been sensitive, largely because there is a lot of misunderstanding about regional research funds.

Dewhirst commented that the concept of national projects was an acceptable proposal. There are certain areas for which there is a need for a national project. There are concerns about the funding. For example, there is probably \$36 million in federal funding for regional research. On the other hand, if you take a look at the amount of money which is expended on regional research, it is well over \$100 million, because it brings along a great deal of state money plus an unknown amount of funding from ARS. If you establish National Projects, there is a concern as to whether it will pull along the other kinds of funds that might be there for a regional project as we currently know it.

Kaltenbach stated that the report had addressed the issue of service types of projects versus research projects. It has always been a problem during discussions. The report separates the two and recognizes that there is a need for the service projects which should be set aside, renamed and funded accordingly.

The motion was made and seconded to accept the Report of the Committee on Interregional Projects, and to support the concept and the recommendations of the report.

Discussion ensued on whether to support both the concepts and the recommendations of the report and whether the motion included the recommendations for Item III - Recommendations for Current IR Projects. Concern was expressed that the recommendations under Item III do not necessarily follow from the concept. They are additional information relating to the long-term plans associated with the IR projects. The issues associated with the National Germplasm Program or the issues associated with integrating IR-4 and IR-5 with NAPIAP and the IPM program are issues that should be discussed in context with the renewal of those IR projects. There is no expressed guarantee that there will be any support at the national level for the plant germplasm and plant introduction support programs as well as the programs for clearances of chemicals and biologics for minor uses.

A motion was made and seconded to amend the motion. The amended motion was to accept the report and support the concepts expressed in

Item I "Philosophy of IR Projects" and Item II "National Research Support and National Research Programs" of the Report of the Committee on Interregional Projects. MOTION TO AMEND THE MOTION CARRIED. AMENDED MOTION CARRIED.

10.3 Users Advisory Board -- C. C. Kaltenbach

Kaltenbach presented the report on the Users Advisors Board which is included as Appendix N, p. 85.

10.4 Animal Care Guidelines Update -- C. C. Kaltenbach

Kaltenbach presented an update which is included as Appendix O, p. 86, on "The Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching."

Jones indicated that use of the guide was currently a voluntary act. Experiment Stations and Universities might want to consider an endorsement for the guide because, if the SAES and universities do not use it voluntarily, it may be made a regulation and the federal government will enforce it.

10.5 Joint Council -- J. P. Jordan

Jordan reported that the Joint Council is a very important forum. There is a cooperate thrust that comes out of the Joint Council effort which will, in the long run, be one of the most effective areas to participate as representatives, and as an organization on behalf of agricultural research, extension and teaching programs.

The Joint Council has gone through several stages: jockeying for position; talking to each other; joint planning. One stage that is yet to be fully harvested is the impact stage. It is a set of documents that come out of the Joint Council on an annual basis, including the priorities and the accomplishments reports. The special reports that are developed from time to time for the benefit of the Congress and the President are being looked at a great deal more. What we need to do is show how the proposals, budget-wise and program-wise, fit into those priorities that are set in the Joint Council process. The Joint Council is also a forum in which the multi-dimensions of agriculture can be brought into common focus for the benefit of the system overall. They meet on a regular basis, and at least once annually with the Users Advisory Board (UAB). That has now become a very meaningful interaction and the UAB is moving to the Congressional offices with more regularity and potentially more impact.

The Joint Council and the UAB must always stay some arm's distance apart. The UAB has to be the citizens' voice that does not necessarily agree with the performers in the system. In fact, its credibility depends upon its being far enough away to be able to agree or disagree with the Joint Council. As

a result of that important role, we have chosen to keep the UAB staff within the Administration Building where it can have access to as many offices as the staff and visitors need.

10.6 Aquaculture Consortium -- G. A. Lee

The report on the Western Regional Aquaculture Consortium as presented by Lee is included as Appendix P, p. 87.

11.0 Low Input Agriculture Program Report and Discussion -- D. E. Schlegel

Schlegel presented the report on the Low Input Agriculture Program which is included as Appendix Q, pp. 88-95.

The most urgent need is input and assistance by Directors in identifying potential technical review committee members. Notify D. E. Schlegel of suggested members for the review committee by telephone, letter or Dialcom. The next cycle will start fairly soon and help is needed now. Congress has mandated that private and non-profit organizations which relate to low input agriculture be represented in the decision process.

12.0 Interregional Project Activities

12.1 IR-1 Report -- V. Van Volk

Volk distributed the IR-1 Report which is included as Appendix R, pp. 96-98.

12.2 IR-2 Report -- J. J. Zuiches

Zuiches reported that all Directors should have received the IR-2 Annual Report and the minutes of the last meeting. A memo has been distributed to all participants in IR-2 listing all the propagation material that is available from IR-2. Currently, with the limited increases in IR-2 funding from off-the-top, the IR-2 advisory and technical committee have made two changes in IR-2 policy: (1) the propagation material is being made available now to all who request it; and (2) the budwood is no longer provided free of charge. There is now a charge of \$0.50 per bud with a minimum of a \$10.00 order and ten buds per variety. This is basically to handle the paperwork and mailing.

The objective of IR-2 is to maintain a collection of virus tested tree fruit cultivars that are available for research and the fruit industry. IR-2 is not a repository, per se. One of the problems that IR-2 is facing is simply a surplus of cultivars and a lack of space. Those cultivars that are not being sought for research purposes or by the industry are being turned over to the germplasm repository.

12.3 IR-4 Report -- G. W. Ware

Ware distributed the IR-4 Report which is included as Appendix S, p. 99.

12.4 IR-5 Report -- D. M. Briggs

No information is available as the IR-5 Committee has not met since the last report was presented at the March 23-24, 1988 WDA meeting.

12.5 IR-6 Report -- C. E. Clark

Clark distributed the IR-6 Report which is included as Appendix T, pp. 100-101. Clark indicated that more participation in IR-6 from the Western Region is requested. Interested participants are to contact Dr. B. Sundquist (MN).

12.6 IR-7 Report -- R. D. Heil

Heil distributed the IR-7 Report which is included as Appendix U, p. 102.

13.0 Search for Life Museum Exhibit Report -- F. E. Bender

Bender distributed information regarding "The Search for Life" exhibit which is included as Appendix V, pp. 103-110. Included in the appendix is a copy of an article regarding the upcoming exhibit at Cold Spring Harbor Village.

He reported that "The Search for Life" exhibit was initiated as part of the centennial of the Hatch Act in an effort to influence the thinking of the Smithsonian Institute with regard to agriculture and agricultural research, teaching and extension. It was decided that one of the best ways was through an exhibit of an area of agricultural research that would be supported by the Kellogg Foundation.

The Smithsonian learned that they did not have the expertise within their organization to keep track of what is happening in the biological sciences or in agricultural research. As a result of that, they are in the process of hiring a curator of life sciences. They will probably end up with two such curators. We will be able to see a continuing development of exhibits and scholarly work relating to the kinds of contributions and research that we're doing so that our story gets out, not from us, but from a different organization. Another thing that happened as a result of the exhibit is that many of their people are beginning to look at agriculture and agricultural science in a whole new way.

In order to counter the adverse image that some have of agriculture, a special committee has been appointed to try to explain the land-grant mission to the nonagricultural public and perhaps to university presidents as well.

14.0 Western Rural Development Center -- R. Youmans

The Western Rural Development Center report presented by Youmans is included as Appendix W, pp. 111-117.

15.0 Neophyte Report/Announcements

After considerable deliberation and discussion, it was moved and seconded to accept the 1988 class of neophytes into the Western Association of Agricultural Experiment Station Directors. MOTION CARRIED.

16.0 Research Planning Activities16.1 W. Agricultural Research Committee -- C. C. Kaltenbach

Kaltenbach reported that the national system is in the third year of a four-year planning cycle. The wheels are just beginning to be put in motion for the next five-year plan which will be published in January 1991.

During the next sixteen months there will be input from many sources as to what the new initiatives will be, including a symposium and workshops. The formal input from the Western Directors Association for the fourth year must be submitted by August 24, 1988. As a group, the opportunity for input in the process must be done immediately.

WARC deliberated at their July 28, 1988 meeting and developed a ranking for initiatives. Some changes in the titles of the initiatives were recommended: Initiative 10 - change title from "Food Processing, Preservation and Quality Enhancement" to "Food Processing, Safety and Quality Enhancement"; Initiative 12 - addition of word YOUTH - title to read "Rural Youth, Family and Community Well Being."

Following discussion, the title of Initiative 14 was recommended to be changed from "Impact of Agricultural and Forest Policy on Global Markets" to better reflect the objectives and to read "Impact of Global Policy on Agricultural and Forest Markets."

It was recommended to change the title of Initiative 17 to "Alternative Agricultural and Forest Land Use."

It was suggested that the phrasing of Initiative 21 be "Atmospheric Deposition Effects on Ecosystems."

It was moved and seconded to accept the list as submitted by WARC and modified by the WDA. MOTION CARRIED.

The edited list which will be submitted to the ESCOP Subcommittee for Research Planning and Budgets is included as Appendix X, p. 118.

16.2 National Agricultural Research Committee -- D. L. Oldenstadt

No report was presented as Oldenstadt has not yet attended a NARC meeting.

17.0 ESCOP Committee Reports

17.1 ESCOP -- C. C. Kaltenbach

Kaltenbach distributed the ESCOP report which is included as Appendix Y, p. 119.

17.2 ESCOP Communications -- D. M. Briggs

Smith, in the absence of Briggs, reported that each SAES should have received a packet of materials from the ESCOP Communications Subcommittee. Responses are needed as soon as possible for a meeting of the technical representatives to the Subcommittee scheduled in October.

17.3 ESCOP Pest Control Strategies -- G. W. Ware

The report on the ESCOP Pest Control Strategies as presented by Ware is included as Appendix Z, p. 120.

17.4 ESCOP Seed Policy Subcommittee -- M. H. Niehaus

Niehaus distributed the report of the ESCOP Seed Policy Subcommittee, which included proposed guidelines relating to release of germplasm, which is included as Appendix AA, pp. 121-124.

Niehaus requested input from the Directors to report at the next meeting of the subcommittee.

Jordan reported that this is an extremely significant issue on a national basis, not only for the SAES but across the entire system. He encouraged the subcommittee to lock itself into a policy statement, even if there are some aberrant institutions. The Department of Agriculture is addressing some of the same issues. More than likely there will be some legislation related to germplasm release and the SAES system should register its preference for guidelines.

The discussion which followed indicated that the WDA supports the proposed policy statement to be established by the ESCOP Seed Policy Subcommittee.

17.5 ESCOP Research Planning & Budgets Subcommittee

17.51 ESCOP FY89 Budget Group -- J. P. Jordan

Jordan reported that the Experiment Station System, like ARS, now has a substantive strategic plan. The ERS is busily working in the same arena. The Extension Service is developing a parallel thrust. The Forest Service had a history in the 1970s of a magnificent strategic planning mechanism which has been allowed to deteriorate markedly.

Neville Clarke has the facility of taking inputs and fitting them together in a rational and reasonable form. As a result, the SAES is in good shape for strong support from the overall effort.

17.52 ESCOP FY90 Budget Group -- J. J. Zuiches/L. L. Boyd

Zuiches distributed the draft of the ESCOP Proposed Budget for FY1990 which is included as Appendix BB, pp. 125-132.

Zuiches reported that ESCOP was developing a three-year sequence of budgeting so that the initial budget materials which were prepared by the FY89 Budget Subcommittee provide the driving force for the FY90 and FY91 budgets.

17.53 ESCOP FY91 Budget Group Plans -- J. J. Zuiches

Zuiches indicated that the first meeting of the FY91 Budget Subcommittee is scheduled for September 26, 1988.

17.54 ESCOP Budget Strategies & Action Group -- J. J. Zuiches/
L. L. Boyd

Zuiches reported that the Budget Strategies and Action Group is one of the new groups established in the reorganization of the ESCOP budget and planning effort. Groups reporting to the ESCOP Subcommittee for Research Planning and Budgets are: the Special Initiatives Group, the National Research Planning Group, the budget development groups, and the Budget Strategies and Action Group.

The Budget Strategies and Action Group is composed of the chairman of the Budget Development Group, the DALs, two directors selected by the group chairman to serve until October 1988, and four directors from states that have majority and minority leadership on Congressional appropriation committees. It is a political action group.

17.55 ESCOP Special Initiatives Group -- J. J. Zuiches/G. A. Lee

Information on the activities of the ESCOP Special Initiatives Subcommittee, presented by Zuiches, are included as Appendix CC, pp. 133-144.

17.56 ESCOP National Research Planning Group -- L. L. Boyd/
D. L. Oldenstadt

Boyd reported that the initiatives which were approved during the WARC report (Agenda Item 16.1) will be aggregated with those from the other regions and will provide input for NARC. For the last few years, the SAES input has been a major factor in what comes out of NARC to go on to the Joint Council.

17.57 ESCOP National Initiative (Preliminary Report) -- J. J. Zuiches/
L. L. Boyd

Zuiches reported that the ESCOP National Initiative group had a retreat to discuss the long-range plans for agricultural research initiatives. The retreat was chaired by Ted Hullar, representing the chancellors. Membership consisted of: members of the ESCOP Planning and Budgets Subcommittee; the DALs; Durwood Bateman, Don Crossan and Bill Flatt, representing the Deans; J. P. Jordan, representing CSRS; and Jim Tavares, representing the National Academy of Sciences Board on Agriculture; Sam Smith, Martin Massengale and Oran Little were involved via telephone conference call.

Results of the meeting indicated that there is a very strong interest in doing something other than what has been done to date. With the exception of the biotechnology initiative we have not been successful in getting any new money into the research program.

A national initiative was proposed that goes beyond the normal budget preparation process. While the national initiative is proceeding, the ESCOP FY91-FY92-FY93 budget effort will also be proceeding. It was decided to capitalize on the momentum already underway by efforts to get new money into the system. One of the key goals in capitalizing on the momentum is to emphasize science basic to agriculture. This would include forestry, nutrition, economic and social sciences.

The Board on Agriculture of the National Academy of Sciences is very interested in pursuing a report and an initiative reflecting agriculture's needs. It was very clear that, for this to work, we must have a coalition of support that goes well beyond the scientific community. We need the support of the agribusiness industry, scientific and

professional societies, commodity groups, and support that extends beyond the historical support of the commodity groups.

The people will have to be convinced and educated that this initiative is to augment the base level of support. The initiative is for \$500 million as a base figure to work with. It will be a competitive program, with peer review and evaluation to be on the quality of the science and the relevance to agriculture. Competition will be wide open to all elements of higher education, land-grant and non land-grant, federal laboratories, not-for-profit research institutions and other research agencies. It would focus on the enhancement of research in the sciences basic to food and agriculture, and in the sciences that address the growing concerns about the environment. The initiative would not necessarily be totally in USDA, it could involve other agencies. The thrust of the research would be science-based.

There are three phases in the development of the initiative:

- (I) To develop a two to four page concept and action plan;
- (II) A request from Congress for a major study on the needs of agriculture. This request could be made to the Board on Agriculture and could be funded through the agencies. Industry participation would be essential.
- (III) Out of the report that the Board on Agriculture would be asked to prepare would come an implementation plan and a coalition of supporting groups would be developed over time.

The study might include: a review of the agricultural situation; a needs assessment and justification of the proposed requirements; an internal assessment of resources; comparison of what is available to address the problem with the resources that are needed, and a discussion of the shortfall; a clear definition of the scientific issues that would be addressed; an implementation strategy; and specific recommendations. The Board on Agriculture of the National Academy of Sciences is not an advocacy agency. They are supposed to be helping think through the issues and outlining the potential solutions.

A number of suggestions were proposed involving members of the National Academy who are in the agricultural sciences, building coalitions with the scientific professional societies, getting the FASEB or the AIBS to endorse this kind of initiative. This could have a very broad based constituency.

The beginning of the national initiative should be in place so that if a transition team decides that they would like to, they could move ahead very aggressively, even while the report is being prepared. The time table would involve the NAS report being released in April 1989, so that it could be a part of the FY90 budget discussion.

Zuiches indicated that the purpose of his presentation was to solicit support, informal or formal, on the actions being taken by the committee. If major problems are seen in the effort, they are to be brought to Zuiches' or Boyd's attention. If it is seen as a good initiative, then a statement of support from the WDA should be extended.

It was moved and seconded that the Western Directors Association instruct the Chairman to prepare a letter of support to the National Initiative Group. MOTION CARRIED.

18.0 Discussion of Joint Meeting and Other Regional Cooperation Issues -- R. D. Heil

Heil reported that there is a high level of interest for continuation of joint meetings. An invitation from Montana will be extended and CAHA is planning to schedule a joint meeting next summer.

Suggestions were solicited for consideration by the planning group for next year's meeting. The program planning group will consist of the chairmen of each of the cooperating units. They will meet this fall to begin planning for the next joint meeting.

It was suggested that the WDA meeting be scheduled earlier in the week, prior to the joint meeting. It was also suggested that Extension and Experiment Stations schedule a one-half day meeting together.

19.0 DAL Report -- L. L. Boyd

The DAL Report presented by Boyd is included as Appendix DD, pp. 144-157.

20.0 Biotechnology Film "Future Perfect: UC Riverside & Biotechnology" --
I. W. Sherman/S. D. Van Gundy

Van Gundy presented a videotape and distributed information about the University of California at Riverside Center of Excellence in Biotechnology. The University of California at Riverside felt that there was an educational need for materials to provide Extension people and other groups information about what biotechnology is. The City and County of Riverside are trying to attract industry, particularly those companies associated with biotechnology. They provided the funding to develop the video and a conference was held in which many of the major biotechnology companies in the area were invited.

The Center of Excellence in Biotechnology includes 35 laboratories engaged in state-of-the-art research to improve agriculture and food production methods. The videotape highlighted the latest agricultural research at UC Riverside and its promise for tomorrow's Californians, and people everywhere.

21.0 Election of Officers

Oldenstadt, of the Nominating Committee, presented the list of nominees for positions which terminate at the end of 1988 or which have been vacated. It was moved and seconded to accept the slate of candidates for offices and representatives to committees. MOTION CARRIED. The following list identifies the officers of the WDA and representatives to related committees.

Chairman	J. V. Drew, AK
Chairman-Elect	D. E. Schlegel, CA-S
Secretary	H. F. McHugh, CO
Treasurer	R. B. Muntifering, MT
WDA Executive Committee:	
Chairman	J. V. Drew, AK
Chairman-Elect	D. E. Schlegel, CA-S
Past Chairman	R. D. Heil, CO
Secretary	H. F. McHugh, CO
Treasurer	R. B. Muntifering, MT
Senior ESCOP Representative	D. E. Oldenstadt, WA
At-large member	C. C. Kaltenbach, WY
At-large member	G. A. Lee, ID
Director-at-Large	L. L. Boyd, DAL
Research Implementation Committee (4 years)	G. W. Ware, AZ (89) S. D. Van Gundy, CA-R (90) J. J. Zuiches, WA (91) V. V. Volk, OR (92) Tom Army, ARS-CO L. E. Lassen, FS-UT W. D. Carlson, CSRS
Committee of Nine (3 years)	M. H. Niehaus, CO (89) L. J. Koong, OR (90) G. W. Ware, AZ (alternate)
Board of Directors, Western Rural Development Center (2 years)	T. Dutson, OR J. V. Drew, AK (89) D. Smith, NM (90)
Experiment Station Committee on Organization & Policy (ESCOP) (3 years)	D. L. Oldenstadt, WA (89) R. D. Heil, CO (90) J. V. Drew, AK (91) D. E. Schlegel, CA (alternate)

ESCOP Standing Committees:

Budget Subcomm. (3 yrs)

R. D. Heil, CO (89)
 J. J. Zuiches, WA (90)
 J. J. Zuiches, WA (91)
 H. F. McHugh, CO (92)
 J. R. Welsh, MT (89)
 D. L. Oldenstadt, WA
 L. L. Boyd, DAL (continuing)
 M. H. Niehaus, CO (89)
 D. M. Briggs, NM (89)
 A. Duncan, OR (89)
 M. J. Woodburn, OR (90)
 J. A. Powell, WY (alternate)
 M. E. Mitchell, WA (89)
 G. W. Ware, AZ (89)
 C. E. Hess, CA-D
 L. A. Bulla, WY
 L. W. Moore, OR

Legislative Subcomm. (3 yrs)

Interim

Liaison

Seed Policy

Communications

Home Economics Research

Human Nutrition

Pest Control Strategies

Genetic Engineering Policy

Microbial & Subcellular

Germplasm

Special Initiatives

National Research Planning & Evaluation

Decision Models & Computer Use in Agri. Research

Social Contributions of Agricultural Research

Marketing Economics & Policy

G. A. Lee, ID
 L. J. Koong, OR (alternate)
 R. D. Heil, CO (88)
 J. J. Zuiches, WA (at-large)
 D. M. Briggs, NM

O. E. Thompson, CA-D
 J. J. Zuiches, WA (Chair)
 D. L. Oldenstadt, WA
 H. F. McHugh, CO (alternate)
 B. C. French, CA-D
 G. A. McIntyre, CO

ESCOP-ECOP-RICOP National IPM Coordinating Committee

National Agricultural Research Committee

Western Regional Council

Western Agricultural Research Committee

R. D. Heil, CO

D. L. Oldenstadt, WA
 D. L. Oldenstadt, WA, Chairman
 R. D. Heil, CO
 J. V. Drew, AK
 G. W. Ware, AZ
 M. J. Woodburn, OR
 (To be Appointed)(NAPFSC)
 L. D. Koller, OR (CVD/AAVC)
 L. L. Boyd, DAL (continuing)

22.0 Future Meetings

22.1 NASULGC Meeting in Dallas, TX

The 1988 Fall WDA meeting will be held in Dallas, TX in conjunction with the annual NASULGC meeting, November 13-15, 1988. The WDA is scheduled to meet from 2:30-5:00pm Monday, November 14.

22.2 1989 Spring Meeting

The 1989 Spring WDA Meeting will be in Monterey, CA and is scheduled for March 22-23, 1989 with RIC meeting on March 21.

22.3 1989 Summer Meeting

Muntifering extended an invitation to the WDA to participate in a Joint Meeting of CAHA, Extension, CARET, RI, WHERA, International Programs, and Experiment Stations to be hosted by Montana in Bozeman, MT, either the week of July 24-28, 1989 or July 31-August 4, 1989. The WDA and RIC meetings will also be held during that week.

23.0 Other Business

23.1 CARET Report

David Fuller, Western Chairman of CARET, reported that the Joint Meeting concept was strengthening and evolving. This came about partly at the request of CARET. CARET is happy that the Deans and Directors have seen fit to hold joint meetings. There is an economic efficiency, as well as a communication efficiency that is important to members of CARET.

At the meeting of CARET a policy statement was approved which was sent on to CAHA whereby a position was taken opposing the specific location earmarking of competitive grants. An editorial statement by C. Hess (CA-D) titled "Bypassing Merit Review - A New Challenge" will be used by CARET in their opposition of earmarking.

Laroe stated that Directors could publicize requests through a CARET Newsletter which is released monthly by NASULGC.

Fillmore commented that the progress made in agriculture with irrigation systems, equipment, use of computers, and embryo transplants all came about as a result of research. With the research information and the extension program to pass the information on, the future of agriculture will come from the land-grant system.

23.2 ECOP/ESCOP/NASULGC Water Coordinator Activities -- Bill Kerrey

Kerrey updated the WDA on his activities as the ECOP/ESCOP/NASULGC Water Coordinator which is included as Appendix EE, pp. 158-162.

23.3 Department of Agriculture Water Quality Effort -- J. P. Jordan

Jordan reported that the Department of Agriculture has a department-wide effort in water quality that involves thirteen units with the USDA. The sparkplug component from a pragmatic side is the Soil Conservation Service and on the research side are ARS and CSRS with contributions from all the other agencies. A joint set of documents have been developed that will be important for the FY90 budget. The Department could go forward with a major initiative in the range of \$150 million, not just in research, but in Soil Conservation Service efforts, etc. There could be as much as \$50 million in research or research and extension combinations.

Jordan requested that V. V. Volk help CSRS on the initiative. The motion was made and seconded to appoint V. V. Volk to help represent the WDA and the SAES in the Department of Agriculture Water Quality Initiative.
MOTION CARRIED.

24.0 Resolutions

The motion was made, seconded and UNANIMOUSLY CARRIED to approve the following resolutions:

RESOLUTION #1

WHEREAS Funds for Publicly-Supported agricultural research in the State Agricultural Experiment Stations are provided primarily through the Cooperative State Research Service System, and

WHEREAS the Competitive Research Grants Program is an important component of that support through peer evaluation of pertinent proposals without regard to affiliation or location, and

WHEREAS location earmarking of funds in the Competitive Research Grants Program will reduce or eliminate competition based on excellence as evaluated by peer scientists for approximately twenty-five percent of the available funds, and

WHEREAS this will, in the opinion of the Western Association of Agricultural Experiment Station Directors, destroy the Competitive Research Grants Program if allowed to become effective,

NOW THEREFORE BE IT RESOLVED, After deep and vigorous discussion that the Western Association of Agricultural Experiment Station Directors urges

unanimously, that Congress eliminate all location earmarks on funds appropriated for the Competitive Research Grants Program, and

BE IT FURTHER RESOLVED, That all location earmarks be eliminated on national initiatives such as funds under Special Grants 89-106 for Water Quality.

RESOLUTION #2

WHEREAS Dr. Gary Evans has provided valuable service and counsel to individuals within and to the Western Association of Agricultural Experiment Station Directors in service on the Regional Implementation Committee, and

WHEREAS he has furthered the attitude of cooperation and good will between the Agricultural Research Service and the State Agricultural Experiment Stations, and

WHEREAS Dr. Evans has now accepted the position of Deputy Administrator for Programs in the Agricultural Research Service and leaves the position of Area Director,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors expresses their sincere appreciation to Dr. Gary Evans for his friendship, service and ability to see the big picture, and wishes him well in his new assignment, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Evans and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #3

WHEREAS Dr. John Fulkerson has chosen to retire, after a long and distinguished career in service to publicly-supported agricultural research, and

WHEREAS those of us with similar research responsibilities recognize the many and important contributions that he has made to the field of recombinant gene technology, and

WHEREAS Dr. Fulkerson has effected his contributions with dedicated purpose, uncommon goodwill, and enviable style,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors note, with a sense of pride, his many accomplishments and wish Dr. Fulkerson good health and happiness in his retirement, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Fulkerson and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #4

WHEREAS Dr. Steven Zobrisky has carved an important niche and service to the State Agricultural Experiment Stations through service in the Cooperative State Research Service, and

WHEREAS Dr. Zobrisky has influenced positively many young animal and meat scientists and provided leadership to many departments in the Land Grant System, and

WHEREAS he now has determined to retire and pursue other interests,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors recognize Dr. Zobrisky's many contributions, positive influence and distinctive style, and wish him well in the future,

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Zobrisky and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #5

WHEREAS Dr. C. Elmer Clark has served the publicly-supported agricultural research system in so many ways that it would be impossible to enumerate them, and

WHEREAS he has done so, efficiently, effectively and with uncommon good humor, in service to others, and

WHEREAS Dr. Clark has been honored in other ways and with unanimous sincerity by his peers,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors at their meeting in Fort Collins, Colorado on July 29, 1988 unanimously expresses its appreciation to Dr. C. Elmer Clark, and wishes him well in retirement, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Clark and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #6

WHEREAS Dr. Robert R. Rice has decided, after thirteen years in administration and service to the Western Association of Agricultural Experiment Stations and the Home Economics profession, to return to a professional capacity, and

WHEREAS he has served with efficiency, purpose and ability as an Administrative Advisor of several regional projects, and

WHEREAS his representation os his profession has been exemplary,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors expresses to Dr. Robert R. Rice its collective thanks for and pride in his high quality service, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Rice and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #7

WHEREAS Dr. James Ozbun has provided invaluable service as Administrative Advisor to regional research projects in the West, and

WHEREAS he has served with distinction as Dean of the College of Agriculture and Home Economics at Washington State University for the past five years, and

WHEREAS Dr. Ozbun has accepted the position of President of North Dakota State University and is leaving the Western region, and

WHEREAS the West notes the loss of a valued administrator in the West and the gain of the North Central Region,

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors wishes Dr. Ozbun well in his new assignment and invites him to return to the West whenever possible, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Dr. Ozbun and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #8

WHEREAS the Western Association of Agricultural Experiment Station Directors have concluded a most successful meeting in Fort Collins, Colorado, and

WHEREAS Dr. Merle Niehaus, Dr. Robert Heil and related support staff have provided facilities and ambiance more than sufficient to engender good will and foster efficiency, and

WHEREAS the trip to Estes Park and the Lazy B Chuckwagon was an exhilarating experiment with pleasant and frightening gastronomical consequences, and

WHEREAS the members and guests of the Western Association of Agricultural Experiment Station Directors are in an expansive mood and one of complete satiation

NOW THEREFORE BE IT RESOLVED, That the Western Association of Agricultural Experiment Station Directors (including neophytes, elderphytes and guests) express their pleasure to all who helped make the meeting successful, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to Drs. Niehaus and Heil, and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

RESOLUTION #9

WHEREAS the Western Association of Agricultural Experiment Station Directors have just concluded a most successful meeting in Fort Collins, Colorado, and

WHEREAS the Marriott Hotel and its employees have assisted immensely in helping to establish an environment for a successful meeting, and

WHEREAS the Western Association of Agricultural Experiment Station Directors wish to let the employees of the Marriott Hotel know how much their efforts in our behalf are appreciated,

NOW THEREFORE BE IT RESOLVED, That the members and guests of the Western Association of Agricultural Experiment Station Directors express their appreciation to the personnel of the Marriott Hotel, and

BE IT FURTHER RESOLVED, That the original of this resolution be sent to the Marriott Hotel, and that a copy be made a part of the minutes of the July 28-29, 1988 meeting.

25.0 Adjournment

The motion was made seconded to adjourn the meeting. **MOTION CARRIED.**

APPENDIX A

29

WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

July 28-29, 1988
 Marriott Hotel
 Fort Collins, Colorado

Thursday, July 28, 1988

8:00am	1.0	Call to Order
	2.0	Introductions and Announcements
	3.0	Adoption of Agenda
	4.0	Approval of Minutes of March 23-24, 1988 Meeting
8:20	5.0	Identification and Orientation of Neophytes
8:35	6.0	Report of Chairman/Executive Committee -- R. D. Heil
8:55	7.0	Treasurer's Report -- R. B. Muntifering
	8.0	Reports from Liaison Representatives
9:15	8.1	CSRS Report -- J. P. Jordan
9:30	8.2	ERS Report -- B. H. Robinson
9:45	8.3	ARS Administrator's Report -- R. D. Plowman
10:00	BREAK	
10:15	8.4	ARS Western Area Report -- J. van Schilfgaarde
10:30	8.5	Forest Service Report -- R. R. Bay
10:45	8.6	W. Home Economics Research Administrators -- M. J. Woodburn/ C. Hefferan
11:00	8.7	Council of Veterinary Deans/Association American Veterinary Colleges -- L. D. Koller
11:15	8.8	National Association of Professional Forestry Schools and Colleges -- A. A. Dyer
11:30	8.9	Western RI Directors -- M. Burke
11:45	8.10	Western Extension Directors -- B. M. Jones
12:00	LUNCH	
1:00pm	9.0	RIC Report -- L. J. Koong
	10.0	Reports from Representatives to Regional and National Committees
1:40	10.1	Committee of Nine -- M. H. Niehaus/D. E. Schlegel
1:50	10.2	Committee of Nine IR Project Off-the-Top Funding Recommendations -- D. E. Schlegel
2:00	10.3	Users Advisory Board -- C. C. Kaltenbach
2:10	10.4	Animal Care Guidelines Update -- C. C. Kaltenbach
2:20	10.5	Joint Council -- J. P. Jordan
2:30	10.6	Aquaculture Consortium -- G. A. Lee
2:40	11.0	Low Input Agriculture Program Report and Discussion -- D. E. Schlegel
3:00	BREAK	
	12.0	Interregional Project Activities
3:20	12.1	IR-1 Report -- V. Van Volk
3:30	12.2	IR-2 Report -- J. J. Zuiches
3:40	12.3	IR-4 Report -- G. W. Ware
3:50	12.4	IR-5 Report -- D. M. Briggs
4:00	12.5	IR-6 Report -- C. E. Clark
4:10	12.6	IR-7 Report -- R. D. Heil
4:20	13.0	Search for Life Museum Exhibit Report -- F. E. Bender
4:40	14.0	Western Rural Development Center--R. Youmans
5:00	ADJOURNMENT FOR DAY	

Friday, July 29, 1988

8:00am	15.0	Neophyte Report/Announcements
	16.0	Research Planning Activities
8:15	16.1	W. Agricultural Research Committee -- C. C. Kaltenbach
8:30	16.2	National Agricultural Research Committee -- D. L. Oldenstadt
	17.0	ESCOP Committee Reports
8:40	17.1	ESCOP -- C. C. Kaltenbach
8:50	17.2	ESCOP Communications -- D. M. Briggs
9:00	17.3	ESCOP Pest Control Strategies -- G. W. Ware
9:10	17.4	ESCOP Seed Policy Subcommittee -- M. H. Niehaus
	17.5	ESCOP Research Planning & Budgets Subcommittee
9:20	17.51	ESCOP FY89 Budget Group -- J. P. Jordan/L. L. Boyd
9:30	17.52	ESCOP FY90 Budget Group -- J. J. Zuiches/L. L. Boyd
9:40	17.53	ESCOP FY91 Budget Group Plans -- J. J. Zuiches
9:50	17.54	ESCOP Budget Strategies & Action Group -- J. J. Zuiches/ L. L. Boyd
10:00		BREAK
10:20	17.55	ESCOP Special Initiatives Group -- J. J. Zuiches/G. A. Lee
10:30	17.56	ESCOP National Research Planning Group -- L. L. Boyd/ D. L. Oldenstadt
10:40	17.57	ESCOP National Initiative (Preliminary Report) -- J. J. Zuiches/ L. L. Boyd
10:50	18.0	Discussion of Joint Meeting and Other Regional Cooperation Issues -- R. D. Heil
11:25	19.0	DAL Report -- L. L. Boyd
12:00		LUNCH
1:20pm	20.0	Biotechnology Film "Future Perfect: UC Riverside & Biotechnology" -- I. W. Sherman/S. D. Van Gundy
1:40	21.0	Election of Officers
1:55	22.0	Future Meetings
	23.0	Other Business
2:15	23.1	CARET Report
3:00	23.2	ECOP/ESCOP/NASULGC Water Coordinator Report -- Bill Kerrey
3:30	24.0	Resolutions
3:45	25.0	Adjournment

July 21, 1988

WESTERN DIRECTORS' SPECIAL ACCOUNT
FINANCIAL REPORT - JULY 1988

ITEM	ASSESSMENT	INCOME	BALANCE
OCTOBER 1 BALANCE			15,950.53
ALASKA			15,950.53
ARIZONA			15,950.53
CALIFORNIA			15,950.53
COLORADO			15,950.53
GUAM			15,950.53
HAWAII			15,950.53
IDAHO			15,950.53
MONTANA			15,950.53
NEVADA			15,950.53
NEW MEXICO			15,950.53
OREGON			15,950.53
UTAH			15,950.53
WASHINGTON			15,950.53
WYOMING			15,950.53
TOTAL	0.00	0.00	15,950.53

DATE	TRANSACTION	INCOME	EXPENSE	BALANCE
01-Oct-87	BALANCE			15,950.53
11-Nov-87	ESCOPE - KALTENBACH - ORLANDO		672.07	15,278.46
01-Jan-88	ESCOPE - E. CLARK - TUCSON, ETC		1,495.08	13,783.38
02-Mar-88	ESCOPE-KALTENBACH-D.C.		741.25	13,042.13
12-Dec-87	OCTOBER INTEREST	98.40		13,140.53
12-Dec-88	NOVEMBER INTEREST	103.32		13,243.85
01-Jan-88	DECEMBER INTEREST	101.68		13,345.53
17-Mar-88	INTEREST CORRECTION*	(47.41)		13,298.12
24-Mar-87	JANUARY INTEREST	95.12		13,393.24
10-Mar-88	FEBRUARY INTEREST	98.40		13,491.64
27-Apr-88	MARCH INTEREST	93.48		13,585.12
04-Apr-88	INVESTMENT TRANSACTIONS	14.10		13,599.22
05-May-88	APRIL INTEREST	73.70		13,672.92
25-May-88	MAY INTEREST	81.74		13,754.66
25-May-88	ESCOPE-KALTENBACH		1,162.04	12,592.62
23-Jun-88	ESCOPE-OLDENSTADT		1,385.64	11,206.98
TOTALS		712.53	5,456.08	

*Correction of an erroneously computed interest payment in prior year

WESTERN DIRECTORS' AT LARGE ACCOUNT
 FINANCIAL REPORT - JULY, 1988

Page 1

21-Jul-88

ASSESSMENTS AND INCOME

ITEM	ANNUAL ASSESSMENT	INCOME	WATER REF ASSESSMENT	WATER REF INCOME	EASTOP TRAVEL ASSESSMENT	EASTOP TRAVEL INCOME	BALANCE
OCTOBER 1 BALANCE							20,126.33
AM. SAMOA	500	500	0	0			20,626.33
MICRONESIA	500	500	0	0			21,126.33
ALASKA	3,840	3,840	1,000	1,000	694	694	25,966.33
ARIZONA	6,828	6,828	1,500	1,500	694	694	34,988.33
CALIFORNIA	10,582	10,582	2,000	2,000	694	694	48,264.33
COLORADO	3,455	3,455	1,500	1,500	694	694	53,913.33
GUAM*	3,740	3,740	300	150			57,803.33
HAWAII	5,011	5,011	1,000	1,000	694	694	63,814.33
IDAHO	6,048	6,048	1,500	1,500	694	694	72,056.33
MONTANA	6,397	6,397	1,000	1,000	694	694	80,147.33
NEVADA	4,924	4,924	1,000	1,000	694	0	86,071.33
NEW MEXICO	5,103	5,103	1,000	1,000	694	694	92,174.33
OREGON	7,632	7,632	1,500	1,500	694	694	102,000.33
UTAH	6,501	6,501	1,000	1,000	694	694	110,195.33
WASHINGTON	9,000	9,000	1,500	1,500	694	694	121,389.33
WYOMING	5,739	5,739	1,000	1,000	694	0	128,128.33
KANSAS					694	694	128,822.33
NEBRASKA					694	0	128,822.33
SOUTH DAKOTA					694	694	129,516.33
TEXAS					694	694	130,210.33
TOTAL	85,800	85,800	16,800	16,650	9,716	7,634	130,210.33

WESTERN DIRECTORS' AT LARGE ACCOUNT
FINANCIAL REPORT - JULY, 1988

21-Jul-88

INTEREST AND EXPENDITURES

DATE	TRANSACTION	INCOME	EXPENSE	BALANCE
01-Oct-87	BALANCE			130,210.33
01-Jan-88	TRANSFER TO COLORADO STATE UNIV.		38,927.39	91,282.94
01-Jan-88	TRANSFER OF FUNDS TO COLO.		25,000.00	66,282.94
17-Feb-88	NASUIGC FOR WATER ASSESSMENT		15,300.00	50,982.94
10-Dec-87	OCTOBER INTEREST	60.00		51,042.94
17-Dec-87	NOVEMBER INTEREST	63.00		51,105.94
06-Jan-88	DECEMBER INTEREST	62.00		51,167.94
11-Feb-88	JANUARY INTEREST	138.00		51,305.94
20-Mar-88	REIMBURSE CSU (WATER ASSESSMENT)		1,500.00	49,805.94
10-Mar-88	FEBRUARY INTEREST	300.00		50,105.94
17-Mar-88	INTEREST CORRECTION**	(184.06)		49,921.88
04-Apr-88	INVESTMENT TRANSACTIONS	285.00		50,206.88
27-Apr-88	MARCH INTEREST	74.26		50,281.14
05-May-88	APRIL INTEREST	188.10		50,469.24
11-May-88	BRITISH MUSEUM-EASTOP TRAVEL		9,710.00	40,759.24
07-Jun-88	MAY INTEREST	208.62		40,967.86
20-Jun-88	FEDERAL EXPRESS-BRITISH MUS.		25.00	40,942.86
13-May-88	AMER.SAMOA-FY87 AND 89 PMT	1,000.00		41,942.86
	TOTAL	2,194.92	90,462.39	

*Paid half of water assessment directly to NASUIGC and half to WD account. The WD account paid the full amount to NASUIGC. Reimbursement from NASUIGC has been requested.

**Correction of erroneously computed interest in prior year.

APPENDIX C

34

COOPERATIVE STATE RESEARCH SERVICE
REPORT TO THE
WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS
FORT COLLINS, COLORADO
JULY 28-29, 1988

1. Budgets. Different versions of an FY 1989 budget have been passed by the House and the full Appropriations Committee in the Senate and copies of the reports have been distributed to Directors. The total funding level for CSRS is higher in the Senate. A major concern with the proposal is the earmarking for specific locations within the competitive grants and water quality programs. Another problem is the absence of the Human Nutrition Program in Competitive Grants. Finally, the Plant Science Centers are identified but no new money is included. The CSRS budget request for FY 1990 is nearing completion and I will present it to the Deputy Secretary on August 3. It reflects strong ESCOP involvement.
2. Plant Science Centers. Although the Executive Budget for FY 1988 contained \$3 1/3 million for Plant Science Centers, no additional funds were in the Appropriation. Approval was given for use of funds for Plant Science Centers, but no specific appropriation was provided. The same request has been made for FY 1989, but is being "sold" more vigorously. Site visits have been completed. Award announcements will be made by September 1 for FY 1988.
3. Animal Care Guidelines. Copies of the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching have been mailed to each SAES Director's office. Additional copies of the guide will be available at a cost of \$5.00 per copy from Association Headquarters, 309 West Clark Street, Champaign, Illinois 61820.
4. CSRS Facilities. CSRS is now occupying new facilities in the Aerospace building located adjacent to L'Enfant Plaza at 9th and D. St., SW. This building is not to be confused with the Smithsonian Air and Space Museum or the NASA building in the same part of town.
5. Water Quality. The interest in water quality remains high. The bills introduced earlier in this session are still alive. Cooperating institutions are also interested in moving ahead with this number 1 research priority, and are contemplating a unified structure for a research program. Individual institutions are already making priority adjustments to address the more urgent State and regional water quality needs.
6. Staffing. We are delighted that Dr. Colleen Hefferan has joined CSRS in the position of principal home economist, replacing Dr. Mary Heltsley. Dr. Hefferan was formerly the supervisory home economist with the Family Economics Research Group, Agricultural Research Service. We are also pleased to announce that Dr. Clark Burbee has joined CSRS as an Agricultural Economist on a permanent basis. Dr. Burbee was with CSRS on loan from the Economic Research Service for a year prior to this appointment. Former Director W. Lamar Harris (MD) will join CSRS as Principal Agricultural Engineer September 1. Dr. David MacKenzie (LA) will begin an IPA assignment as Director of the National Biological Impact Assessment Program on September 1. Dr. Estel Cobb retired as Deputy Administrator for Plant and Animal Sciences on April 1, 1988. He has been unusually effective both as a scientist and as an administrator. His successor is being chosen through a nation-wide open competitive search. Dr. E. M. Wilson

will carry those responsibilities as Acting Deputy Administrator while Dr. John Naegele will fill in behind Dr. Wilson as Acting Deputy Administrator for Regional Research and Special Grants. Dr. Naegele will continue to lead the agency effort in strategic planning and leadership development. Several IPA's and national searches will be used to fill expected retirements that are scheduled over the next year. Paul K. Stumpf, a member of the National Academy of Sciences, has agreed to be the CRGO Chief Scientist for 1988-89.

7. Biotechnology. CSRS continues to work with all involved parties to assure research guidelines for safe field experimentation and to discourage the proliferation of potential conflicting State laws and regulations. The timely adoption of these guidelines is critical to agricultural biotechnologic research in both industry and the academic institutions. Four conferences on biotechnology, co-sponsored by USDA and the experiment station system, were held this Spring. The conferences, entitled "Agricultural Biotechnology and The Public," were well received by scientists, government officials, industry representatives, food processors, educators, farmers, and ranchers and focused on such topics as processing of food from test tube to the table; coordinated regulation of genetically engineered plants, animals, micro-organisms and food products; and ethical and environmental issues.

8. National Biological Impact Assessment Program (NBIAP). NBIAP is a CSRS program established under the authority of the Assistant Secretary for Science and Education. It is intended to provide the scientific underpinning for assessing and monitoring the potential impacts of biotechnological processes and products on human welfare and the environment. NBIAP activities will be conducted in four major areas: research site identification, research on monitoring technologies, expertise identification, and information exchange. Further scientific input is anticipated from a later summer symposium, now in planning by the Division of Agriculture Biotechnology Committee, the University of California, and CSRS NBIAP staff.

9. New Directors Workshop. The 1988 CSRS/ESCAP New Directors Workshop was held June 19-21, 1988 at the Hyatt Regency Hotel, Capitol Hill, Washington, D.C. Drs. John Naegele (CSRS) and Dale Zinn (NE-DAL) did a superb job of organizing an excellent set of events this year.

10. Honor Awards Program. We received sixteen outstanding nominations from the SAES system and submitted eight nominations involving ten people for final review by the Secretary's Honor Awards Committee. All were approved by the Secretary's Awards Committee and were presented by Secretary Lyng on Wednesday, June 22, 1988. A brochure describing achievements of the honorees will be sent to all Directors.

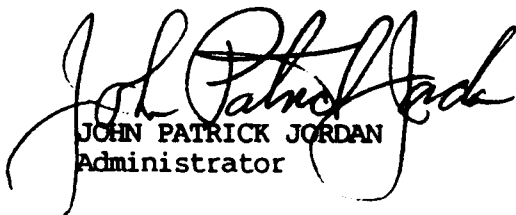
11. A symposium honoring the USDA Food and Agricultural Sciences National Needs Graduate Fellows was held at the National Academy of Sciences, April 18-19, 1988. It was titled, "FOCUS 1988: Future Opportunities and Challenges Unique to Science." Large numbers of fellows supported by this program attended, along with their faculty advisors and deans. Secretary of Agriculture Richard E. Lyng opened the program which included presentations by Max Lennon, President, Clemson University, and Ray Thornton, President, University of Arkansas. Frank Press, President, National Academy of Sciences, opened the second day which included presentations by Dr. Mary Clutter on behalf of Erich Bloch, Director,

National Science Foundation, with additional major presentations being made by Harrison Shull, University of Colorado; Senator Christopher S. Bond (R-MO); A. L. Young, USDA; and C. Eugene Allen, Dean, College of Agriculture, University of Minnesota. Concurrent sessions focused on several different aspects of future opportunities, including the relationship between science and regulation, science and the development of new products, and facilitating technology transfer. The closing address was given by Harry O. Kunkle, former Dean, College of Agriculture, Texas A&M University. The event organized by Dr. Kyle Jane Coulter, Director, Higher Education program, CSRS, had strong support from RICOP and AASCU.

12. OMB Visit: On May 19, 1988, Drs. David Gibbons, Neal Conklin, and Susan Offutt of OMB, accompanied by Deputy Assistant Secretary Robert Long and USDA Budget Director Stephen Dewhurst as well as three of us from CSRS, visited North Carolina State University to view its agricultural research program and related activities. Dean Durward Bateman organized a visit to a dozen programs, many of which were cooperative across college lines or involved ARS, FS or other Federal agencies. Chancellor Bruce R. Poulton opened the day with a briefing and Dr. Bateman closed the day with an hour and a half dialogue session that involved Deans Terry Curtin (Vet Med), Erick Ellwood (Forest Resources), James Oblinger (Academic Affairs), Ronald Kuhr (Experiment Station), and Robert Wells (Extension Service) along with Ernest Corley (ARS-Southeast Area), Frank Hart (Vice Chancellor-Research) Burleigh Webb and Sidney Evans (NC A&T), and Jim Wilder (NC Soybean Association). This presented a tremendous opportunity to provide some answers to critical questions that the OMB leadership needs, but most of all to show the synthesis capacity of the university as a place in which all the components in agricultural research, extension and teaching can be brought together to meet the needs of the citizen of America. Dr. Robert Cook (NC) and Dr. William Carlson (CSRS) did the detail planning and brought about an outstanding program that had an enormous positive impact on all the visitors. Follow-on activities are now under discussion with OMB.

13. IR Special Report: Both ESCOP and the Committee of Nine discussed in detail the IR Committee Report in their May meetings. While there appears to be positive regard for the conceptual notion of national projects, the Committee of Nine took no formal action other than to recognize that this issue should be thoroughly discussed at the regional association meetings so that a clarification and enumeration of the issues and implications surrounding this concept are clearly articulated. The Committee of Nine is planning to review the issues that emerge from the regional association discussions in their September meeting before taking formal action on the concept.

Respectfully submitted,


JOHN PATRICK JORDAN
Administrator

Highlights of the ERS Program

Organization and Planning

The thrust of the ERS program has four areas of responsibility which are Research, Situation and Outlook, Staff Analysis, and Data Development. Ultimately the output from each area serves decisionmakers and policymakers in the agricultural sector in its broadest sense. From a subject matter perspective we are organized into 5 Divisions in order to gain from specialities in commodities, land and water resources, trade, farm financial and rural conditions, and management and technical analysis of empirical data. Each division provides output under all four of the responsibility areas. Program planning is approached differently for each area of responsibility.

Research planning

For research, our task is to identify and conceptualize well-defined projects that provide the analytic and empirical foundation for applying the discipline of agricultural economics to the problems that decisionmakers and policymakers are facing or as best we can anticipate the problems they will face. In some cases the results from research projects go directly to the final users. In other cases, the results of our research program provides the basis for a secondary or tertiary round of analysis that is required to bring the focus to the problems confronted by our audience.

Situation and Outlook planning

For Situation and Outlook, our task is to 1) assemble a vast amount of data and information, 2) subject the information to the scrutiny of commodity and other analysts who apply the rigors of classification and economic analysis to the data and information, and 3) to disseminate the essence of what we discover in the process in a timely fashion. Obviously situation and outlook planning requires identifying the kind of information that public and private decisionmakers need on a day to day basis and then developing a systematic program that gathers, integrates, analyzes raw data and disseminates packaged information that is neither mundane nor outdated. Situation and outlook combines human analytic expertise with the state of the art in data processing and communication.

Planning for Situation and Outlook led to the 1987 reorganization, it is the impetus for developing a data coordination system, for standardizing word processing, for investigating desk-top publishing, for training programs in writing and speaking, and for recruiting individuals that have special skills in analyzing and communicating.

Presented by B.H. Robinson, Associate Administrator, at the Summer Meeting of the Western Deans, Directors and CARET Representatives, Colorado State University, Fort Collins, Colorado, July 27-29, 1988.

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Staff Analysis planning

There has been the view that staff analysis was a nuisance activity that interrupted research and defied planning. We no longer operate under that misconception. Staff analysis puts the immediate information needs of a policymaker before an analyst or group of analysts who either have the information or the capability to analyze the policymaker's problem. Staff analysis requires that an analyst respond within a specified period of time. Staff analysis draws on research, on situation and outlook and on data information capabilities. The prerequisite for good staff analysis is a balanced and relevant program in all of the other areas.

Since staff analysis requests are a spontaneous occurrence, they require a particular management approach. Our approach to staff analysis is that the person or group that has the data and research capability should be a participant in responding to staff analysis requests. We have established a staff analysis coordination function in the Office of the ERS Administrator and counterpart coordination functions in each Division. It is the responsibility of the coordinator in the Administrator's office to keep a log of staff analysis requests, direct them to the appropriate area of specialized expertise and provide the leadership and coordination to assure quality and timeliness. The coordinators are responsible for monitoring the progress, reviewing the adequacy of response, and directing the response back to the requesting party through the Administrator's office. This system provides a procedure for finding the most appropriate person or persons for responding to a policymakers question or need, for review at more than one level, for maintaining timeliness, and for keeping a record of resources devoted to this effort as well as a record of all outgoing materials.

The management focus gives recognition to staff work as a full fledged legitimate function and provides for managerial control over the product. ERS has been handling 250-300 requests each year. These analyses have given analysts a broader perspective on issues and questions, they have influenced the planning of research projects, and they have influenced decisions on data handling and information processing. We have also provided specialized communication training to help analysts improve preparation of staff analysis reports.

Data Development planning

We are giving the collecting, analyzing, storing and sharing of data new emphasis. For one thing, we see making good data files readily and widely accessible as being an important part of the ERS mission. There are several challenges in this area. One is to motivate the individual researcher to understand that packaging the data he or she is using may be as important as packaging the results of analyses. Another challenge is to provide and manage the computer hardware and software resources that are available in such a way that preparation of data offerings and dissemination of data becomes as routine as hard copy publication which includes editing and review.

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Finally, there is the challenge of making hardware, software, and data files readily available to our own analysts. We are seeking steps that minimize the time and effort needed to make efficient use of what computer systems can offer. ERS has a small division devoted to handling data and information and to charting the course for this area.

Mandated or Special Studies Directed to ERS

Now I want to talk about some of our specific studies and findings and finally review some of the highest priority program thrusts identified for the next 5 years.

We are seeing a growing number of requests to do specific studies. These requests are often written into legislation or they are requested by members of Congress who make a direct request for ERS input through the Secretary. Requests for these studies also originate with other agencies particularly OMB and USTR. The following are some examples:

1. The 1987 Supplemental Appropriations Bill required that the Secretary of Agriculture investigate "changes needed in farm programs in order to restore the American farm economy." The directive specifically asked that the Secretary investigate whether producers of basic commodities favored mandatory limits, to investigate the quantity of basic commodities and soybeans that would be required to meet demand including reserves and to investigate changes needed to implement mandatory production controls in order to provide returns that would cover costs of production.

ERS conducted this study over a 7-month period. The study concluded that producers historically have shown varying degrees of support for mandatory controls. Implementation of mandatory controls would require changes in a wide range of statutes and USDA regulations. The study showed that cost of production based price goals would likely be below parity-based price goals. Even so, export subsidy costs would lead to higher program costs and consumer food costs would rise because of higher meat prices that in turn would be induced by higher feed prices.

2. The Farm Disaster Assistance Act of 1987 mandated the Secretary of Agriculture to submit a report to the Agriculture Committee on the use of marketing loans if the Secretary declined to establish marketing loans for wheat, feed grains and soybeans.

The Secretary declined to establish marketing loans for wheat, feed grains and soybeans so ERS prepared a report that set forth:

- o An explanation of why marketing loans were not implemented for 1987 crops of wheat, feed grains, and soybeans;

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- o A comparison of 1987 program costs for wheat, feed grains, and soybeans with and without marketing loans;
- o An analysis of the effectiveness of marketing loans for upland cotton and rice;
- o A comparison of the effectiveness of marketing loans for upland cotton and rice and marketing loans for wheat, feed grains, and soybeans;
- o An analysis of how the use of generic certificates affects market prices for program commodities compared with marketing loans; and
- o An assessment of how a soybean marketing loan would affect other oilseed markets and the effectiveness of a marketing loan for sunflowers.

The report concluded that marketing loans for wheat and feed grains would be analogous to further modest reductions in support levels, whereas, for rice and cotton and depending on world prices, soybeans, marketing loans have the potential for significantly enhancing price competitiveness. The modest potential price reductions offered by marketing loans for wheat and feed grains would add little to the price risk borne by foreign competitors and would have only a modest effect on domestic use and exports.

3. The National Commission on Dairy Policy requested a study of the influences on current and projected utilization of milk products by domestic and foreign consumers. The study concluded that rising consumer incomes and declining prices for dairy products relative to other foods caused most of the 2-percent average annual increase in per capita consumption and the 3-percent increase in total consumption posted from 1983 through 1986. Advertising, concern about health and nutrition, changes in demographics, and Government donations also affected consumption. But these influences were small for most dairy products, compared with the effects of changes in relative prices and consumer incomes.
4. After the release of a controversial alcohol fuel study in 1986, the Secretary directed ERS to undertake a comprehensive study to investigate the economic feasibility of ethanol production under current and projected prices and technology. ERS was directed to solicit cooperation from business, government and academics and draw upon all available information. The Secretary asked for an examination of a broad range of economic conditions and technologies, including technologies on the horizon.

The report concluded that federally supported ethanol use is one alternative for meeting environmental, energy security, and agricultural objectives. Additional expansion of the industry depends on a continuation of current favorable conditions, including extension

of the Federal gasoline tax exemption. Under current conditions, ethanol should be able to compete with other additives as an octane enhancer. Expansion of the ethanol industry would increase ethanol's contribution to improving energy security, reducing air quality problems associated with carbon monoxide, and increasing corn prices. The report provides a basis for assessing the tradeoffs in using ethanol to meet national objectives.

ERS has conducted over 20 such studies since the beginning of 1987. These are challenging studies that deal with controversial issues or with policy or program options. They require a blend of data, modeling, and skill of the economic analysts. They almost always involve tight deadlines even though most require several months work. The majority of these studies are released to the public although they are not always available in a numbered series. Further, since most of these studies are assigned, planned, and finished within a year, they seldom get written into official work plans.

The USTR Mandate

One of the most important ongoing efforts relates to the special mandate from the Office of the United States Trade Representative (USTR) to provide analytic back up for the trade negotiations. As an ongoing contribution we have provided a continual updating and reporting of PSE/CSE measures for all major countries and an extensive list of commodities. The ERS reports have become handbooks to the entire group of GATT participants.

We delivered a comprehensive internal analysis of trade liberalization effects to USTR in the Fall of 1987. We are completing an update of that analysis which will be delivered next month. In addition we have carried out numerous staff analyses on particular questions or concepts relating to the trade negotiations and to trade liberalization effects.

The results from many of these analyses have been or are scheduled for publication. Only a small number of analysis are considered so sensitive that they are designated for internal use only.

Our trade liberalization work has required resources from all of the divisions with the commodity and trade divisions the most heavily involved. Our CGE modeling efforts are now being used in the trade liberalization work. We have also linked our major trade model (SWOPSIM) with our domestic econometric model (FAPSIM).

Focusing on the 1990 Farm Bill

We have planned a coordinated effort to develop a broad range of information directed to the upcoming 1990 farm bill debate.

One of the objectives we are emphasizing for this effort is to cap off the work with reports that will communicate clearly to policymaking officials, legislators, and the general public. We want to release these reports over the next twelve months.

Analysis of major scenarios

One priority is to analyze a continuation of the Food Security Act of 1985. The 1985 farm bill scenario will provide a basis for comparisons with other alternatives. We also plan to analyze a decoupling alternative in detail because it is an alternative that has received so much attention. We have prepared several assessments of mandatory controls and the overall effects are consistently the same. Mandatory controls would introduce many problems while the benefits accrue mostly to existing landowners.

Preparing an AFPR

ERS initiated an Agricultural-Food Policy Review (AFPR) series in 1977. Each review is a collection of in-depth articles that focus on relevant background information for policymaking purposes or articles that treat current and emerging policy issues. We plan to publish another Agricultural-Policy Review (AFPR) next year. The theme for the next AFPR is "U.S. Agricultural Policy in a Changing World". This 200-300 page review will deal with the events that led to the agricultural sector's problems in the early 1980's; the performance of the policy and program measures taken to restore the financial viability of agriculture; and, as we move into the 1990's, the issues policymakers face in dealing with trade, the environment, food safety, and the economic performance of the agricultural sector.

A special series of issues and background bulletins

We also initiated an "Issues in Agricultural Policy" series of Agriculture Information Bulletins (AIB's) in 1987. This series highlights current issues or provides background information in an 8-page pamphlet format that gives readers an overview of an issue or a succinct treatment of facts and information for an area of interest to the agricultural policy audience. We have identified a large number of issues and background topic areas that relate to the 1990 farm bill and to trade liberalization. Topics such as "Understanding Trade Liberalization", "Understanding Decoupling", and the "Effect of Implementing Water Quality Legislation on Agriculture" are being addressed. We expect to release as many as 35 bulletins in the AIB issues and a new background series over the next year.

Commodity Background Bulletins

In September 1984, the Department released 14 commodity specific background bulletins that had been prepared by ERS. These 30-50 page bulletins described the structure of the industry for the particular commodity, identified trends in domestic and world markets, summarized costs and returns, and provided an explanation of current programs including the history of their development. The bulletins also contained data appendices. These bulletins served as a handbook for policymakers when they had to deal with commodity specific matters. We are updating these bulletins for a mid-1989 release.

Water Quality, Irrigation and Environment

Our research program on water quality, irrigation and the environment is coordinated by the Resources and Technology Division. The water quality research focuses on three general topic areas: policies, programs, and management tools. Under these general areas, we will be looking at a set of generic approaches to address water quality concerns within the agricultural sector. These approaches include taxes, subsidies, input restrictions, and farm management regulations. The RTD analysts are prepared to analyze the impacts of legislation (1987 Water Quality Act) and policy initiatives (CRP) on the farm sector and the associated impacts on water quality. This will include assessing actual or potential conflicts between programs, policies and legislation relating to water quality goals and existing farm policy (soil conservation programs, commodity programs). Part of the overall effort will include evaluating programs to assess the consistency of management and regulatory efforts. RTD analysts have specifically identified some 13 reports or papers that will address the water quality area.

A closely related area is an assessment of the contribution of new practices and technological enhancement to agricultural production for achieving water quality goals. This will include a look at the effectiveness of best management practices for controlling surface water runoff and groundwater protection. This will require refinement and further development of quantitative relationships linking agricultural production and environmental outputs. Tradeoffs between protecting groundwater and controlling surface water nonpoint source pollution and cost-effectiveness of new technologies and tillage practices to achieve water quality goals will have to be examined. The impacts of alternative pesticide and tillage strategies and the potential for low input agriculture to contribute to water quality goals will also have to be explored. We have 9 pieces of output planned for this area.

A third topic area will be to focus on offsite costs of agricultural residual pollution and offsite benefits of programs and policies to enhance water quality. The beginning task is to refine assessment procedures and establish data bases to reduce reliance on restrictive assumptions. We can then go on to investigate health impacts of pesticide and nutrient contamination, particularly in groundwater. We will continue to quantify linkages between off-farm consequences and on-farm production activities and to explore the impact of external constraints on agricultural production. This area is fertile for the kind of data enhancement and data packaging that I mentioned earlier. There are 14 items of output planned for this third topic area.

We have made a distinction between water quality research and research on water management and technological adoption in connection with irrigation. Our plans are to develop and maintain a national irrigation and agricultural water resource data base that can be used to project irrigated acres, water use, production and rates of irrigation technology adoption. Further, we see opportunities for cooperative work with western universities to analyze the location, extent, and consequence of growing competition for water supplies. This will include looking at both market and nonmarket alternatives for water allocation.

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Environmental research focuses on both environmental programs, the provisions created in the 1985 farm bill, and the economic implications of wider environmental issues. We have recently completed a draft economic assessment of the Conservation Reserve Program (CRP), which finds the net economic gain from implementing a 45 million acre program to exceed \$11 billion. We are also analyzing the potential economic effects of the Conservation Compliance (CC) program, with work underway on both farm and national/regional cost implications. Estimates of the compliance costs range between \$5 and \$20 per acre, depending on the implementation regime followed.

In addition, we are analyzing the economic implications of various environmental issues, including pesticide regulation, large area pest control programs such as boll weevil eradication and grasshopper control, and the implementation of the Endangered Species Act.

Drought

The drought has been headline news since mid-June. For ERS, it has meant overtime and working under pressure. Staff analysis requests increased and situation and outlook analysts found they were in particularly heavy demand. The initial concern from the viewpoint of the headlines is the effect on food availability and food prices. Our Food Marketing and Consumption Economics Branch working together with the Crops and Livestock Branches provided a complete rundown to show the effect on marketing spreads, retail price levels, the food component of the CPI, and the dollar effect on households with different income levels. The general points they made within a matter of hours when the headlines broke have held consistent and have been the basis of many statements and reports from the Department of Agriculture and the Administration.

- o Meat prices would be expected to decline slightly in the second half of 1988 as producers liquidate livestock, but by 1989 supplies will decline leading to higher prices than otherwise would be the case.
- o Prices of cereal and bakery products would increase with products requiring Durum wheat and oats showing the largest price increases in 1988. Unless the drought continues, prices of these products would plateau in 1989.
- o Cooking oils, salad oils, and margarine would increase because of reduced soybean supplies.
- o Fruits and vegetables would not be heavily affected by the drought. Among the fruits, apples would potentially be affected the most.
- o The 2-4 percent range for a retail food price increase that had been expected in 1988 was revised up to a 3-5 percent range although ERS analysts do not see food price increases reaching 5 percent.

Interest in the drought's effect on farm income and on the macro economy followed on the heels of the food price concerns. Getting a fix on the farm income situation has some complexities from the standpoint of explaining the effects to the media and public observers. Changes in government payments, adjustments in inventories, and in the fact that feed is a farm produced input complicate the task.

- o Cash receipts from sales are expected to increase under drought conditions experienced so far. If conditions worsen receipts would not rise quite as much, but would still run above pre-drought expectations.
- o Government payments decline in response to higher drought induced market prices. Congress, however, is debating aid packages that could offset this decline.
- o Cash expenses do not change much in the aggregate as increased feed and irrigation costs offset lower harvesting costs.
- o Net cash income would be expected to increase, but part of the increase in cash receipts comes from inventory reductions, thus net farm income which takes inventory changes into account falls. Net farm income could decline by as much as \$5 billion under a major drought. Again, any Congressional aid packages could offset or conceivably increase net farm income.

The 1988 drought is not likely to have much effect on the macroeconomy in terms of the CPI or GNP.

Aggregate indicators which make it appear that the drought will not be a serious blow to the economy mask the extreme hardships suffered by individuals and the local level problems. These are the problems that Congress is responding to as they seek to pass drought relief legislation.

Once the food price, farm income, and macro economic effects had been estimated, the emphasis shifted to providing information and analysis that would help the Government administer relief programs and help determine the implications of Congressional drought relief proposals. Feed for the foundation livestock herd is a major concern. The question becomes one of how much feed is needed, where is it needed, and how much feed is available and where. Information on forage availability is particularly weak.

ERS crop and livestock analysts are developing spreadsheets at the state level and we are also doing some county summaries to determine livestock inventories, feed stocks, and feed production possibilities. Normally our analysts do not deal with this level of disaggregation.

Effect of drought on research planning

The drought has potential impacts that go beyond the indicators I have been listing. It will be of major significance as to the effect on the GATT trade

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negotiations, the long-term trade agreement negotiations with the Soviet Union, the effect on the 1990 farm bill, and the effect on the future of the Conservation Reserve Program and the sodbuster and swampbuster provisions. It could also affect future water allocations and the whole realm of water quality, irrigation, and environmental initiatives. These impacts affect research. For instance what impact will the drought have on the PSE/CSE calculations that are being applied in trade liberalization discussions? Will the drought make the United States look more protectionist or more akin to a free trader? As research managers we want to anticipate the issues and the needs and design our research programs accordingly.

Farm Financial Conditions

ERS and NASS cooperate in conducting an annual ERS funded farm costs and returns survey (FCRS). The sample survey obtains comprehensive financial, production input and commodity specific data on individual farm units. One major use, among many, is providing the raw data for the ERS enterprise cost of production estimates. The survey concentrates on a selected set of commodities each year by gathering more detail on those particular commodities.

Another major use of the FCRS data is to sort, classify, and cross-classify farms by selected characteristics. The survey can be expanded to include about 1.6 of the 2.2 million farms. Compared with the Census of Agriculture, the FCRS survey provides annual data and it allows classifying more categories of farms, particularly large farm size categories.

The FCRS data has allowed us to provide detailed information on the financial conditions of farms and to make annual comparisons that track the dimensions of the financial crisis that developed, the plateauing of those conditions, and the cautious indications of recent recovery. One of the reports we have made summarizes the farm financial conditions on January 1 of each year. These reports have given the agricultural community insight into the dimensions of what has been happening.

We have traced four financial phenomena that have been startling to some. One of these is the indicator that nominal net cash income was record high in 1982, 1984, 1985, 1986, and 1987. On a year by year basis, net cash income fell by \$1.4 billion in 1981 and \$1.0 billion in 1983 otherwise cash income increased over the 1980-1987 calendar year period. Net cash income is an indicator of cash flow. The rapid decline in agricultural debt which fell from a record \$206.5 billion in 1983 to \$143 billion in 1987 and the likelihood of a further decline to less than \$140 billion in 1988 is indicative of substantial adjustments. Thirdly, the adjustments made to reduce production expenses which fell from a record \$143 billion in 1984 to \$120 billion in 1987 also indicated rapid and substantial adjustments in expense management. Finally, the off-farm income, the fourth indicator, showed that this source of income has doubled since 1975 and that starting in 1978 it has increased for 10 successive years and will most likely increase again for the eleventh consecutive year in 1988. Off-farm income which has

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almost reached the \$50 billion level surpassed net farm income in 1976 and every year since. Prior to 1976 there was no clear pattern as to which of the two income components would be the largest.

In spite of these levels of money flows in the 1980's, the sector was gripped by financial stress and there is still financial stress out there. I'm handing out a set of tables that focus on the Western States that illustrate the kind of financial indicators and classifications that we can provide. The summary tables show that the percent of farms falling in the favorable category is increased for the United States when 1987 is compared with 1986. However it is not the case for Arizona, Nevada, New Mexico, Washington, the Pacific States, and the Western Region when household income is considered. The summary tables also show that the percent of farms in the vulnerable category declining in the United States. However there are several instances where this is not the case for some of the Western States.

The detailed tables that show the characteristics of the farms falling in the financial position categories can help pinpoint the reasons for differences and conditions. I'm using this information as an illustration of the details that can be extracted from the FCRS data. It gives us an added dimension for looking at farm characteristics in conjunction with the common aggregate indicators that we use to judge economic conditions. A full report of the results of the 1987 FCRS survey will be published in late summer or early fall. Additionally, State Summaries will be published in cooperation with NASS.

Plans for 1990-1995

The final area that I would like to review briefly with you relates to our program initiatives for the next five years. While we realize that certain emergencies and contingencies can thwart the best laid plans, we feel it imperative to identify our needs and programatic gaps, establish priorities, and carefully delineate major program thrusts.

Background

U.S. agriculture and rural America have undergone massive adjustments over the past decade in response to changes in the production and marketing of farm products both at home and abroad and in the financial and policy environments. National and international commodity and financial markets are more competitive and impact more significantly on U.S. agriculture than ever before. Thus, no part of the U.S. food and fiber system or those sectors dependent on it has been left untouched by these changes. More specifically:

- o Agriculture is now, more than ever, affected by U.S. and foreign monetary, fiscal, and trade policies.
- o The competitive position of U.S. agriculture is being challenged on many fronts.
- o The structure and performance of the domestic and export marketing system for farm commodities and the wholesale/retail food and fiber distribution system have changed dramatically.

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- o Farming is now inextricably linked to industries that supply inputs and move products from farm gate to final consumer.
- o Agriculture is now confronted with significant costs of and adjustments to environmental regulations.
- o Farming is now highly capital intensive and therefore affected by the volatility of capital markets.

These changes occurring in agriculture and the general economy have also affected rural America and resource use. Technological changes, global shifts in industrial activity, financial stress, unemployment, regulatory policies, asset depreciation, and attendant dislocation are forcing major adjustments in rural households and businesses.

To adequately address these and other emerging issues, ERS has established a 5-year program to rebuild and enhance its core data, information, and analysis programs in global agriculture and trade, agricultural commodities, agricultural-rural-general economy linkages, and agricultural resources and regulatory policy.

Table 2--Average operating and financial characteristics of Colorado farms
by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	51	10	28	11	100
Economic class:					
Sales above \$250,000	40	23	15	21	100
Sales \$40,000-\$250,000	81	8	8	4	100
Sales below \$40,000	29	8	47	15	100
Type of farm:					
Cash grain	55	18	15	12	100
Other crops	49	7	38	6	100
Beef, hog, or sheep	47	5	35	13	100
Other livestock or poultry	68	16	4	12	100
Operating:			Acres per farm		
Acres owned	1,000	790	310	3,580	1,070
Acres operated	1,640	1,910	480	3,690	1,560
			Years		
Operator age	49	50	56	40	50
Financial:			Dollars per farm		
Crop sales	37,500	82,400	11,900	42,700	34,900
Livestock sales	42,300	107,600	30,700	20,100	42,500
Other farm income	17,600	43,100	4,700	30,300	17,700
Gross cash farm income	97,400	233,100	47,300	93,100	95,100
Cash operating expenses	57,900	175,500	73,100	140,500	82,200
Net cash farm income	39,500	57,600	-25,800	-47,400	12,900
Nonfarm income	15,600	8,000	23,100	37,800	19,500
Total assets	469,400	514,300	618,100	941,500	568,200
Total debt	45,200	368,000	52,100	494,100	126,700
Ratios:			Ratio		
Debt to asset	0.10	0.72	0.08	0.52	0.22
Return on assets	.09	.13	-.02	.02	.05
Oper. exp./gross inc.	.59	.75	1.55	1.51	.86
Interest/gross inc.	.06	.11	.14	.62	.14

1987 Farm Costs and Returns Survey, USDA.

Table 2--Average operating and financial characteristics for Nevada, Arizona, and New Mexico farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	27	2	58	14	100
Economic class:					
Sales above \$250,000	47	10	15	28	100
Sales \$40,000-\$250,000	68	4	24	3	100
Sales below \$40,000	13	0	72	15	100
Type of farm:					
Cotton	41	12	11	36	100
Other crops	29	2	45	24	100
Beef, hog, or sheep	28	0	70	2	100
Other livestock or poultry	17	1	61	21	100
Operating:					
			Acres per farm		
Acres owned	3,690	1,390	820	300	1,530
Acres operated	4,710	3,230	1,790	660	2,440
			Years		
Operator age	52	42	53	51	52
Financial:					
			Dollars per farm		
Crop sales	82,400	378,800	16,200	119,500	53,700
Livestock sales	79,700	454,800	14,500	19,000	39,300
Other farm income	23,000	87,900	4,000	54,700	17,400
Gross cash farm income	185,100	921,500	34,700	193,200	110,400
Cash operating expenses	129,400	733,400	49,700	231,200	106,600
Net cash farm income	55,700	188,100	-15,100	-38,000	3,800
Nonfarm income	39,900	17,300	34,500	14,500	32,900
Total assets	1,449,800	1,485,300	448,100	284,300	710,000
Total debt	77,400	993,100	27,300	178,400	76,200
Ratios:					
			Ratio		
Debt to asset	0.05	0.67	0.06	0.63	0.11
Return on assets	.04	.14	-.04	-.15	0
Oper. exp./gross inc.	.70	.80	1.44	1.20	.97
Interest/gross inc.	.05	.10	.11	.11	.08

1987 Farm Costs and Returns Survey, USDA.

Table 2--Average operating and financial characteristics for Montana, Wyoming, Utah, and Idaho farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	49	8	36	7	100
Economic class:					
Sales above \$250,000	62	27	8	3	100
Sales \$40,000-\$250,000	70	14	9	7	100
Sales below \$40,000	39	3	49	9	100
Type of farm:					
Cash grain	62	15	18	5	100
Other crops	31	8	51	10	100
Beef, hog, or sheep	56	4	34	7	100
Other livestock or poultry	47	9	34	10	100
Operating:			Acres per farm		
Acres owned	1,121	1,316	212	249	745
Acres operated	1,640	1,838	341	351	1,094
			Years		
Operator age	55	44	53	47	53
Financial:			Dollars per farm		
Crop sales	39,300	98,900	4,800	13,800	29,700
Livestock sales	46,000	61,700	10,600	28,300	33,200
Other farm income	16,500	22,600	2,200	7,100	11,100
Gross cash farm income	101,800	183,200	17,600	49,200	74,000
Cash operating expenses	64,500	116,400	25,000	64,800	54,500
Net cash farm income	37,300	66,900	-7,500	-15,500	19,600
Nonfarm income	18,000	8,200	23,600	37,800	20,800
Total assets	564,200	594,500	280,400	248,900	441,200
Total debt	45,500	364,800	27,300	153,200	71,900
Ratios:			Ratio		
Debt to asset	0.08	0.61	0.10	0.62	0.16
Return on assets	.05	.10	0	0	.04
Oper. exp./gross inc.	.63	.64	1.42	1.32	.74
Interest/gross inc.	.06	.14	.19	.24	.09

1987 Farm Costs and Returns Survey, USDA.

Table 2--Average operating and financial characteristics for California farms
by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
	Percent				
All farms	42	5	41	12	100
Economic class:					
Sales above \$250,000	66	14	13	6	100
Sales \$40,000-\$250,000	66	12	13	8	100
Sales below \$40,000	31	1	54	15	100
Type of farm:					
Cash grain	49	11	40	0	100
Other crops	64	5	25	6	100
Vegetables, fruit, nursery	44	5	41	10	100
Beef, hog, or sheep	29	1	61	9	100
Other livestock or poultry	35	4	31	30	100
Operating:					
	Acres per farm				
Acres owned	150	150	60	50	100
Acres operated	330	440	180	90	240
	Years				
Operator age	53	46	57	45	54
Financial:					
	Dollars per farm				
Crop sales	155,600	389,800	19,500	70,900	99,900
Livestock sales	65,400	163,600	10,800	8,200	40,300
Other farm income	19,800	28,300	2,600	3,100	11,100
Gross cash farm income	240,800	581,700	32,900	82,100	151,300
Cash operating expenses	172,200	448,600	49,700	117,700	127,700
Net cash farm income	68,600	133,100	-16,800	-35,600	23,600
Nonfarm income	32,400	24,900	44,600	45,100	38,600
Total assets	845,800	1,013,300	496,000	410,300	655,900
Total debt	67,000	668,900	46,200	260,300	109,800
Ratios:					
	Ratio				
Debt/asset	0.08	0.66	0.09	0.63	0.17
Return on assets	.07	.13	-.02	-.10	.03
Oper. exp./gross inc.	.72	.77	1.51	1.43	.84
Interest/gross inc.	.03	.10	.13	.26	.07

1987 Farm Costs and Returns Survey, USDA.

Table 2--Average operating and financial characteristics for Washington farms
by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	42	7	43	9	100
Economic class:					
Sales above \$250,000	64	18	12	6	100
Sales \$40,000-\$250,000	56	23	15	7	100
Sales below \$40,000	36	1	54	10	100
Type of farm:					
Cash grain	79	9	8	4	100
Other crops	27	6	50	18	100
Vegetables, fruit, nursery	33	15	47	5	100
Beef, hog, or sheep	53	0	45	2	100
Other livestock or poultry	22	4	47	27	100
Operating:					
			Acres per farm		
Acres owned	216	118	91	166	152
Acres operated	540	546	148	257	347
			Years		
Operator age	58	46	59	38	56
Financial:					
			Dollars per farm		
Crop sales	63,900	225,300	10,200	21,600	47,900
Livestock sales	36,500	68,900	11,900	11,500	25,900
Other farm income	23,200	34,300	2,000	6,400	13,400
Gross cash farm income	123,700	328,500	24,100	39,500	87,200
Cash operating expenses	74,200	196,100	35,700	59,100	64,400
Net cash farm income	49,500	132,300	-11,600	-19,500	22,700
Nonfarm income	16,800	17,100	36,300	30,400	26,400
Total assets	441,000	402,200	384,000	199,600	392,800
Total debt	40,300	255,600	27,600	133,400	57,300
Ratios:					
			Ratio		
Debt/asset	0.09	0.64	0.07	0.67	0.15
Return on assets	.09	.26	-.02	-.09	.05
Oper. exp./gross inc.	.60	.60	1.48	1.49	.74
Interest/gross inc.	.04	.08	.13	.27	.07

1987 Farm Costs and Returns Survey, USDA.

Table 2--Average operating and financial characteristics for California, Oregon, and Washington farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	39	5	46	10	100
Economic class:					
Sales above \$250,000	63	16	13	7	100
Sales \$40,000-\$250,000	64	16	13	7	100
Sales below \$40,000	29	1	58	12	100
Type of farm:					
Cash grain	71	10	15	5	100
Other crops	43	8	35	14	100
Vegetables, fruit, nursery	42	7	43	8	100
Beef, hog, or sheep	30	2	61	6	100
Other livestock or poultry	31	4	43	22	100
Operating:					
			Acres per farm		
Acres owned	210	300	80	120	150
Acres operated	450	790	200	160	330
			Years		
Operator age	55	45	58	43	55
Financial					
			Dollars per farm		
Crop sales	114,100	264,600	11,800	48,500	68,200
Livestock sales	48,900	103,300	10,900	11,000	30,000
Other farm income	18,500	32,100	1,900	4,300	10,100
Gross cash farm income	180,500	400,000	24,600	63,800	108,300
Cash operating expenses	122,600	283,600	36,800	91,800	88,400
Net cash farm income	57,900	116,400	-12,100	-28,000	19,900
Nonfarm income	25,100	20,800	36,900	39,600	31,800
Total assets	638,300	654,700	401,400	338,400	499,200
Total debt	52,600	418,500	33,500	215,100	79,900
Ratios:					
			Ratio		
Debt/asset	0.08	0.64	0.08	0.64	0.16
Return on assets	.08	.16	-.02	-.09	.03
Oper. exp./gross inc.	.68	.71	1.49	1.44	.82
Interest/gross inc.	.03	.09	.13	.27	.07

1987 Farm Costs and Returns Survey, USDA.

DISTRIBUTION OF FARMS IN WESTERN STATES AND REGIONS BY FINANCIAL POSITION

State or region	Net cash household income/solvency position			
	Favorable	Marginal Income	Marginal Solvency	Vulnerable
Colorado (1987)	49.47	30.23	9.54	10.75
Colorado (1986)	35.78	37.60	17.83	8.79
AZ, NV, and NM (1987)	44.87	39.76	1.13	24.23
AZ, NV, and NM (1986)	64.10	25.87	5.38	4.65
ID, UT, MT, and WY (1987)	51.13	33.45	6.33	9.89
ID, UT, MT, and WY (1986)	46.25	33.51	10.05	10.19
Pacific States (1987)	47.11	39.40	8.61	4.88
Pacific States (1986)	47.53	31.74	16.12	4.61
California (1987)	59.84	23.21	8.52	8.44
California (1986)	57.66	27.18	7.94	7.22
Washington (1987)	44.08	40.52	9.92	5.48
Washington (1986)	62.89	19.94	9.70	7.66
All western States (1987)	51.13	32.89	7.62	8.36
All western States (1986)	52.65	29.41	10.44	7.50
U.S. farms (1987)	51.68	33.38	8.07	6.86
U.S. farms (1986)	47.40	30.96	11.15	10.48

Source: Farm Costs and Returns Surveys, USDA.

DISTRIBUTION OF FARMS IN WESTERN STATES AND REGIONS BY FINANCIAL POSITION

State or region	Net cash farm income and solvency position			
	Favorable	Marginal Income	Marginal Solvency	Vulnerable
Colorado (1987)	51.21	28.49	9.21	11.08
Colorado (1986)	39.81	33.57	14.28	12.34
AZ, NV, and NM (1987)	26.85	57.79	1.51	13.85
AZ, NV, and NM (1986)	25.57	64.40	6.00	4.03
ID, UT, MT, and WY (1987)	48.99	35.59	7.71	7.71
ID, UT, MT, and WY (1986)	40.09	39.67	11.68	8.55
Pacific States (1987)	28.79	57.72	4.89	8.59
Pacific States (1986)	27.64	51.64	5.55	15.18
California (1987)	42.02	41.02	4.54	12.41
California (1986)	37.06	47.79	4.96	10.19
Washington (1987)	41.64	42.97	6.65	8.74
Washington (1986)	34.04	48.79	10.24	6.93
All western States (1987)	41.38	42.65	5.89	10.09
All western States (1986)	35.23	46.83	8.17	9.77
U.S. farms (1987)	48.50	36.57	8.16	6.78
U.S. farms (1986)	41.40	36.96	11.69	9.94

Source: Farm Costs and Returns Surveys, USDA.

DISTRIBUTION OF FARMS IN WESTERN STATES AND REGIONS BY FINANCIAL POSITION

State or region	Net farm income/solvency position			
	Favorable	Marginal Income	Marginal Solvency	Vulnerable
Colorado (1987)	66.22	13.48	13.84	6.45
Colorado (1986)	44.43	28.95	13.65	12.97
AZ, NV, and NM (1987)	53.96	30.67	1.98	13.38
AZ, NV, and NM (1986)	50.83	39.14	6.04	3.99
ID, UT, MT, and WY (1987)	67.28	17.30	12.12	3.30
ID, UT, MT, and WY (1986)	50.59	29.17	11.30	8.94
Pacific States (1987)	68.30	18.21	9.14	4.35
Pacific States (1986)	57.20	22.07	11.56	9.16
California (1987)	62.99	20.06	8.66	8.30
California (1986)	58.30	26.54	6.76	8.40
Washington (1987)	69.75	14.85	7.81	7.59
Washington (1986)	57.01	25.82	10.53	6.64
All western States (1987)	65.39	18.63	9.39	6.59
All western States (1986)	54.25	27.81	9.53	8.41
U.S. farms (1987)	68.13	16.93	10.09	4.84
U.S. farms (1986)	56.82	21.54	11.65	9.98

ARS REPORT TO WESTERN DIRECTORS

As is evident from Dean Plowman's presence at this meeting, ARS has a new Administrator, and he and his new team are effectively taking hold of the reins. All of us are delighted at this course of events, and we fully expect a number of changes that will make ARS an organization more responsive to the ideas of its scientists, a better place to work, and a better partner with the State Experiment Stations. One recent change is that Dr. W. G. Chase is returning to California as Area Director. Dr. Norman James has requested reassignment to Corvallis.

Dedication of the National Small Grains Germplasm Research Facility is scheduled for August 23, 1988. The new facility at the University of Idaho, Agricultural Research and Extension Center, Aberdeen, Idaho, will house the World Small Germplasm Collection now located in Beltsville, Maryland. An expanded research program on enhancement of wheat, oats, and barley germplasm will be conducted in cooperation with the University of Idaho and other Land Grant Institutions.

The Citrus Germplasm Clonal Repository, in cooperation with the University of California, Riverside, was dedicated April 1988. Because of quarantine regulations that restrict movement of citrus germplasm, it was necessary to establish citrus germplasm repositories in both California and Florida.

A long-term lease was negotiated recently with University of California, Riverside, for a site to locate a new Salinity Laboratory. The Northwest Tree Fruit Industry is seeking a site for a new laboratory to house the scientists located in the Yakima Agricultural Research Laboratory. Planning and design funds were appropriated by Congress for both facilities.

Similarly, planning and design funds were appropriated for an expansion of the National Seed Storage Laboratory here in Fort Collins. The construction costs, estimated at \$11M, had been expected from the FY 89 budget. However, the House eliminated this item entirely and the Senate recommended \$5.3M.

The struggle continues for completion of the facilities at Laramie, Wyoming for the Arthropod Borne Animal Disease Unit. With luck, we can hope for occupancy of the animal/laboratory facilities next winter. The research work is in full gear, with facilities provided by the University on central campus very cramped until the retrofit/construction is completed.

With substantial financial support from APHIS, an expanded program of field testing advanced methods for grasshopper control is headquartered at Bozeman, Montana with field sites serviced out of Twin Falls, Idaho and Sidney, Montana. At Bozeman, also, we have strengthened our biocontrol of weeds efforts by transfer of two scientists from Albany, California. Remodeled Federal and expanded State facilities provide additional, first

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class space for laboratory and greenhouse work, including quarantine facilities for some of our scientists. We expect that the Biocontrol group will move out of dilapidated facilities into renovated space in a few months.

There have been a number of retirements recently. In Akron, CO, Ardell Halvorson has replaced Darryl Smika as Research Leader. Al Grable, Research Leader for Great Plains Systems Research in Fort Collins, has announced his departure for December, and we have started the search for a replacement. In New Mexico, ARS is searching for a new Research Leader for the Jornada Range; a selection is expected to be announced within the month.

Jan van Schilfgaarde
26 July, 1988

U.S. Forest Service Report to
Western Association of Agricultural Experiment Station Directors
Fort Collins, CO - July 28-29, 1988

BUDGET

Both the House and Senate have marked up the Forest Service appropriations bill, but it has yet to go to conference. For Forest Service Research, the figures are:

<u>FY 1988</u>	<u>FY 1989 President's Budget</u>	<u>FY 1989 House Action</u>	<u>FY 1989 Senate Action</u>
\$135,510,000	\$129,279,000	\$139,865,000	\$132,599,000

The House and FY 1988 figures include \$3 million for competitive grants. Neither the President's budget nor the Senate action contain anything for competitive grants.

Our best guess is that the conferees will agree on figures close to those of FY 1988.

PERSONNEL

Dr. Thomas Hamilton was named to one of two Associate Deputy Chief for Research positions in the Washington Office. Hamilton has a background in Forest Service research as an economist. Most recently, however, he has served as staff director of the Resources Program and Assessment Staff which has Service-wide responsibilities.

Dr. Ronald Stewart replaced Dr. Roger Bay as Station Director of the Pacific Southwest Station in Berkeley. Bay retired this spring. Stewart was an assistant director for research programs at the Station.

PROGRAMIntermountain Station

- . Fire chemistry research to increase in Missoula MT.
- . Hydrology research in Idaho Batholith where sedimentation from highly erosive soils threatens anadromous fish spawning--hence, timber harvesting--is planned to increase.
- . Forest engineering research has the Forest Service lead in supplanting the Universal Soil Loss Equation used to measure soil erosion in agriculture with something more suited to forestry. This is part of a USDA-wide effort.

Pacific Northwest Station

- . The Copper River Delta Institute has been announced. A director is being sought. The Institute will provide a unique living laboratory of ecological processes on Prince William Sound created by the 1964 earthquake. It offers opportunity to follow the adaptability of species.

- The Coastal Oregon Productivity Enhancement (COPE) Program is involved in a joint research effort with Oregon State University and the Bureau of Land Management. This effort is directed at two areas: 1) regeneration of coastal conifer forests, and 2) riparian zone management.
- Two research work units--Economics of Forest Land Management, and Macro Economics of U.S. and International Trade--were combined into one unit to improve the focus of this research area.
- A new research work unit in Seattle was started to look at the relationship of rain on snow events to land management procedures in the Washington Cascades, and to the relationship of sediment input and streamflow to fish habitat production. It will closely coordinate with the State of Washington timber, fish-wildlife, research/management concerns.
- Pacific Resource Research Program (PARR) for Alaska and Washington. The issues addressed by this program relate to the economic strength of industries and coastal communities dependent upon the ability of the area to provide timber, fish, wildlife, and recreation.

Pacific Southwest Station

- Termination of the Management Sciences and Pest Impact Assessment Units is scheduled for FY 1989.
- Urban/Wildland Recreation research work unit will be initiated in FY 1989.
- 8.3 percent of Station's appropriated research dollars in 1987 went for cooperative/extramural agreements; 5 percent through second quarter of FY 1988.
- The Station is exploring development of an informal program of interdisciplinary research on alternative silvicultural systems.
- "Conservation of Diversity in Forest Ecosystems"--A symposium at Davis, July 1988, sponsored by the Station's Institute of Forest Genetics.

Rocky Mountain Station

- New research initiative on cultural resources in the Southwest is under way.
- A cold water fisheries research initiative in Wyoming has also been launched.

APPENDIX G

60

Western Home Economics Research Administrators
Annual Report to Western Association of
Agricultural Experiment Station Directors
1987-88

Meeting: November 8 (prior to NASULGC), Washington, DC.

I. Activities

Research inventory was completed in draft form for review at WHERA meeting July 29.

Research priorities were reviewed. Water quality, Household Impact on Water Use was added.

These are (in alphabetical order):

Agricultural Policy and the Consumer
Elderly, the Family, and the Community
Enhancing Agricultural Profitability
Family and Community Well-Being
Food, Nutrition, and Health Status
Water Quality/Impact of Household Use.

Progress of home economics related regional projects and WRCCs was reviewed.

II. Other information

Margy Woodburn (OR) represents home economics (HERS/ESCOP) on the Committee of Nine.

Carol Makela (CO) is the home economics representative on the Western Regional Council.

Colien Hefferan, Ph.D., will attend the July 29 meeting of WHERA as recently appointed (FEB) with CSRS-NRFSS.

ANIMAL HEALTH AND DISEASE

Western Association of Agricultural Experiment Station Directors

Loren D. Koller
AAVMC Representative
July 28, 1988

- I. Why Support Research for Animal Health and Disease?
- o Approximately 50% (\$72.7 billion) of Agriculture's annual income is derived from livestock and livestock products.
 - o An estimated 20% (\$14.5 billion) annual loss in production is accountable to animal health problems.
 - o Worldwide, animals provide 12-35% of the dietary protein requirements of humans.
 - o In the United States, about 35% of the energy and 67% of the dietary protein for man comes from animals and their products.
 - o 1987 - U.S. exported \$5.6 billion worth of animals and animal products.
 - o Animals can bioaccumulate toxicants which enter the food chain.
 - o Animals can transmit zoonotic diseases.
 - o Healthy animals are content.
 - o Increased production efficiency/profit
- II. Current Status of Animal Health - Disease Research and Development
- o Annual base support for research is \$185.6 million, or a mere 1.2% of the \$14.5 billion loss suffered annually by producers
 - o Sources of funding
 - o Hatch Funds through AES
 - o Animal Health and Disease Formula Funds (1433)
 - o Special Animal Health Grants (1414C1)
 - o Competitive Grants Program (1414-2b)
 - o NIH, NSF, EPA, DOD, Industry, Foundations
 - o ARS

Animal Health and Disease
 Page 2
 July 1988

- o Progress to improve production enterprises and to combat persistent disease processes are impaired by lack of resources.
- o Advances in knowledge and application has occurred but not as rapidly as ideal which results in slowed economic growth.
- o Large ranching operation favor development and implementation of effective preventive health and disease management systems.
- o Safe food for humans is currently in jeopardy from contaminated animal products.
 - o Infectious agents
 - o Toxic substances

III. What Constitutes Animal Health and Disease?

- o Mortality
- o Morbidity
- o Inefficient conversion of feed
 - o Disease
 - o Nutrition
 - o Stress
- o Management Practices/Preventive Medicine
- o Profitability and Economic Stability of Producers
- o Higher Consumer Prices
- o Food Safety
- o Zoonotic Diseases
- o Biogenetics/Embryo Transfer
- o Biotechnology/Vaccines, Diagnostics
- o Sports Medicine/Recreation
- o Companion Animals/Wildlife/Exotic

IV. Resolution to Facilitate Progress of Animal Health and Disease Research

- o Areas of Research
 - o Improve health and productivity of livestock production enterprises
 - o Develop biotechnology to improve prevention, diagnosis, and treatment of maladies

Animal Health and Disease

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- o Assurance of food quality and consumer safety
- o Animal disease surveillance
- o Develop cost effective control and prevention programs
- o Health and welfare of companion, aquatic, zoo, and laboratory animals
- o Attain Additional Funding
 - o Hatch
 - o 1433 - Animal Health and Disease
 - o 1414 C1 - Special Grants Program
 - o 1434 - Animal Health and Disease Program
 - o 1414 2b - Competitive Grants
 - o Industry
 - o Foundations
- o Increased support for education and training of scientists for animal health and disease research.

**ANNUAL REPORT OF THE NATIONAL ASSOCIATION OF PROFESSIONAL
FORESTRY SCHOOLS AND COLLEGES**

PROGRESS OF 1989 FORESTRY APPROPRIATIONS

Congressional debate of forestry research is still taking place. McIntire-Stennis appropriations are in the President's and House bills at approximately \$13 million, while the Senate bill is \$20 million. It is unlikely that the conference will resolve this until after August.

The Competitive Grants Program in forestry was not in the Senate bill because Senator Byrd, the Subcommittee Chair, believes that the program should be under the jurisdiction of the Agriculture Appropriations Subcommittee. As a result the minutes of the Senate reflect a recommendation that the program be transferred to Agriculture and that the House numbers be used in 1989. The House funded the program at the \$3 million level, and also recommended that the program be moved to the jurisdiction of the Agriculture Appropriations Subcommittee.

The Senate restored funding for the Renewable Resources Extension Program at last year's level of \$2.765 million, but the House did not include the program in its bill.

FORESTRY RESEARCH PLANNING

NAPFSC in cooperation with the Cooperative State Research Service and the U.S. Forest Service is in the process of developing a research planning document that identifies critical research issues in forestry. This document will be available later this year or early next year.

NAPFSC 1990 RESEARCH PRIORITIES

Representatives of Western forestry schools established 1990 research priorities at their Spring meeting in Northern Idaho. The lists below summarize the Clark Fork discussions. The first list is simply a list of the research issues considered. The second list includes issues which were ranked high in importance. In the priority issue list, the numbers in parentheses indicate the relative rank of each issue. For example, "stream side management" is ranked at 140 and "long term productivity of forests" just over half as important at 75.

WESTERN NAPFSC RESEARCH ISSUES

- | <u>Issue #</u> | <u>Issue</u> |
|----------------|---|
| 1. | Atmospheric quality and forest health - Acid Rain |
| 2. | Cumulative effects on the ecosystem |
| 3. | Remote Sensing methodologies and information on resources |

4. Application of geographic information systems
5. Resource interrelationships and production functions
6. Wilderness management
7. Effective alternatives to fire for slash disposal
8. Forest user motivations and values
9. Tissue culture propagation techniques - biotech
10. Soil/water process in wildlands (forest and range lands)
11. Natural Resource related tourism
12. Contribution of natural resources to western state's economies
13. Managing the urban/forest interface
14. Affects of climatic change in forest management
15. Integrated Forest Protection (fire, insects, disease)
16. Silvicultural techniques for 2nd growth stands
17. Bio-assessment and monitoring methods
18. Evaluation of stream-side management problems and best management practices relative to water quality
19. Institutional Study of water laws
20. Sociological basis for more effective conflict resolution
21. Methodology for valuation of non-commodity goods
22. Silvics of non-traditional species
23. Long-Term forest productivity (soil chemistry, nutrient cycling).
24. Techniques for attaining and using public input/involvement
25. Social economic dynamics of resource dependent communities
26. Root rot control and timber management activities
27. International markets and trade
28. Profitability of forest industries
29. Component sensitivity of forest management models

30. Techniques for managing and maintenance of bio-diversity in forest communities (old growth)
31. Forest and Range plant improvement (genetics)
32. Improve utilization of forest products
33. Valued added opportunities and new products for forest product industries.

PRIORITY ISSUES

- | <u>Issue #</u> | <u>Issue</u> |
|----------------|---|
| 18. | Stream Side Management including fish and wildlife (140) |
| 5. | Resource Interrelationships and production functions that describe resource responses to management (105) |
| ^{1*} | Profitability of Forest Industries (New Products, International Trade, Improved Utilization) (80) |
| 23. | Long Term Productivity of forests (75) |
| 13. | Management of the Urban/Rural interface (60) |
| 30. | Bio Diversity - This includes research needs for management of old growth. (55) |
| 20. | Social-psychology of conflict resolution (55) |
| 15. | Integrated forest protection - This includes fire, insects, and disease. (50) |
| 1. | Atmospheric Quality (Acid Rain) (45) |
| ^{*2.} | Social and economic importance of natural resources to Western communities.(45) |
| 2. | Non-Commodity Valuation (40) |

^{1.} This priority was created by combining issues 27, 28, and 32.

^{2.} This priority was created by combining issues 12 and 25.

REPORT TOWESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS

Marriott Hotel
Fort Collins, Colorado
July 28, 1988

The Cooperative Extension System this past year developed eight national initiatives to help the Cooperative Extension System focus its resources on issues critical to the economic, social and environmental progress of Americans. More than 200 representatives from national organizations and agencies and more than 100 Extension staff across the nation worked in unison to identify the critical issues Cooperative Extension should address as we move toward the 21st Century. A publication was developed and a national seminar on the initiatives was held in January 1988. There are nine national initiatives including the following:

- * Alternative Agricultural Opportunities
- * Building Human Capital
- * Competitiveness and Profitability of American Agriculture
- * Conservation and Management of Natural Resources
- * Family and Economic Well-Being
- * Improving Nutrition, Diet and Health
- * Revitalizing Rural America
- * Water Quality
- * Youth at Risk

The national initiatives effort focused on program. Another major activity of the Cooperative Extension System was an Extension Committee on Organization and Policy Futures Task Force. This task force operated as a "think tank" focusing on delivery rather than content of Cooperative Extension Service programs. Although the committee was comprised of Cooperative Extension professionals, the task force received oral and written testimonies from 54 individuals, some of whom have been quite critical of Cooperative Extension in the past. A publication was developed "Extension in Transition--Bridging the Gap Between Vision and Reality." This publication included 32 recommendations for the individual state Cooperative Extension Services to consider.

Recently, the Extension Committee on Organization and Policy held a retreat for the purpose of re-evaluation of ECOP mission and structure. This is a third step of the Cooperative Extension reassessment of strengths, weaknesses and future direction.

The Western Extension Directors are pleased with the cooperation between ESCOP and ECOP on the water quality and low-input agriculture initiatives. We would welcome any recommendations from the Western Agricultural Experiment Stations to the Western Extension Directors.

RESEARCH IMPLEMENTATION COMMITTEE REPORT

RIC met Tuesday, July 26, 1988 at the Marriott Hotel in Fort Collins, Colorado. Members present were: L. J. Koong (Chair), S. D. Van Gundy, G. W. Ware, J. J. Zuiches, G. R. Evans, W. D. Carlson, R. R. Bay (for L. Lassen). Guest: John Naegele.

1.0 REGIONAL RESEARCH PROJECTS AND COORDINATING COMMITTEES SCHEDULED TO TERMINATE ON OR BEFORE SEPTEMBER 30, 1988

- * W-162 Interrelationships among Low Intensity Land Uses, Population Growth, and Public Lands in the West
- ** W-161 Integrated Pest Management for Semiarid Dryland and Irrigated Agroecosystems in the Western Region
- W- Farm Survival and Growth
- * See Agenda Item 7.1. Replaced by Ad Hoc WRCC- The Economic Future of Agriculture Near Cities: Resolving Competing Demands for Water and Land Resources
- ** See Agenda Item 7.3. Replaced by WRCC-69.

2.0 REQUESTS FOR PROJECT EXTENSIONS

No requests were submitted.

3.0 REQUESTS FOR PROJECT REVISIONS

3.1 W-126 Integration of Physiological and Morphological Criteria for Alfalfa Breeding

A project outline bearing the above title was received from Administrative Advisor J. L. Ozbun (WA) on behalf of W-126 "Integration of Physiological and Morphological Criteria for Forage Plant Breeding."

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with G. A. Mitchell (AK) to serve as Administrative Advisor.

(Action of WDA: Approved)

3.2 W-166 Characteristics and Feed Value of Barley and Western Protein Supplements for Swine

A project outline bearing the above title was received from Administrative Advisor D. M. Briggs (NM).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with R. B. Muntifering (MT) to replace D. M. Briggs (NM) as Administrative Advisor. Before the outline is submitted to the Committee of Nine, editorial changes are recommended by RIC.

(Action of WDA: Approved)

3.3 W-169 Minimizing Occupational Exposure to Pesticides

A project outline bearing the above title was received from Administrative Advisor G. W. Ware (AZ).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with G. W. Ware (AZ) to continue as Administrative Advisor.

(Action of WDA: Approved)

4.0 REQUESTS FOR ESTABLISHMENT OF NEW PROJECTS

4.1 W- Identification, Behavioral Ecology, Genetics and Management of African Honeybees

A project outline bearing the above title was received from Administrative Advisor W. W. Allen (CA-B) on behalf of Ad Hoc W- "Effects of Africanized Honey Bees on Pollination by Solitary Bees and European Honey Bees."

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with W. W. Allen (CA-B) to continue as Administrative Advisor.

(Action of WDA: Approved)

5.0 REQUESTS FOR ESTABLISHMENT OF AD HOC TECHNICAL COMMITTEES

No requests were submitted.

6.0 REQUESTS FOR WRCC RENEWALS OR EXTENSIONS

6.1 WRCC-27 Potato Variety Development

A request for a three-year extension of WRCC-27 was received from Administrative Advisor H. P. Rasmussen (WA).

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with H. P. Rasmussen (WA) to continue as Administrative Advisor.

(Action of WDA: Approved)

6.2 WRCC-37 Maximizing the Effectiveness of Bees as Pollinators of Agricultural Crops

A request for a three-year extension of WRCC-37 was received from Administrative Advisor R. D. Plowman (UT).

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with W. W. Allen (CA-B) to serve as Administrative Advisor. RIC suggests that the meetings of W-Identification, Behavioral Ecology, Genetics and Management of African Honeybees and WRCC-37 meetings be held consecutively.

(Action of WDA: Approved)

6.3 WRCC-47 Climatic Data and Analyses for Applications in Agriculture and Natural Resources

A request for a three-year extension of WRCC-47 was received from Administrative Advisor W. R. Gardner (CA-B).

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with W. R. Gardner (CA-B) to continue as Administrative Advisor.

(Action of WDA: Approved)

6.4 WRCC-60 Science and Management of Pesticide Resistance

A request for a three-year extension of WRCC-60 was received from Administrative Advisor T. R. Fukuto (CA-R) on behalf of WRCC-60 "Resistance and Resistance Management to Pesticides in Pests and Beneficial Organisms."

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with the Administrative Advisor to be appointed later.

(Action of WDA: Approved)

7.0 REQUESTS FOR ESTABLISHMENT OF NEW OR AD HOC WRCC'S

7.1 WRCC- The Economic Future of Agriculture Near Cities: Resolving Competing Demands for Water and Land Resources

A petition for a WRCC bearing the above title was received from Administrative Advisor J. M. Hughes (CO) on behalf of W-162 "Interrelationships among Low Intensity Land Uses, Population Growth, and Public Lands in the West."

RIC recommends approval of Ad Hoc WRCC- The Economic Future of Agriculture Near Cities: Resolving Competing Demands for Water and Land Resources for one year, to July 26, 1989 with the Administrative Advisor to be appointed later. RIC extends strong encouragement to the committee to focus the petition on the subjects of water and land.

(Action of WDA: Approved)

7.2 WRCC- International Marketing of Agricultural Products in the Western United States

A petition for a WRCC bearing the above title was received from Administrative Advisor D. L. Oldenstadt (WA) on behalf of the Ad Hoc WRCC- "International Marketing."

RIC recommends approval of WRCC-68 "International Marketing of Agricultural Products in the Western United States" for a period of three years, from October 1, 1988 to September 30, 1991 with D. L. Oldenstadt (WA) to continue as Administrative Advisor.

(Action of WDA: Approved)

7.3 WRCC- Coordination of Integrated Pest Management Research Programs for the Semiarid Regions of the Western United States

A petition for a WRCC bearing the above title was received from Administrative Advisor D. E. Schlegel (CA-S) on behalf of W-161 "Integrated Pest Management for Semiarid Dryland and Irrigated Agroecosystems in the Western Region."

RIC recommends approval of WRCC-69 "Coordination of Integrated Pest Management Research Programs for the Semiarid Regions of the Western United States" for a period of three years, from October 1, 1988 to September 30, 1991 with D. E. Schlegel (CA-S) to serve as Administrative Advisor. W-161 "Integrated Pest Management for Semiarid Dryland and

Irrigated Agroecosystems in the Western Region" will terminate effective September 30, 1988. RIC recommends the petition not cite specific commodities in the objectives and in the narrative regarding the management of the special project grants program.

(Action of WDA: Approved)

7.4 WRCC- U.S.-Canada Trade Agreement: Impacts on the Economy of the Pacific Northwest

A petition for a WRCC bearing the above title was received from Directors T. R. Dutson (OR) and G. A. Lee (ID).

RIC recommends approval of WRCC-70 "U.S.-Canada Trade Agreement: Impacts on the Economy of the Pacific Northwest" for a period of three years, from October 1, 1988 to September 30, 1991 with D. L. Oldenstadt (WA) to serve as Administrative Advisor. The committee is encouraged to solicit participation from other states and the University of British Columbia.

(Action of WDA: Approved)

8.0 FOLLOW-UP OF AD HOC TECHNICAL AND COORDINATING COMMITTEES

8.1 W- Effects of Africanized Honey Bees on Pollination by Solitary Bees and European Honey Bees

See Agenda Item 4.1 above.

8.2 W- Immigration Reform and U.S. Agriculture

A letter requesting participation has been mailed to all SAES Directors and the first meeting is scheduled for January 10-12, 1988 for identified participants.

8.3 W- Farm and Ranch Survival and Growth

No new project outline has been received. The committee has terminated, effective July 20, 1988.

8.4 WRCC- Effects of Mother Absence in the Development of Children

A letter was sent to all Western Experiment Station Directors in June, 1988 asking for nomination of interested individuals.

8.5 WRCC- International Marketing

See Agenda Item 7.2 above.

9.0 ADMINISTRATIVE ADVISOR ASSIGNMENTS

RIC makes the following appointments to or changes in Administrative Advisor assignments effective immediately:

- IR-6 National and Regional Research Planning, Evaluation, Analysis, and Coordination -- H. F. McHugh (CO) to replace C. E. Clark (UT).
- W-122 Improve Food Safety by Control of Natural Toxicants -- R. G. Arnold (OR) to replace C. E. Clark (UT).
- W-167 Coping with Stress: Adaptation of Nonmetropolitan Families to Socioeconomic Changes -- S. Laughlin (CA-B) to replace R. R. Rice (AZ).
- W-168 Seed Production and Quality Investigations -- R. Heimsch (ID) to replace J. L. Ozbun (WA).
- W-176 Housing and Locational Decisions of the Maturing Population: Opportunities for the Western Region -- Administrative Advisor to be appointed to replace R. R. Rice (AZ).

10.0 SECOND AND FOURTH-YEAR REVIEWS OF REGIONAL PROJECTS AND COORDINATING COMMITTEES

RIC had the benefit of historical data on personnel, funding and publications summarized from the DAL office for each review. Written RIC review comments were discussed in committee and will be sent to Administrative Advisors.

The following projects and coordinating committees appear to be progressing satisfactorily with good publication records, adequate resources and/or participation, and the committees are following their stated objectives:

<u>No.</u>	<u>Project/Committee</u>	<u>Advisor</u>	<u>Reviewer</u>
<u>Second Year Reviews</u>			
W-112	Reproductive Performance in Domestic Ruminants	Kaltenbach	Koong
W-133	Outdoor Recreation and Public Interest: Benefits and Costs in Federal and State Resource Planning	Bell	Bay
W-143	Nutrient Bioavailability--A Key to Human Nutrition	Woodburn	Koong
W-157	Development of New and Improved Crops for Water Conservation in Arid Lands	Niehaus	Ware
W-160	The Physico-Chemical Basis for Managing Salt-Affected Soils	van Schilfgaarde	Van Gundy
W-176	Housing and Locational Decisions of the Maturing Population: Opportunities for the Western Region	Rice	Zuiches
W-178	Water Management and Conservation in Western Irrigated Agriculture	Oldenstadt	Van Gundy
W-179	Marketing Alfalfa in the Western Region: Structural Analyses, Strategies and Issues	Briggs	Koong
IR-005	Research Information Using the Current Research Information System (CRIS)	Briggs	Ware
WRCC-20	Virus and Virus-Like Diseases of Fruit Crops	Nelson	Zuiches
WRCC-29	Diseases of Cereals	Mathre	Carlson
WRCC-30	Western Region Soil Survey	Lund	Carlson
WRCC-39	Increased Efficiency in Sheep Production and Marketing of Lamb and Mutton	Linton	Koong
WRCC-42	Control Rodent Damage to Hay, Range, and Grain Crops	Shoemaker	Bay
WRCC-43	Codling Moth Management in the Orchard Ecosystem	Allen	Van Gundy
WRCC-52	Food Legume Production Improvement	Heimsch	Evans
WRCC-55	Rangeland Resource Economics	Rogers	Evans
<u>Fourth Year Reviews</u>			
W-082	Pesticides and Other Organics in Soil and Their Potential for Groundwater Contamination	Kefford	Van Gundy
W-128	Water and Nutrient Management of Crops Under Micro-Irrigation	Nielsen	Ware
W-134	Quantifying the Nematode Pest Management Decision Process	Van Gundy	Ware
W-150	Genetic Improvement of Beans for Yield, Pest Resistance, and Nutritional Value	Welsh	Zuiches
W-154	Crop Productivity as Limited by the Rhizosphere and by Water and Nutrient Use Efficiencies	Gardner	Bay
W-155	Characterization and Management of Soil Water and Solutes in Field Soils	Smith	Evans
W-158	Determine the Causes and Corrections for pH Imbalance in Grapes for Processing	Lyons	Carlson
W-170	Chemistry and Bioavailability of Waste Constituents in Soils	Lee	Carlson
IR-001	Introduction, Preservation, Classification, Distribution and Evaluation of Solanum Species	Volk	Ware

RIC has specific comments to make concerning the following projects and coordinating committees:

<u>No.</u>	<u>Project/Committee</u>	<u>Advisor</u>	<u>Reviewer</u>
W-132	Genotype-Environment Interactions Related to End-Product Uses in Small Grains (2nd year)	Volk	Evans

RIC recommends that the committee consider increasing the animal nutrition component to meet projected needs for feed stuff evaluation.

W-151	Utilization of Range forage for Rangeland and Domestic Ruminant Animal Production	Dewhirst	Koong
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RIC notes a decreasing trend in participation at the annual meetings and, because of the diversity of the group, a fragmentation of research efforts.

W-153	Economic and Behavioral Factors Associated with Food Supplement Usage	McHugh	Zuiches
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RIC reviewer reports that the committee has addressed a significant health, safety, and nutrition issue. However, publication rate is slow and the scientific nature of the project needs to be reviewed.

W-171	Germ Cell and Embryo Development and Manipulation for the Improvement of Livestock (4th year)	Jones	Koong
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RIC reviewer comments that publications from the project, as reported in the annual progress report, are less than adequate considering efforts contributed to the project.

W-177	Domestic and International Marketing Strategies for U.S. Beef (2nd year)	Dutson	Zuiches
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RIC reviewer recommends that the economists and meat scientists on the committee continue to communicate with each other across their disciplines. Without close interaction, the meat scientist efforts may not correlate with the results of the social science studies.

<u>No.</u>	<u>Project/Committee</u>	<u>Advisor</u>	<u>Reviewer</u>
WRCC-50	Soil Moisture and Temperature Regimes as Predictors of Western Range and Forest Land Potentials (2nd year)	Heil	Bay

RIC notes that attendance has been dropping. The Administrative Advisor has indicated a low level of involvement from climatologists. RIC suggests that the committee consider merging with WRCC-47 in the future.

WRCC-51	Application Technology Related to Plant Protection and Pest Management (2nd year)	Studer	Van Gundy
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RIC reviewer notes a decrease in participation and the Administrative Advisor has noted concern about participation and meeting format/site.

WRCC-54	Drainage Water Management (2nd year)	van Schilfgaarde	Evans
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RIC reviewer comments that, with the additional emphasis on ground water quality, this committee should play a much more important role. More participation from SAES is encouraged as federal agencies see a great benefit from this activity. The committee could consider involvement with W-160 and W-178.

WRCC-61	Crop Production Using Living Mulches to Improve Soil and Weed Management Practices (2nd year)	Warkentin	Carlson
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RIC notes the decline of participants by one-third of the original group. The funding of "sustainable" agriculture by the USDA could give impetus for more interest in this area.

11.0 OTHER BUSINESS

11.1 Regional Research Office Report -- John Naegele

Dr. John Naegele of the CSRS Regional Research Office reported to RIC on activities and changes in the Regional Research Office in Washington, D.C.

ADMINISTRATIVE ADVISOR ASSIGNMENTS AS OF 7/26/88

ADMINISTRATIVE ADVISOR	WESTERN REGIONAL PROJECTS		WESTERN REGIONAL COORDINATING COMMITTEES	
Allen, W.W. (CA-B)	W-110	W-Bees	WRCC-43	WRCC-37
Arnold, R.G. (OR)	W-122			
* Bell, E. (FS-CA)	W-133+			
Briggs, D.M. (NM)	W-179	IR-005+		
** Brink, K.M. (CO)			WRCC-11	
Bulla, L.A. (WY)	W-172			
** Burger, R.E. (CA-D)			WRCC-59	
** Cate, R. (WA)			WRCC-Children+	
Dewhirst, L.W. (AZ)	W-102	W-151		
Dutson, T.R. (OR)	W-177			
** Ferris, H. (CA-D)			WRCC-24	
Gale, A. (WY)			WRCC-21	
Gardner, W. (CA)	W-154		WRCC-47	
* Gerloff, E. (ARS-CO)	W-164+			
** Gifford, F. (NV)			WRCC-56	
Heil, R.D. (CO)	W-160+	IR-007+	W-106	WRCC-50
Heimsch, R. (ID)	W-168			WRCC-52
** Hillman, J.S. (AZ)				WRCC-63
** Hoyt, S. (WA)				WRCC-60
Hughes, J.M. (CO)	W-133+			
Jones, B.M. (NV)	W-171			WRCC-01
Kaltenbach, C.C. (WY)	W-112			
Kefford, N.P. (HI)	W-082			
Koller, L.D. (OR)				WRCC-46
Koong, L.J. (OR)	W-173	W-174		
Laughlin, S. (CA-B)	W-167			
** Laycock, W.A. (WY)				WRCC-40
Lee, G.A. (ID)	W-170	W-147		WRCC-66+
** Linton, A.C. (MT)				WRCC-39
** Lund, L.J. (CA-R)				WRCC-30
Lyons, J.M. (CA-D)	W-158	W-164+		
** Mathre, D.E. (MT)				WRCC-29
Matthews, D.J. (UT)				WRCC-65
McHugh, H.F. (CO)	W-153	W-175	IR-006+	
Mitchell, G.A. (AK)	W-126			
Muntifering, R.B. (MT)	W-166			
** Nelson, M.R. (AZ)				WRCC-20
Niehaus, M.H. (CO)	W-006	W-157		

* USDA research administrators

** Other research administrators

+ Designates Co-Administrative Advisor in a project with Co-Advisors

ADMINISTRATIVE ADVISOR ASSIGNMENTS AS OF 7/26/88

ADMINISTRATIVE ADVISOR	WESTERN REGIONAL PROJECTS		WESTERN REGIONAL COORDINATING COMMITTEES	
Nielsen, D.R. (CA-D)	W-128		WRCC-62	
**O'Keefe, L.E. (ID)			WRCC-66+	
Oldenstadt, D.L. (WA)	W-178		WRCC-68	WRCC-70
**Rasmussen, H.P. (WA)			WRCC-27	
**Rogers, L.F. (WA)			WRCC-55	
Schlegel, D.E. (CA-B)			WRCC-67	WRCC-69+
Seiber, J.N. (CA-D)	W-130			
**Shoemaker V. (CA-R)			WRCC-42	
Smith, D.W. (NM)	W-155			
**Smith, O.E. (OR)			WRCC-69+	
**Studer, H. (CA-D)			WRCC-51	
**Thompson, J. (WA)			WRCC-23	
Van Gundy, S.D. (CA-R)	W-084	W-134		
* van Schilfgaarde, J. (CO)	W-160+		WRCC-54	
Volk, V.V. (OR)	W-132	IR-1+		
Ware, G.W. (AZ)	W-045	W-169	IR-4+	
**Warkentin, B.P. (OR)			WRCC-61	
**Weiser, C.J. (OR)			WRCC-17	WRCC-58
Welsh, J.R. (MT)	W-150			
**Wiese, M.V. (ID)			WRCC-28	
Woodburn, M.J. (OR)	W-143		WRCC-57	
Zuiches, J.J. (WA)	W-118	IR-2+	W- IMMI. WRCC-64	WRCC-Children +

* USDA research administrators

** Other research administrators

+ Designates Co-Administrative Advisor in a project with Co-Advisors

Western Agricultural Experiment Station Directors

Fort Collins, Colorado

July 28-29, 1988

Committee of Nine Report

Merle H. Niehaus

The Committee of Nine met in Washington, D. C. on May 17-19, 1988. Twenty six RRF proposals were reviewed. Of these, 17 were approved, 7 were deferred and 2 were rejected.

Deferrals and rejections were for several reasons, but a major one continues to be lack of demonstrated regionality in the proposals. Some deferred or rejected proposals contain excellent science and have desirable goals with appropriate procedures; however, they are a collection of individual projects which could just as easily be done by individual stations. Perhaps more attention should be given to the decision as to whether a proposal should be for a coordinating committee as opposed to a regional project.

There were requests to extend 14 projects for one year. All were approved.

Recommendations by C/9 for off-the-top funding for IR projects are as follows:

	FY '89 Request	FY '89 Recommended Allocation	Increase Over FY '88 Budget
IR-1	141,750	138,200	4.5%
IR-2	223,000	212,000	3.1%
IR-4	371,088	352,000	4.5%
IR-5	204,400	204,400	0.0%
IR-6	200,000	200,000	0.6%
IR-7	97,748	91,748	4.3%

A motion was passed approving that the \$20,000 contingency fund should be used by the Regional Research Office to purchase state-of-the-art computer equipment to expedite the accomplishment reporting program and establish communications and information flow among CRIS, IR-5, State AESs, other partner institutions and clientele. A subcommittee was appointed for the purpose of expediting the accomplishment reporting program and computer support of the communication and information functions of the regional program.

The report of the Committee on Interregional Projects was discussed. It was decided that before C/9 could make any recommendations the report should be discussed at the regional AES meetings.

Report of the Committee on Interregional Projects

January 22, 1988

The Committee composed of W. J. Benton, E. H. Cobb, C. W. Donoho, K. A. Huston, M. H. Neufville, D. E. Schlegel, and E. M. Wilson met on Tuesday, November 24, 1987 in Washington, D. C. After examining all aspects of Interregional Projects, the Committee makes the following observations and recommendations.

I. Philosophy of IR Projects

The Committee reaffirms its belief in the continuing importance of the RRF program as a means of addressing high priority national and regional research needs. After careful examination of numerous historical documents relating to the legislative intent of the RRF and its subsequent implementation and evaluation, the Committee notes that some confusion about the role of RRF in SAES research reappears periodically. Clearly the RRF was not intended, like Hatch funds, to provide individual state stations with an annual formula allocation of resources. Rather it is a means of enabling two or more stations to join together in solving problems of common concern.

The Committee believes that the RRF continues to offer flexible approaches to regional and national research issues that should be exploited!

The Committee believes that regional issues currently are well-addressed through mechanisms established by each of the four regional associations of experiment station directors. However, the Committee believes that national priorities and responsibilities can be addressed more effectively by revamping the IR mechanism into a truly national approach by basing it on the planning mechanisms of ESCOP, NARC, and the Joint Council, or their successors.

The Committee notes that the historic "bottoms-up" approach of setting priorities from state to regional to national levels has served the nation and the agricultural research system well. The Committee developed its recommendation from this perspective.

The Committee recommends the present system of IR projects be replaced by a national system consisting of two major programs: (1) National Research Support Programs, and (2) National Research Programs.

II. National Research Support and National Research Programs

1. National Research Support Programs - programs in this category would provide broad support on selected issues to the entire research system in an ongoing, efficient and timely manner. These support programs would continue to be funded by off-the-top funding and approved for 5 year periods. Prior to the end of each 5 year period, programs would be reviewed by a review panel of administrators and peers established by CSRS and the Committee of Nine. The panel would review the programs' progress, importance, and appropriateness for continued support in the Agricultural Experiment Station System. New programs in this category would be initiated by utilizing existing mechanisms for interregional projects. However, termination or continuation at the end of each 5 year period would be recommended to CSRS by the Committee of Nine.

2. National Research Programs (5 Year Duration)

A. A New Concept: National Research Programs

A new system of national research programs is proposed to replace, over time, the IR projects having a research orientation. In this new system one new national research program would be established each year for a 5 year period. After 5 years, the first identified national research program would terminate, and a new replacement program would be established. This process would continue each year to provide a maximum of five national research programs being funded at any one time. No national research program could continue beyond 5 years. If that research effort needed to continue, it would be the responsibility of the regional associations or states to continue the research effort and funding.

B. Identification of National Research Programs

Each year one national research program would be identified through the ESCOP research planning process. A Coordinating Committee would be appointed by CSRS to develop policy guidelines, and identify specific research thrusts to be undertaken in a national research program. After approval of the Coordinating Committee plan by the Committee of Nine and CSRS, each region would use the same title as the national research program and develop regional projects which would identify the specific research objectives to be undertaken in that region. These regional research projects would follow the same approval process used for

other regional projects to assure regional association, Committee of Nine, and CSRS approval of the research to be undertaken.

C. Funding of National Research Programs

A combination of national off-the-top RRF funding by the Committee of Nine and Special Research Grants (P. L. 89-106) would be used to fund each national research program (\$1 million from each source). Each region would receive its currently allocated share of RRF funds, and 25 percent of the Special Grants Funds. Administrative cost, for any coordinator, secretaries, or travel expenses, would not exceed 10 percent of the RRF and Special Grant Funds provided to support the regional effort. At least half the funds received by each region should be used to support a competitive program to undertake the objectives of the national programs. A general administrative process would be established for use in all regions, based on the experience gained from the regional IPM programs. CSRS will evaluate the regional competitive proposals and provide these evaluations to the regional associations.

D. Benefits of the New System

- (1) It maximizes the flexibility of the RRF to address current and emerging issues.
- (2) It uses the established SAES system for research planning to identify national research programs.
- (3) It uses the established regional research approval process to make funding decisions and identify research objectives.
- (4) It strengthens the ESCOP Budget actions; emphasizes the importance of Hatch and RRF funding; and identifies Special Grants needed to match the SAES Funding.
- (5) It provides the SAES with a system for responding promptly to national research issues on a continuing basis.
- (6) It may attract additional Federal funds.

III. Recommendations for Current IR Projects

All existing Interregional Projects should continue to the end of their current approval period with the following provisions:

- (1) IR-1 and IR-2 (and their associated regional projects, NC-7, NE-9, S-9, and W-6) provide necessary support for the introduction, preservation, and utilization of plant germ plasm in Agricultural Research which needs to be continued on a long term basis and therefore clearly fit under the National Research Support Program. These projects should be combined into a national germ plasm and plant introduction research support program which would be coordinated at the national level to allow for joint planning among the 4 regions on plant germ plasm activities.
- (2) IR-4 and IR-5 fit under the National Research Support Programs as independent issues which may be continued based on periodic review by a review panel as described previously in this document. Consideration should be given to combining other pest related issues (NAPIAP and IPM) with IR-4 to form a national pesticide program in the same manner as recommended for the germ plasm program.
- (3) Both IR-6 and IR-7 have a definite research orientation (as opposed to support function). The continuation of these projects beyond their current approval period should depend upon their emerging as high national research priorities through the ESCOP planning process.

WESTERN ASSOCIATION AGRICULTURAL EXPERIMENT STATION DIRECTORS

July 28-29, 1988

USERS ADVISORY BOARD REPORT

by
Colin Kaltenbach

The Users Advisory Board held its last meeting May 16-18, 1988 at Agricenter International in Memphis, Tennessee. The meeting included a tour of the Delta Pride catfish operation near Sunflower, Mississippi. I was unable to attend this meeting, however, ESCOP was well represented by Dr. L. L. Boyd who provided old and new members of the board with briefing materials on the ESCOP planning and budget development process. Primarily through Lanny's efforts we have received an invitation to formally present the 1990 ESCOP budget to the Users Advisory Board during their meeting August 8-10 in Boston. As reported at our last meeting, I believe the Users Board has come to realize that the normal few hours spent on the budget during their February meeting is not sufficient for adequate evaluation. We did present the 1989 budget during the summer meeting last year but the interest in dealing with such matters at that time did not seem to be high. We have detected a definite change in attitude during the past year and hopefully, the upcoming presentation will stimulate discussion and interest.

WESTERN ASSOCIATION AGRICULTURAL EXPERIMENT STATION DIRECTORS

July 28-29, 1988

Animal Care Guidelines Update

by
Colin Kaltenbach

The Guide for the care and use of agricultural animals in agricultural research and teaching has been published and distributed to all land grant universities and other interested parties. Additional copies can be obtained from Association Headquarters, 309 West Clark Street, Champaign, IL 61820, at \$5.00 per copy.

All indications are that the Guide is being well received and that it is filling a definite need. This first publication was intended as an initial document and it will have to be updated and revised rather soon. The Board of Directors, Division of Agriculture, NASULGC, accepted responsibility for continued revision of the Guide; however, to my knowledge there are no specific plans to proceed at this time. It is my guess that the Experiment Station System will be asked to serve as principal actors in this endeavor.

WRAC REPORT
TO
The Western Association of Agricultural Experiment Station Directors
July 28, 1988
Fort Collins, Colorado

The Western Regional Aquaculture Consortium Board of Directors met March 29, 1988 in Seattle, Washington. The regularly scheduled meeting focused on procedures to enhance communications, representation and identification and prioritization of research and education problems.

The WAAESD Representative chaired an Ad Hoc Committee which assessed criteria for developing, reviewing and implementing the initial WRAC research and extension projects. A survey of participants indicated that communication and active participation in project development and review needs to be enhanced. The Ad Hoc Committee recommended and the WRAC Board of Directors approved the following:

- (1) The Industrial Advisory Committee be expanded to include organizations from all western states.
- (2) The Technical Committee be expanded to include a research and extension representative from each state. Dr. Ken Chew was directed to contact each state AES and CES Director for recommendations. A smaller executive committee of the Technical Committee will be designated to coordinate program activities.
- (3) A uniform procedure including a set of evaluation criteria will be used in the peer review process.
- (4) A WRAC Newsletter will be developed to enhance communication on WRAC activities and general information relative to aquaculture in the western states. The first issue has been printed and circulated.

The WRAC Director and office staff have been assigned space in the Department of Fisheries at the University of Washington. The new offices required some remodeling and new furniture. The offices should be functional by the time of this report.

Contingent upon funding levels for FY-89, there should be approximately \$200,000 available for funding new or extending existing projects next year. The Technical Committee is developing projects for consideration by the WRAC Board of Directors. If researchers or extension specialists wish to submit a proposal, please contact Dr. Ken Chew, Director of WRAC or Dr. Graham Gall, Chairman of the Technical Committee (UC-Davis).

The WRAC Board of Directors will meet in Newport, Oregon on August 3, 1988.

APPENDIX Q

88

SUMMARY OF THE WESTERN LOW-INPUT FARMING SYSTEMS RESEARCH AND EDUCATION PROGRAM

July 19, 1988

David E. Schlegel

The official announcement of this program was distributed by U.S. Mail and DIALCOM on March 31, 1988 with a closing date of June 1, 1988. All Directors of Cooperative Extension and the Agricultural Experiment Stations in the Region were sent copies of the announcement and asked to distribute it widely, both within the system and outside the system. We estimate that nearly 1500 announcements were distributed.

On April 27, Fred Poston (Director of Cooperative Extension, Washington State University), Patrick Madden, and I met to develop a draft set of seven criteria to be used for evaluating these proposals. Copies of these draft criteria were circulated to an Ad Hoc Technical Review Committee for comment and ranking. No revisions of the proposed criteria were received.

In response to the announcement, 66 proposals were received by 5:00 PM on June 1st. Two reviewers were assigned to develop a written evaluation of each proposal and all 66 of the proposals were sent by Federal Express to each reviewer on June 3, 1988. Thus, all reviewers were asked to read all 66 proposals, including 8 to 10 specific proposals which were to be evaluated in writing.

The Ad Hoc Technical Review Committee met in Reno June 15 - 16, 1988 to review the proposals. The first three hours on June 15 were spent reviewing the basis for the program and debating the ranking of criteria for evaluation. Rankings were agreed upon, none of which was dramatically higher than others. We then went through the projects asking the assigned reviewers to present their evaluations and a brief summary of the project. Those projects that were not supported by either reviewer were immediately eliminated. If one reviewer supported one and the other did not, the project remained viable until the next round. At any time a Technical Committee member could request that a project be placed on the "to consider" list regardless of the reviewers' comments. The remaining projects were again reviewed to eliminate a few more that the committee felt were not competitive in the light of the others that they had seen.

The short list arrived at by this means included 18 projects, totaling \$3.5 million. All projects on the short list were reviewed intensively. A computer-aided decision system was used to rate the quality of the proposal with respect to each criteria. The rating system went from Excellent to Above Average to Average to Below Average and Unsatisfactory. (This process took until noon on the second day.) When completed, the projects were ranked and then reexamined without reference to the numerical evaluations for subjective differences that might have been overlooked earlier.

There were no changes that resulted from that exercise. During the review process there were numerous references to budget excesses and deficiencies, but these were not a major issue in the evaluation process. Some members of the Technical Review Committee were also listed as PIs on some

proposals. It was agreed in advance that this would be allowed, but the individuals were required to leave the room before discussion of their proposals began.

The budget adjustments were made by the Administrative Council at its meeting on the following day, June 17, 1988. All members of the Administrative Council had received copies of the proposals prior to the meeting. The Administrative Council made some drastic budgetary cuts, because clearly many budgets were excessive. They also full-funded all projects for up to two years in order to make an opportunity for additional new projects next year. This was done on the basis that it did not look promising for any substantial increase in the program budget for next year.

Funded projects that anticipate a need for funding beyond the two years will have to resubmit in competition for future funding at that time. Fred Poston and I were present for the entire three days and Bob Heil was present for the second and third days. The Administrative Council felt that two important areas had not been well represented in the proposals received; 1) the animal/range area and the 2) information systems management (database). (The latter was mandated by Congress in the legislation that created the LIFSRE program.) Consequently, the Administrative Council set aside up to \$15,000 for each of these program areas to be used for the development of proposals for the next cycle.

Bob Heil and Bernie Jones were assigned as liaisons for the animal/range program and Fred Poston for the Information Systems. Two other small planning grants were awarded with instructions to develop a program that would be competitive in the next cycle. PIs were notified and the budget adjusting efforts began immediately. The Plan of Work for the Western Region was completed and sent by Federal Express to CSRS on Monday, July 11, 1988. Formal notification to successful PIs was mailed via Federal Express on July 18, 1988. This project is effective June 1, 1988.

LOW INPUT AGRICULTURE REVIEWS

The notes below summarize some of my personal reactions to the LIA process this year, and include some comments that I have received from others. The very short time frame and the fact that the guidelines for the process were continually evolving made this a difficult experience. The issues listed are not in priority order.

FORMAT: A more structured format for each proposal is needed. To the extent possible we should have the same kind of information in the same level of detail from each applicant. This would tend to improve the review process. The narrative should be extended slightly, not to exceed 7 pages plus the budget page(s), signature page(s) and principal investigator curriculum vitae. In several instances, individuals listed as cooperators were unaware that they had been listed as cooperators, and in at least one instance, did not support the research proposal. A signature page that bears the signature of all of the identified PIs and their immediate supervisors is essential. In addition, all listed cooperators must be listed and must sign off individually to insure that they really are involved. The proposal must state the role of the cooperators.

In multistate proposals, separate signature pages can be used for each state. A standard budget format is needed, as the wide variation in budgets for similar activities was a continual source of consternation to the review panel. This detracted from the technical review. Also, the absence of uniform information greatly complicated the process of informing applicants of the outcome of the review process.

PANEL MEMBERS WITH PROPOSALS FOR REVIEW: For the most objective reviews, the technical committee members should not be permitted to submit proposals for funding. Although the Committee had a strict rule about PIs leaving the room during discussion of their projects, it would be cleaner if they were not involved at all, or at least the number involved should be limited. I have dealt with panels that have had members whose proposals were to be reviewed, but never to the extent that it occurred this time. I am concerned that a large number of reviewers with a vested interest in the outcome of the review process may contribute to a group dynamic that could limit the objectivity of the panel. Limiting the panel composition to those who are not potential recipients would significantly limit the pool of reviewers. However, I think that this problem is becoming less of an issue as interest in this field grows. We will have to identify the reviewers after the proposals have been received. In spite of the concerns expressed above, I have no reservations about the projects that were funded. They were first rate projects. They were solid projects and are aimed directly at the LIFSRE goals. No obviously superior projects were overlooked in the award process.

PROGRAM ANNOUNCEMENT: The Administrative Council needs to articulate the Western Region's priorities, and these need to be clearly shown on the Announcement. Next year's Administrative Council may wish to target some specific areas of interest. Congress made a very clear statement emphasizing the development of information systems that describe in user language what has already been done by the land grant system in the area of low input agriculture. A proposal in this area must be included in the next cycle.

Another point that needs consideration by the Administrative Council is whether targets should be set for funding to non-traditional organizations and the competition for that group separated from the basic/applied research, extension and demonstration proposals. One member of the review panel expressed great frustration at having to rank projects that were totally different in a single priority listing.

REVIEW CRITERIA: These need to be spelled out well in advance. One criterium used was feasibility of achieving objectives in the time frame and budget. Implied in this was the "track record of the PI". This worked quite well for the traditional AES/CE proposals, but when projects from unusual and unfamiliar organizations were viewed, "track record" was not evaluated because no one knew anything about the PI or the organization. On the other hand, track records have been used to exclude the young scientists who have not yet established a "track record." Given the young age of many of the scientists recommended for funding in this program (assistant professor types), this would not appear to be a serious problem.

Given the enormous over subscription (\$), no project that is not rated excellent with respect to relevance to LIFSRE goals should reach the short

list (and there may be other criteria that should be handled similarly). All of the projects funded in this cycle met this criteria, but if we had continued down the list very far this would not have been true.

Additionally, no proposal that is rated lower than above average methodologically should be considered for funding. With these screens in place, selection could be made on the basis of innovation and the likelihood of significant contributions to the goals of the LIFSRE program.

GENERAL ISSUES:

1. No PI salaries for eleven month appointees.
2. It was reported to me indirectly that some technical committee reviewers were intimidated by outspoken members and opted to go along with an "extracted" consensus rather than risk a confrontation. I am investigating a number of ways of handling this problem.

ADMINISTRATIVE COUNCIL: This Council is an essential component of the program management and they did a first rate job. Fred Poston and I were present for the entire review process. Bob Heil was there for the second day. This committee followed very closely the prioritized list submitted by the Technical Review Committee. Deviations were not large, and those that were made were for good reason. In addition the Council concluded that certain important areas were lacking good proposals and took steps to insure that proposals will be available in these areas in the next cycle.

THE MOST URGENT NEED AT THIS MOMENT IS YOUR INPUT AND ASSISTANCE IN IDENTIFYING POTENTIAL TECHNICAL REVIEW COMMITTEE MEMBERS. I WOULD LIKE TO THINK THAT NEXT TIME WE CAN IDENTIFY A REVIEW COMMITTEE AFTER THE PROPOSALS ARE RECEIVED AND THEREBY EXCLUDE THOSE INDIVIDUALS WHO HAVE SUBMITTED PROPOSALS. PLEASE GIVE THIS NEED SOME CAREFUL THOUGHT AND LET ME KNOW BY TELEPHONE, LETTER OR DIALCOM. THE NEXT CYCLE WILL START FAIRLY SOON AND I NEED YOUR HELP NOW. WE ALSO NEED HELP IN IDENTIFYING PRIVATE AND NON-PROFIT ORGANIZATIONS THAT RELATE TO LOW INPUT AGRICULTURE. CONGRESS HAS MANDATED THAT THEY BE REPRESENTED IN THE DECISION PROCESS.

 LOW INPUT FARMING SYSTEMS RESEARCH AND EDUCATION

AD HOC TECHNICAL REVIEW COMMITTEE

<u>NAME & ADDRESS</u>	<u>DISCIPLINE</u>	<u>STATE</u>
D.F. Bezdicek Dept. of Agron. & Soils Washington State University Pullman, WA 99164-6420	Soil Scientist, AES	WA

Allen Bjergo Community Development Specialist Montana State - Extension Service 1018 Burlington #200 Missoula, MT 59806	Community Development,CE	MT
Wayne Burkhardt Range Wildlife and Forestry University of Nevada Reno, NV 89557	Animal/Range,AES/CE	NV
Bob Cantisano 11173 Peaceful Valley Road Nevada City, CA 95959	Private LIA Advisor, veg. crops	CA
Marshall Johnson Entomology University of Hawaii Honolulu, HI 96822	Entomology,AES	HI
Bill Liebhardt Agronomy, Extension University of California Davis, CA 95616	Agronomist,CE	CA
Edgar Michalson Dept. of Ag. Econ. & Rural Soc. University of Idaho Moscow, ID 83843	Agriculture Economics,AES	ID
Merritt Nelson Dept. of Plant Pathology University of Arizona Tucson, AZ 85721	Biological Control,AES	AZ
David Oien R.R. 3, Box 461 Conrad, MT 59425	Rancher	MT
Phil Rasmussen Soils Extension Utah State University UMC 4840 Logan, UT 84322-4840	Soil Conservation,CE	UT
Milt Schroth Plant Pathology University of California Berkeley, CA 94720	Plant Pathology,AES	CA
Marvin Shaffer Crops Res. Lab 1701 Center Ave. Fort Collins, CO 80526	ARS, systems	CO

Gayle Willett
 Agri. Economics
 Washington State University
 Pullman, WA 99164-6210

CE, Farm Management, AES

WA

Van Volk
 Oregon Agricultural Experiment
 Station
 Oregon State University
 Corvallis, OR 97331

Soil Scientist, AES

OR

AD HOC ADMINISTRATIVE COMMITTEE

NAME & ADDRESS

Robert Heil
 Agricultural Experiment Station
 Colorado State University
 Fort Collins, CO 80523

Chair, Western AES Directors

Bernard Jones
 Director, Agric. Exp. Station
 and Cooperative Extension
 Max C. Fleischmann College
 of Agriculture
 University of Nevada
 Reno, NV 89557

(Alternate for Dr. Paul Larsen,
 Chair, Western CE Directors)

Fred Poston
 Director
 Cooperative Extension
 Washington State University
 Ag. Sciences Building
 Pullman, WA 99164-6230

(CE) Administrative Advisor

Jan Van Schilfgaarde
 Associate Area Director
 Northern Plains Area
 Agri. Research Service
 2625 Redwing Road, Ste. 550
 Fort Collins, CO 80526

ARS, Associate Area Director

David Schlegel
 Assistant Director
 Division of Agriculture
 and Natural Resources
 University of California
 300 Lakeside Drive, 6th floor
 Oakland, CA 94612-3560
 (415) 987-0029

(AES) Administrative Advisor

Kay Thornley
Box 69
Davenport, CA 95017

Grower

Robert Peyton
Analyst
Division of Agriculture
and Natural Resources
University of California
300 Lakeside Drive, 6th floor
Oakland, CA 94612-3560

Administrative Facilitator

CRITERIA FOR TECHNICAL REVIEW

1. Appropriate methodology: In addition to the dissemination procedures identified in #3 below, are the research and/or educational methods proposed of acceptable quality and appropriate to the project objectives? This includes the scientific quality of the research design and the pedagogical quality of the educational approach being proposed. In other words, all methodologies, scientific, educational, demonstrative, data collection, etc. Unless these are sound, we will not achieve our goal.
2. Functional integration of multiple organizations: Research and extension should be linked. Meaningful involvement of both public and private organizations as well as farmers and farm organizations, is strongly encouraged.
3. Identification of the intended audience and dissemination procedures: Does the proposal contain a description of the dissemination procedures that will make the findings of the project readily usable to the intended audience.
4. Feasibility of attaining the objectives within the lifetime of the proposed project: Given the "anticipated difficulty" and resource requirements of the methods being proposed and the capabilities of the organization(s) submitting the proposal, what is the likelihood that objectives will be attained in the time frame proposed.
5. Regionality: Where appropriate, projects should involve participation by more than one state, or the anticipated findings should be shown to be relevant to more than one state.
6. Relevance to the Goal of the LIFSRE program: The overall goal of the LIFSRE program is to provide an abundance of food and fiber in a way that is harmless to (has minimum impact on) humans and the environment, and in a way that is sustainable for generations to come. The LIFSRE program is envisioned as enhancing the profitability, and competitiveness of U.S. agriculture while reducing the pollution of air and water supplies and the hazards to human health that are associated with excessive use of pesticides, fertilizers, and animal drugs on small, medium and large farms.
7. Systems approach: Does the proposal call for an interdisciplinary or comprehensive approach to identifying and solving problems? For example, when low-input farming systems are being developed or evaluated, the impact on the whole farm should be estimated, in terms of profitability, risk, labor and management requirements, and environmental impacts.

EVALUATE & RANK LIFSRE PROPOSALS

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!   GOAL   !
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! APPROMET !	! LIFSREGL !	! FUNCINTE !	! SYSTEMS !	! FEASOBT !	! AUDNCDIS !	! REGIONAL !
! L 0.167 !	! L 0.219 !	! L 0.117 !	! L 0.147 !	! L 0.095 !	! L 0.141 !	! L 0.113 !
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GOAL --- EVALUATE & RANK LIFSRE PROPOSALS
 ABOVE AV --- ABOVE AV
 APPROMET --- APPROPRIATE METHODOLOGY
 AUDNCDIS --- AUDIENCE DEFINED AS WELL AS MEANS OF DISSEMINATION
 AVERAGE --- AVERAGE
 BELOW AV --- BELOW AV
 EXCELLENT --- EXCELLENT
 FEASOBT --- FEASIBILITY OF ACHIEVING OBJECTIVES IN TIME FRAME AND BUDGET
 FUNCINTE --- FUNCTIONAL INTEGRATION OF VARIOUS ORGANIZATIONS
 LIFSREGL --- LIFSRE GOALS
 REGIONAL --- REGIONALITY OF PROPOSED PROJECT
 SYSTEMS --- SYSTEMS APPROACH TO LIFSRE
 UNSATISF --- UNSATISF

L

INTER-REGIONAL POTATO INTRODUCTION PROJECT (IR-1)
to the
WESTERN DIRECTORS ASSOCIATION

Title: Introduction, preservation, classification,
distribution, and evaluation of Solanum species

Duration: October 1, 1984 - September 30, 1989. Project to
be rewritten by December 15, 1988 to begin
approval process.

Meeting: June 22, 1988, Denver, Colorado

Activities:

1. Physical facilities - Sturgeon Bay, WI. Storage, office,
and herbarium space completed (900 ft²). Boiler and steam
line problem remedied.
2. Solanum stock introductions - 104 new true seed
introductions added to collection. Twenty-three (23)
clones received as quarantine releases.
3. Preservation of stock - Tuber increases for about 1450
clonal stocks. Seed increases of 306 accessions, 75% more
per year than the previous five years. Research on seed
increase techniques, reuse of potting soil, and
fertilization techniques. Wrote complete procedures
manual.
4. Classification - Created database for collection.
Taxonomic determination made on 1200 accession plantings.
Somatic chromosome numbers determined on 340 accessions.
5. Distribution - Materials (18,083 units) sent to 28 states
and 18 countries. Distributed list of 260 accessions which
represents 86 species mailed to over 350 potato workers.
6. Evaluation - Integrated inventory lists into GRIN
(Germplasm Resources Information Network, USDA). Screened
stock for resistance to Erwinia and Rhizoctonia.
7. Introductions - Since 1932, 174 of the 179 potato varieties
released in the U.S. contain germplasm from two or more
foreign introductions.

Work Planned:

1. Continue update on IR-1 accession database
2. Research on seed increase techniques
3. Establish a working herbarium
4. Build better seed dryer
5. Continue preservation, classification, distribution, and evaluation program

Actions Endorsed and Information:

1. Bob Hanneman - Research geneticist increase emphasis on enhancement (90%).
2. S. Slack who has conducted pathogen moved to Cornell. Pathogen testing program will remain in Wisconsin and not transfer to Cornell.
3. Budget approved: \$138,200.
4. Plant exploration to Mexico in 1988.
5. Collection is large. Need breeders to help identify ones to be maintained.
6. Increasing requests by miscellaneous individuals/groups requesting germplasm.

Committee of Nine Report on IR Projects:

All existing Inter-regional Projects should continue to end of their current approval period with the following provisions.

- (1) IR-1 and IR-2 (and their associated regional projects, NC-7, NE-9, S-9, and W-6) provide necessary support for the introduction, preservation, and utilization of plant germplasm in Agricultural Research which needs to be continued on a long-term basis and therefore clearly fit under the National Research Support Program. These projects should be combined into a national germplasm and plant introduction research support program which would be coordinated at the national level to allow for joint planning among the four (4) regions on plant germplasm activities.

- (2) and (3) refer to other IR projects.

Notable Research contributions (Western Region) using Solanum species accessions:

Alaska: Developed varieties with frost resistance for S. acaule

California: Characterization of the genetics of 2n egg formation; linkage studies of marker genes support efforts to construct a genome map for potato.

Colorado, New Mexico: Consistent high levels of Colorado potato beetle resistance are found in S. jamesii native to southwestern states.

Idaho: Discovery of resistance to a new threatening nematode M. chitwoodi in S. sparsipilum. S. andigena, S. phureja, and S. stenotomum derivatives are shown to exhibit superior insect and virus resistance. Identification of germplasm with resistance to bacterial soft rot. Identification of sources of resistance to early blight, Verticillium wilt, Colorado potato beetle, and potato leaf roll virus.

Washington: Characterization of nematode resistance in wild species accessions. Germplasm enhancement aimed at putting desirable characteristics of cultivated and exotic wild relatives of the potato into a form usable to breeders.

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IR-1.doc

July 25, 1988

APPENDIX S

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IR-4 REPORT
TO THE
WESTERN ASSOCIATION OF EXPERIMENT STATION DIRECTORS
FT. COLLINS, COLORADO
JULY 28, 1988

1. IR-4 celebrated its Silver Anniversary on March 8, at USDA Administration Bldg, Patio Area, Washington, DC. Speaking guests were Congressman George Brown, California, Patrick Jordan, Terry Kinney, Douglas Campt (Dir. Off. Pest. Prog.), Jack Early (NACA). Dr. Virgil Freed, Oregon State Univ., received the first IR-4 Meritorious Service Award.
2. IR-4's major problems are (a) inadequate funding, (b) the inability of many university labs to meet federal Good Laboratory Practice requirements (GLP), and the prospect of losing many minor use pesticide registrations as EPA proceeds with re-registration.
3. In calendar year 1987 and first 2 months of '88, efforts of IR-4 resulted in pesticide clearances representing 121 tolerances: 8 fungicides, 24 herbicides, and 48 insecticides & miticides. Additionally 41 tolerances were granted based on crop definitions. IR-4 accounted for more than 50% of new use tolerances for raw agricultural commodities during 1987. There are now 3,676 food-use requests in their computer, up 412 over last year. It is quickly obvious that this is an endless process, and there is no possible chance that all these needs can be met by the limited staff and facilities of IR-4.
4. IR-4 has had 5.5 years experience registering biorationals. These biorationals include microbial pest control agents, (bacteria, fungi, viruses) and biochemical agents such as insect growth regulators and pheromones. During this time the project has received 29 clearance requests and 19 biorational research proposals. Of these, 3 registrations have been granted, the codling moth granulosis virus, Bacillus popilliae on pastures and rangeland for Japanese beetle control, and an oriental fruit fly attractant.
5. Animal drugs--since 1987 IR-4 received 161 animal drug requests submitted by universities, animal producer organizations, and govt agencies. Approximately 70% of the new requests are considered valid projects to be funded.
6. Ornamental minor uses--in the last year 229 ornamental registrations were obtained through IR-4 efforts. Because only minimal data are required for pesticide registrations on ornamentals, it is obviously the most successful of the 4 categories.
7. EPA's mandated re-registration of pesticides continues to affect the progress of IR-4 in obtaining clearances of minor use pesticides for older chemicals. Again, certain tolerances requested by IR-4 have not been established because EPA has indicated that existing toxicology or methodology data bases were not adequate to support new tolerances at that time.

G. W. Ware

**IR-6 REPORT TO
WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS
July 1988 C. E. CLARK**

Title: National and Regional Research Planning, Evaluation, Analysis and Coordination

FY'88 Budget: \$198,800

FY'89 Budget: \$200,000 (Requested)

Stations Participating: University of Vermont, University of Georgia, University of Florida, Cornell University, Rutgers University, University of Idaho, Virginia Polytechnic Institute & State University, University of Wyoming and University of Minnesota.

Research Progress:

1. Sponsored a national conference on evaluating agricultural research and productivity.
2. Published reports on:
 - a. "The Benefits and Costs of U.S. Consumers in Various Income Categories of Investment in Agricultural Research"
 - b. "Why Do We Need New Technologies in Time of Agricultural Surpluses"
 - c. "Public Research in Agriculture, Forestry and Home Economics: Its Role, Its Benefits and Selected Issues"
3. Other Planning and Coordination Activities
 - a. Planning and Coordination with International Center for National Agricultural Research Systems (ISNAR) for improving national and international systems of agricultural research evaluation.
 - b. Coordination with regional research project on Economic Implications for Agriculture of the Emerging Biotechnologies (NC-142).
 - c. Liaison with the participation in NCR-133, Regional Research Evaluation and Analyses Research Committee on Home Economics Research Evaluation.
4. Examples of Specific Research Evaluation and Analyses
 - a. Rate-of-returns to agricultural research, 50 percent for all wheat research and almost 100 percent for varietal development research.

Page 2
IR-6 Report

- b. Productivity gains from adopting new technology, between 1974 and 1983, were about 15 percent for corn and soybeans, 6 percent for wheat and 10 percent for cotton.
 - c. Effort devoted to maintenance research for all commodities is about 35 percent or \$300 million annually. Barley, wheat and vegetables is highest (40%) with livestock lowest (21%). Maintenance research itself has an annual rate-of-return of about 55 percent.
 - d. Annual rate of return for marketing research on citrus and winter tomatoes is about 50 percent.
5. Examples of research underway:
- a. Value added-research relationships.
 - b. Relationships between public and private and basic and applied research.
 - c. Economic impacts of emerging biotechnologies.
6. IR-6 is interested in more participation from the Western Region. Interested directors or scientists are invited to contact Burt Sundquist, project coordinator, for details.

Report of
NATIONAL ATMOSPHERIC DEPOSITION PROGRAM (IR-7)
TO
WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

R. D. Heil
July 28, 1988

IR-7 currently includes activities of 4 committees; namely:

1. Network site and criteria
2. Methods of development and quality assurance.
3. Data management and analysis
4. Effects research

The "single lab" issue which I reported on a year ago has been resolved. Only one lab is being utilized which is in the best interest of the project for maintaining integrity and quality of data.

Progress of this project is excellent. Currently, there are 203 sites involved in the network. Project participants published 82 papers in 1987. The group held a very successful annual meeting in Minneapolis November 3-5, 1987.

REPORT TO WESTERN DIRECTORS

July, 1988
Filmore Bender

Historically, museum exhibits have been focused on objects, rather than on ideas. The exhibit "The Search for Life" is an innovative type of exhibit that focuses on ideas. In this case, the contribution that science makes to agriculture and medicine and through agriculture and medicine to American well-being. It uses the history of the science and selected historical objects to convey this complex set of ideas.

At the National Museum of American History, the response of the visiting public has been overwhelmingly favorable. During its initial run, more than forty thousand individuals viewed the exhibit. The exhibit was able to communicate to different individuals at different levels. Visitors without any background in the science or of the role that agriculture plays in American life were able to acquire a basic understanding as well as an increased awareness of and interest in the topics. For these individuals, the brochure and the recommended additional readings will help them develop the knowledge base and understanding that they should possess. At the other end of the knowledge spectrum, leading scientists visited the exhibit and praised it for its ability to convey the key points of these challenging and complicated topics to a broad audience.

As an indication of the acceptance of this exhibit by the scientific community, it is important that the first stop on the national tour will be at Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. It is planned that the exhibit will be the centerpiece of the Cold Spring Harbor Laboratory's new DNA Learning Center. It will remain at this location for twelve to fifteen months as an integral component of the outreach program of Cold Spring Harbor Laboratory. The dedication of their new DNA Learning Center and the exhibit "The Search for Life" will take place on September 18, 1988.

Currently, we are making plans for collaboration between the Cold Spring Harbor Laboratory and the Land-Grant Universities of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Pennsylvania, in this exciting program of public education. With the ColdSpring Harbor Laboratory venue in place, plans are continuing for the remainder of the national tour.

Peter Wexler, Harold Closter and Filmore Bender are contacting organizations and museums that have expressed an interest in hosting this exhibit. The California Department of Education has expressed its desire to have the exhibit on display at four locations within the state during a twelve month period. Because of the intense interest in this exhibit, we are working on plans for a three year tour. In order to defray some of the costs associated with such a national tour, Filmore Bender, Harold Closter and J. P. Jordan will be contacting corporations for financial support.

This exhibit has increased the awareness of the importance of science in agriculture as well as the importance of the contribution that agriculture makes to American well-being within the National Museum of American History.

Consideration is now being given to a new exhibit that will focus on food. In addition, the National Museum of American History is currently recruiting a curator of Life Sciences, whose primary interest would be in the topic area presented in the museum exhibit "The Search for Life."

Our effort to design, develop and construct the museum exhibit "The Search for Life" has resulted not only in the development of an exhibit that tells an important story, in an exciting and compelling manner, but has also accomplished the following:

1. New methods of museum exposition were developed and tested. The use of 35mm slide projectors, television monitors and hands on models coupled with historical objects has enabled a broad spectrum of the population to understand and appreciate a complex and challenging component of American life.
2. The development of the exhibit "The Search for Life" has awakened within the National Museum of American History, Smithsonian Institution an interest in an area of science history which had not been adequately covered before. If the search for a Curator of Life Sciences is successful, the permanent addition to the staff of such an individual will ensure that the subject matter covered in the exhibit "The Search for Life" will continue to have a high level of visibility within the Smithsonian Institution.
3. The presence of the museum exhibit "The Search for Life" within the National Museum of American History has caused other curators to reexamine the role that food and agriculture play in American life. Discussions concerning the possible development of an exhibit on food in America is but one example of this change. The grant from the W. K. Kellogg Foundation for the museum exhibit "The Search for Life" has not only had an immediate impact but will clearly have a continuing impact on the public's understanding of science in agriculture.

As a means of enabling each visitor to possess a tangible reminder of the exhibit and its subject matter, a scarlet, hybrid tea rose has been registered with the name "Search for Life". We will have 1,000 of these roses available for planting in 1989. Individuals will be able to purchase these roses at \$12.50 each. Members of the Search for Life Association, as well as other financial contributors, will receive complimentary roses.

The Search for Life Tour Possibilities

A Group - confirmed location:

Cold Spring Harbor Laboratory
Cold Spring Harbor, New York

B Group - we have a letter of intent - they have seen the exhibit and have said they want it, have not negotiated fees:

Dr. Paul Hanle
Maryland Science Center
601 Light Street
Baltimore, Maryland 21230
(301) 685-6873

Mr. Tony Mitchell
Trammel Crow Company
2001 Ross Avenue
Suite 370
Dallas, Texas 75201-2997
(214) 979-6440

Thomas Harrington
Director/Curator
The Agricultural Museum of the State
of New Jersey
P.O. Box 1978
New Brunswick, New Jersey 08903
(201) 923-9090

C Group - they have said they want the exhibit, have not negotiated fee.

Ms. Claudia Pratt
Exhibits Coordinator
Heritage-Hjemkomst Interpretive Center
202 1st Avenue North
Moorhead, Minnesota 56560
(218) 233-5604
Would like exhibit Fall 1990.

Tom Sachse
Department of Education
State of California
721 Capital Mall
Sacramento, California 95814
(916) 324-7187

Would like exhibit to come to four cities in California,
Los Angeles, San Francisco, Fresno, San Diego.

D Group - have expressed strong interest by phone or in person.

Mr. John Betthausser / Margret Kadoyama
 California Academy of Sciences
 Exhibits Department
 Golden Gate Park
 San Francisco, California 94118
 (415) 750-7318
 Interested, talking with Executive Director, would be a part of California tour.

Mr. Ross McGuire
 Director
 Fresno Metropolitan Museum
 1515 Van Ness Avenue
 Fresno, California 93721
 (209) 441-1444
 Met with Filmore, interested. Would be a part of the California tour.

Mr. George Gardner
 Exhibition Department
 American Museum of Natural History
 79th and Central Park West
 New York, New York 10024
 (212) 769-5000
 Interested, would like to talk about the possibility.

Mr. Charles Howarth
 Science Tech Center
 c/o Warner Lambert
 201 Tabor Road
 Morris Plains, New Jersey 07950
 (201) 540-4325
 Museum will not open until 1990 or 1991, but would like to talk about possibility.

Mr. Jeff Horning
 Museum of Science and Industry
 4801 East Fowler Avenue
 Tampa, Florida 33617
 (813) 985-5531
 Promising, would like more information sent.

Ms. Teddy Kohrt
 Science Museum of Minnesota
 30 East Temp Street
 St. Paul, Minnesota 55101
 (612) 221-7187
 Would be interested in later part of tour, continuing conversation.

D Group (Continued)

Ms. Jane Crocker
 The Museum of Science
 Science Park
 Boston, Massachusetts 02114-1099
 (617) 723-2500
 Would seem to fit.

Mr. Frank Sysenas
 Chicago Museum of Science & Industry
 57th Street and Lake Shore Drive
 Chicago, Illinois 60637
 (312) 684-1414
 Interested, have sent complete package to him.

Mr. Terry Boykie
 Education and Exhibit Department
 New York Hall of Science
 47-01 111th Street
 Corona, New York 11368
 Interested, would like to see photographs.

Mr. John Voskuil
 Ontario Science Center
 770 Don Mills Road
 Don Mills, Ontario Canada M3C 1T3
 Interested, would like to see photographs.

Mr. Henry Robitaille
 The Land
 EPCOT Center
 P.O. Box 40
 Lake Buena Vista, Florida 32830
 (305) 827-7256
 He is very interested, saw exhibit, will need to interest
 Disney- California. Sent letter with full package to
 Disney.

Mr. Kevin Twohig
 The Spokane Opera House
 West 334 Spokane Falls Boulevard
 Spokane, Washington 99201
 (509) 456-6000
 Very interested, building new agricultural center, needs
 to know about costs.

THE CHRONICLE OF HIGHER EDUCATION
March 9, 1988

History: Curatorial position at the Smithsonian Institution's National Museum of American History in the history of American science, with emphasis on the history of the life sciences since 1880. Responsibilities include research, interpretation, publication, exhibition, and collections development in the history of life sciences. Candidates must provide evidence of professional historical research in the intellectual and social history of the life sciences. Applications accepted immediately, open until suitable candidate is identified. Direct inquiries and requests for Announcement Number 88-117F to Dr. Ramunas Kondratas, National Museum of American History, Room 5000, Smithsonian Institution, Washington, D.C. 20560; (202) 357-2145. An equal opportunity, affirmative action employer

Search for Life Association Membership

Patron

Maryland

New Jersey

Pennsylvania

Sustaining Member

California

Florida

Georgia

Illinois

Indiana

Iowa

Michigan

Minnesota

New York - Ithaca

Oregon

Wisconsin

Member

Arkansas

Colorado

Connecticut-Storrs

Connecticut-New Haven

Delaware

Hawaii

Idaho

Kansas

Kentucky

Louisiana

Maine

Massachusetts

Mississippi

Montana

Nebraska

New Hampshire

New Mexico

New York - Geneva

North Carolina

Ohio

Oklahoma

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Vermont

Virginia

Washington

West Virginia

Wyoming

National Exhibit At Cold Spring Labs

The National Museum of American History of the Smithsonian Institution in Washington D.C. will tour its exhibit *The Search For Life: Genetic Technology in the Twentieth Century* to Cold Spring Harbor Laboratory as the first event of its upcoming centennial celebration.

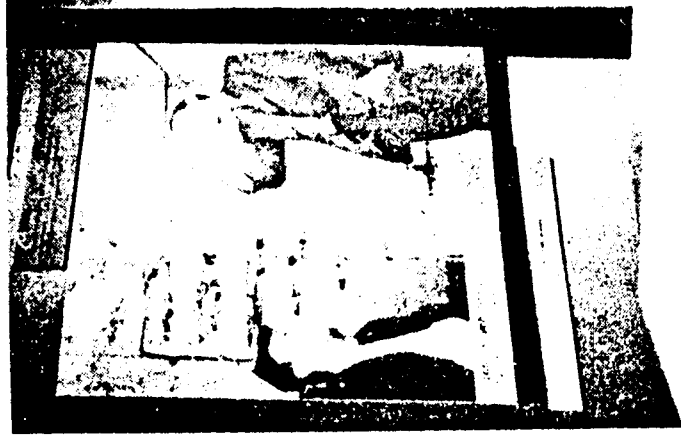
The exhibit will be on display at the Laboratory's new DNA Learning Center on Main Street in Cold Spring Harbor Village from September 1988 to October 1989.

One of the largest and most up-to-date museum exhibits on modern biology in the United States, *The Search For Life* traces the quest to understand the genetic and molecular basis of life, which culminated in the recombinant-DNA revolution. The exhibit also confronts visitors with the promise and controversy of man's increasing ability to precisely manipulate the genetic code.

Cold Spring Harbor Laboratory was closely involved in the development of the exhibit, supplying historical artifacts, photographs, and video footage. Key discoveries of four Cold Spring Harbor staff members are specifically highlighted.

The 2,500 square foot exhibit features historical objects, a synchronized slide show, video monitors, and interactive displays. The entire program including narration and key lighting used to guide the visitor through the exhibit - is computer controlled. The displays are contained within a futuristic framework of aluminum girders whose lattice-work suggests the DNA helix.

Within the Learning Center, the exhibit will be situated adjacent to a teaching laboratory where visitors can



COMING SOON: The Smithsonian exhibit *The Search For Life* will be on display at Cold Spring Harbor Laboratory's new DNA Learning Center on Main Street in Cold Spring Harbor Village beginning in September 1988. The exhibit follows the history of genetics and molecular biology, including the discovery of the structure of DNA (deoxyribonucleic acid) by James D. Watson (above, left), director of the Laboratory.

actually perform experiments with DNA. The Learning Center has committed to develop educational materials to expand and interpret the information in *The Search For Life* exhibit. The opening of the exhibit will also coincide with the dedication of the DNA Learning Center. This will help establish the Center as the nation's first institution devoted solely to biotechnology education. After the exhibit leaves Cold Spring Harbor, the vacated space in the Learning Center will house a permanent exhibit and large-screen auditorium.

To date, grants for development of the Learning Center and installation

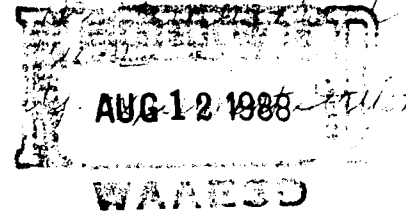
the exhibit have come from the Richard Lounsbery Foundation (\$30,000), the J.M. Foundation (\$25,000), and Brinkmann Instruments (\$10,000). In addition, a legislative grant of \$75,000 for the exhibit was included in the 1988-89 New York State budget at the request of Senator Ralph Marino.

The Search For Life exhibit was produced by Peter Wexler, Inc. of New York City, with additional assistance provided by the University of Maryland Agricultural Experiment Station. Funding for the production was provided by a generous grant from the W.K. Kellogg Foundation.

WRDC



Western Rural Development Center
Oregon State University
Covallis, OR 97331
(503) 754-3621



A

regional August 8, 1988

center

for

**TO: Western Agricultural Experiment Station Directors
Western Extension Service Directors**

applied

social science

SUBJ: Follow up to oral report in Ft. Collins

and

community

development

cooperating

with

Land Grant

Universities

in

The WRDC Board of Directors met in Ft. Collins and received the attached summary of WRDC activities. There is a mixture of research and Extension activities, but historically you have shown interest in the entire program.

Alaska

Arizona

California

Colorado

Guam

Hawaii

Idaho

Montana

Nevada

New Mexico

Oregon

Utah

Washington

Wyoming

The Board and Advisory Committee both encouraged more consistent use of the Western Wire, the WRDC newsletter, to communicate programs with Directors. The response has been supportive of the three issues a year of the Western Wire. You will receive a special edition soon.

As outlined in Ft. Collins, the focus of WRDC research and Extension is on jobs and income, capability of local government and effectiveness of local leadership. This focus is very close to the national agenda in Land Grants/USDA for rural development.

The major limiting factor to providing effective assistance to more rural communities is the lack of Extension FTE to deliver the programs. The shortage in research capability is usually felt in 5 to 10 years and I believe we will feel the lack of scholarship in the early 1990's. We need more people in both Land Grant functions.

Yours Truly,

**Russell C. Youmans
Director**

RY:nb
enclosure

**Western Rural Development Center
Summary of Activities
July 1988**

WESTERN RURAL DEVELOPMENT CENTER
Oregon State University, Corvallis OR 97331

Western Rural Development Center
Summary of Activities
July 1988

Getting Down to Business Project leaders: Marlon Bentley and Barbara Rowe, Utah State University. This is a one-week "train the trainers" workshop for Extension faculty and, as space permits, other professionals who work with rural communities and small business owners/operators. It is scheduled September 26-30 in Salt Lake City, Utah. Those attending will hear summaries or portions of longer workshops on community economics and small business topics, and receive a notebook of materials to help them conduct workshops on these topics. They will learn techniques for improving business management decisions and practices, and develop understanding and skill in analyzing and assessing rural communities and their economies. They will develop programs of work to use this knowledge in their communities. A team of workshop leaders met in Tucson, AZ March 24-25, 1988, to finalize workshop plans. This project has generated much interest, and we expect a full house (80-100 participants) in Salt Lake City.

Community Economic Development Evaluation This is a multi-phase WRDC project to help evaluate economic development efforts. One phase involves creating and publishing an annotated bibliography outlining factors that impact community job growth. John Pankratz, Oregon State University, drafted the bibliography. This summer Doug Bradley, University of Wisconsin, will write a 3-4 page article summarizing the findings for the general public. WRDC will publish the article. A second phase involves designing two economic development workshop evaluation instruments: one for participants to complete immediately after a workshop; the other a mail survey of participants one year after the workshop. Ann Meadowbrook, WRDC, drafted the instruments. One draft was successfully pretested immediately after a workshop in Gold Beach, OR. Final drafts of both instruments will be available to workshop leaders later this summer. A third phase of this project will examine the effectiveness of various intervention processes.

Community Venture Capital Project leader: Dave Sharpe, Montana State University. The workshop "A Small-Scale Venture Capital Fund for Our Community?" attracted 70 persons from Montana, Idaho and Washington May 9-11, 1988, in Spokane, WA. Speakers had first-hand experience with venture capital. They discussed practical aspects of start-up financing — the opportunities and the pitfalls. WRDC hopes to eventually offer a publication based on workshop materials.

Western Rural Development Center
Summary of Activities
July 1988
Page 2

Local Government Education Project leader: Dave Sharpe, Montana State University. In December 1986 a workshop was held in Great Falls, Montana designed to familiarize newly-elected county commissioners, as well as other local officials, with issues facing them as they take office, and to provide them with the skills to successfully meet these challenges. More than 115 individuals attended the Montana event, and 140 participated in similar workshops held in Albuquerque and Las Cruces, New Mexico during March, 1987. The training is now a popular annual event in Montana. In December 1987, participation was limited to the first 120 registering, and a waiting list was maintained. Faculty involved in presentations include six Extension personnel and twenty-one community leaders. This year the materials were adapted to reflect geographic, cultural, demographic, and political conditions of specific community systems and were used with municipalities in Guam (March 1988), with community leaders in Phonpel, Micronesia (March 1988), and in Alaska (January 1988). These programs led to Montana Extension sponsoring a training in "cut-back management" for 20 county agents, and to the formation of a Montana Government Education Council.

This project also involves strategic management workshops. A strategic management training for Extension staff was held in September 1987, conducted by Sharpe; Kelsey Gray and Ron Faas, Washington State University; and Beal Gomez, New Mexico State. The team also offered "real" planning sessions through the Anaconda Local Development Corporation and The Fort Belknap Tribal Council in Montana. The Fort Belknap work resulted in the tribe adopting the goals identified at the meeting. Tribal members are now working on an implementation plan.

In-Reach for Indigenous People Project leader: Francis Mitchell, University of Alaska. Emphasis of the project is to recruit, train, and establish key individuals among indigenous populations to serve as "in-reach" personnel, who would recognize educational needs within communities that can be addressed by Extension. A planning meeting, held in June 1987 to coincide with the International Indigenous Education Conference in Vancouver, B.C., was attended by one representative from Extension and one from the dominant indigenous culture in Alaska, Guam, Hawaii, Montana, and California. WRDC provided funds for travel and conference expenses. WRDC also covered expenses for a successful pilot "Training in Cross-Cultural Partnership Development" workshop in Hilo, Hawaii June 15-17, 1988. Participants included Extension Service personnel in Hawaii and representatives of the indigenous population. The workshop increased cross-cultural understanding, which hopefully will result in more effective use of the Extension Service by indigenous Hawaiians.

Western Rural Development Center
Summary of Activities
July 1988
Page 3

Revitalizing Rural America The Extension Committee on Organization and Policy has identified this as a priority program for the fiscal period 1988-91, and the four Rural Development Centers are responding separately and in concert. They have co-sponsored two national conferences: "Alternative Farming Opportunities for the South" and "National Rural Entrepreneurship Symposium." Proceedings for both of these well-attended conferences are available from the Southern Rural Development Center. The Council of State Government has established a National Agriculture and Rural Development Center and a working relationship is beginning to emerge between the four Centers and the CSG group. NASULGC recommended a \$10 million line item for the 1988 Extension budget, which will increase the ability to deliver existing programs to more communities.

Trade-Area Analysis Principal investigator: Tom Harris, University of Nevada, Reno. Rural counties have historically lost retail and service sales to large, metropolitan counties. These leakages reduce the size of a county's export-base multiplier because the spending those sales generate occurs outside the county. The Bureau of Labor Statistics projects that almost 75 percent of all jobs created between 1982 and 1995 will be in the commercial sector; therefore, economic development must not only encourage new industry, but also emphasize development of commercial enterprise. Trade-area analysis is one method for understanding the activity in a community's commercial sector. Beginning in January 1986, with financial assistance from WRDC, Tom Harris developed data on trade-area capture and pull factor for each county in the Western region. To receive a copy of the analyses for the counties in any of the Western states, contact the Center or the state's CD leader.

Variation of Consumer Prices Among Small Towns in Selected Parts of the Western Region Principal investigators: Paul Barkley, Washington State University; Will Rochin, University of California; and Ed Bradley, University of Wyoming. This study, which began in September 1986, is to determine the relationship between town population and local consumer prices, and how those retail prices are set. New inhabitants of rural towns often travel to distant cities to make even simple purchases, laboring under the impression that local prices are much too steep. Local leaders in these small communities need information about comparative prices so they can effectively advertise. Comparative prices were gathered on 500 items in 22 Washington towns, 23 Wyoming communities, and 18 towns in California. A rough manuscript reporting Wyoming data is now available, and draft reports of California and Washington data should be ready in August. Each state will prepare a publication for public use, and investigators plan to collectively report the data in a WRDC publication.

Western Rural Development Center
 Summary of Activities
 July 1988
 Page 4

Potential for High-Technology Industries in Non-Metropolitan Areas

Principal investigator: David Barkley, University of Arizona. Funded by the Center in 1985, this project included analysis of 1975 and 1982 county-level employment data, surveys of manufacturing firms in the eleven non-metropolitan Western states, and an econometric analysis to determine the characteristics of non-metropolitan counties which have successfully attracted high-technology manufacturing. Results of this study are being prepared for publication and will be available from the Center later this year.

Rural Education Budgets Principal investigator: Joe B. Stevens, Oregon State University. A project to identify the determinants of voter approval of tax measures to support primary and secondary schools. Variables examined include economic factors (median household income in the school district, unemployment rate at the time of the election); demographics within the school district (median age, educational levels, students per household); voting factors (voter turnout, mail vs. poll booth ballot, pre-election efforts to inform voters on the issue, superintendent's tenure in the district); and financial resources (existing tax base, state and federal assistance, local carryover funds). A WRDC publication reporting results is planned.

National Rural Studies Committee Project leader: Emery Castle, Oregon State University. The Western Rural Development Center serves as administrative headquarters for the committee, which was established by a five-year, \$836,000 grant from the W. K. Kellogg Foundation. This inter-disciplinary group is investigating ways rural communities have been affected by social, economic, political and environmental events in the past decade, and will identify research and educational opportunities in rural studies. Their first meeting was May 24-26 in Hood River, OR. The second meeting is scheduled for Greenville, Miss. in June 1989. Committee members are Julian Wolpert, Woodrow Wilson School of Public and International Affairs; Edwin Mills, Northwestern University; Edward Bergman, University of North Carolina; Gene Summers, University of Wisconsin; Bruce Weber, Oregon State University; David Brown, Cornell University; Pierre Crosson, Resources for the Future; Ronald Oakerson, U.S. Advisory Commission on Inter-Governmental Relations; Sonya Salamon, University of Illinois; and Carol Stack, Center for Advanced Study in the Behavioral Sciences.

Average Population Size Analysis for Selected Western U.S. Retail and Service Establishments Principal Investigator: Robert Coppedge, New Mexico State University. The goal of this project is to use 1985 census computer tapes of county business patterns to discover the order new businesses develop as a community grows. The data covers eight Western states:

Western Rural Development Center
 Summary of Activities
 July 1988
 Page 5

Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. Current plans call for in-depth data analysis for New Mexico, with slightly less detailed information for the other participating states. Work on this project is on hold due to the planned future availability of the IMPLAN database for Extension Service use. IMPLAN (for Impacts of Planning) is a computer model developed by and for the U.S. Forest Service to analyze the impacts of Forest Service plans on local communities and economies. Coppedge hopes to integrate the project data base into IMPLAN. Forest Service personnel will train several Extension staff in IMPLAN use at a meet at Fort Collins, CO, in August 1988.

Building the Economic Viability of Small Cities Project Leader: Clark Goecker, League of California Cities. This project will help cities of less than 15,000 enhance their economic viability through work with three clusters of cities. Each cluster will consist of 3-5 small cities with similar economic problems. Clusters will form in 1) Northern California/Southern Oregon, 2) Central California, and 3) the Imperial Valley (CA)/Arizona. There are two phases to this project: Initially it will involve a needs assessment in each cluster area, and identification of resources available to help enhance economic viability. The second phase includes workshops for local officials, community/business leaders and resource persons. Workshops will take a problem-solving approach, and will supplement the knowledge already available to each community. Major emphasis will be on phase two. The clusters will serve as models for other cities, and officials from nearby communities will be invited to observe the process and participate in discussions. Hopefully, this project will prompt officials in small cities to assume a more active leadership role in economic development efforts.

The Role of Water in Creating Income and Employment on Selected Southwestern Indian Reservations Principal Investigator: Robert Young, Colorado State University. This research will develop estimates of the current economic impact of water use on selected Indian reservations in Colorado, New Mexico and Arizona. Economic impact will be measured in terms of net return per unit of water used, value-added income (factor income) per unit of water, and employment that is the direct result of water use. Research will focus on water for crop irrigation and other agricultural uses, food processing, manufacturing, household use, and recreation. Indian community development in the arid Southwest is dependent on the allocation of water resources. Current and future demands for this water must be assessed to paint a complete picture of economic development on the reservation.

WRDC Publications Annually, the Center distributes approximately 5,000 of its various publications nationwide. The newsletter "Western Wire" is mailed three times each year to more than 2000 individuals both in the Western region, the nation, and Canada. The most recent publications is ***WRDC 103, Our Children, Our Future***, a demographic study of youth in the Western region by Annabel Cook of Washington State University.

WESTERN REGION RANKINGS OF THE 1988 ESCOP RESEARCH INITIATIVES
July, 1988

Rank	Titles
1.	Maintain and Protect Water Quality and Quantity
2.	Biotechnology
3.	Improved Management of Crop Pests and Diseases
4.	Interrelationships of Food and the Nutritional and Health Status of People
5.	New and Expanded Uses for Agricultural and Forest Products
6.	Animal Health and Disease
7.	Marketing of Agricultural and Forest Products
8.	Genetic Improvement of Economically Important Plants
9.	Animal Efficiency in Food Production
10.	Food Processing, Preservation Safety and Quality Enhancement
11.	Sustaining Soil Productivity
12.	Rural Youth , Family and Community Well-Being
13.	Integrating Agricultural Technologies
14.	Impact of Agricultural and Forest Policy on Global Markets Global Policy on Agricultural and Forest Markets
15.	Productivity of Range and Pastureland
16.	Forest Productivity
17.	Alternative Agricultural and Forest Land Use
18.	Sensors and Computing Systems for Food and Agriculture
19.	Energy Efficient Systems
20.	Plants for the Urban Environment
21.	Effects of Atmospheric Deposition Effects on Ecosystems

APPENDIX Y

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WESTERN ASSOCIATION AGRICULTURAL EXPERIMENT STATION DIRECTORS

July 28-29, 1988

ESCOP REPORT

by
Colin Kaltenbach

ESCOP held its spring meeting May 2-5, 1988 in San Juan, Puerto Rico. Major items of business included: 1. Acceptance of the proposed 1990 budget; 2. Review of proposed guidelines for operation of IR committees and asked that each region discuss and approve the report prior to any formal action by ESCOP; 3. Approval of new budgeting and planning process; 4. Establishment of an ad hoc subgroup to work with the budget strategy and action group for implementation of the research program identified in the Agricultural and Rural Viability Initiative; 5. Review of proposed new Seed Policy Guidelines and referred them to the individual states for review before final action; 6. Acceptance of report from the Domestic and International Markets and Agricultural Policy Committee and referred the report to the Research Planning and Budgeting Committee; 7. Election of Dr. Robert Gast as Chairman-elect of ESCOP.

ESCOP Interim will meet in Chicago August 1-3, 1988. This will be a joint meeting with ECOP.

APPENDIX Z

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REPORT
for
ESCOP PEST CONTROL STRATEGIES SUBCOMMITTEE
to
WAAESD Meeting July 28-29, 1988
Ft. Collins, Colorado

The Subcommittee, consisting of W. H. Brown (LA), B. A. Jones (IL), R. A. Rohde (MA), and G. W. Ware (AZ), met at the Kings Inn, St. Louis, MO, on April 28, 1988. This was the result of the WAAESD's sanction, given at the 1987 summer meeting, to meet with program leaders of pest control-related activities across all agencies and disciplines.

Attending guests and organization represented, were:

Keith Douce (GA)	APHIS Survey Program
John Fulkerson (CSRS)	Natl. Biol. Impact Assess. Program
Edward Glass (NY)	Comm. on Pesticide Resistance, Natl Res. Council
Donald Holt (IL)	ESCOP Comm. on Expert Systems
Ron Kuhr* (NC)	Natl. IPM Coord. Comm.
Robert Kupelian (NJ)	IR-4 Minor Crop Pesticide Registration
David MacKenzie (LA)	ESCOP Biotechnology Subcommittee, and Comm. on Movement of Biotic Agents
Merritt Nelson (AZ)	ESCOP Biocontrol Subcommittee of the Pest Control Strategies Subcommittee
Eldon Ortman (IN)	Host Plant Resistance
Nancy Ragsdale (CSRS)	Natl. Pesticide Impact Assess. Program
Robert Riley* (CSRS)	IPM Coordination
Henry Studer (CA)	Pesticide Application Technology

The meeting was essentially an information exchange, wherein everyone became acquainted, while gaining an insight into the relationships of different pest control-related entities. Thirty-minute reports were given by each participant, accompanied by a one-page overview of their history, organizational activities, parentage, funding, objectives, and authority. The resulting discussion examined directions of basic research, funded by many sources, which provide data to several ESCOP-supported programs, leading eventually to systems such as IPM. The presumed goal of all this is to increase competitive advantage or profitability of agriculture.

Next meeting of the ESCOP Subcommittee will be at NASULGC in Dallas, November 13-14. Plans are uncertain regarding future meetings of the expanded committee.

* Absent

George Ware
July 11, 1988

Western Agricultural Experiment Station Directors

Fort Collins, Colorado

July 28-29, 1988

Report of the ESCOP Subcommittee on Seed Policy

Merle H. Niehaus

The Committee is composed of R. Lower, B. Chabot, K. W. Tipton, M. V. Wiese, R. L. Thompson, P. A. Miller, K. A. Huston and M. H. Niehaus. There has been one meeting of the subcommittee with much correspondence. A draft document has been prepared and is now being reviewed by each subcommittee member. As the policy is being developed the subcommittee must keep in mind that ARS has recently developed and published a policy as has the American Seed Trade Association. Seed policy was a major agenda item at both the recent National Plant Germplasm Committee meetings in Davis, California and was on the agenda of the Regional Plant Introduction Station Joint Meetings held in June, 1988 in Fort Collins. It was also on the agenda of the National Plant Genetics Resources Board meetings held in Washington, D. C. in 1988.

Concerns being addressed by the Subcommittee deal primarily with the plant protection and patent area and their overall effects on agricultural experiment stations. There has been considerable discussion on the effects of patents, primarily utility patents, and the long-range effect patenting will have on the relations between public institutions and private industry and on the free exchange of germplasm.

Two states from the North Central region have begun releasing lines of soybeans to commercial firms with the agreement that the firms can sell the releases under their own brand names. Thus, a line might be sold by several different companies under several different brand names. The tag would state "Variety unspecified," but there would be an identifying number on the tag. In at least one of the states each company would pay a fee to the state seed association which would, in turn, grant research funds to the university.

The subcommittee has developed some guidelines for purposes of discussion as follows:

**A STATEMENT OF RESPONSIBILITIES AND GUIDELINES RELATING TO DEVELOPMENT,
RELEASE AND MULTIPLICATION OF PUBLICLY DEVELOPED GERmplasm OF
SEED-PROPAGATED CROPS**

(The following are points being considered. They emphasize the unique roles and obligations of land grant institutions and agricultural experiment stations.)

1. Training of students in plant breeding and genetics
2. Research contributions of point no. 1 will include improved germplasm, inbred lines and varieties.
3. Agricultural experiment stations are the major, and sometimes the only, contributor to improvement of the so-called minor crops.
4. Agricultural Experiment Stations have unique opportunities to merge proven classical and applied genetics and breeding programs with the new more basic biotechnologies.
5. Agricultural experiment station's efforts on germplasm may insure/protect national security and act as a buffer against the control of major crop germplasm by a few conglomerates with non-U.S. ownership.

GUIDELINES FOR RELEASE

1. Germplasm from agricultural experiment stations programs should be made available under reasonable terms and provisions to foster research and cooperation by public and private scientists.
2. Agricultural experiment stations will release finished varieties and inbreds as a part of their educational programs.
3. Stations may elect to protect (PVP or patent) or otherwise restrict certain uses of germplasm when it enhances utilization by the end user. Royalties or fees that accrue from protected germplasm should be distributed according to local institutional policies - to enhance and support research.
4. Identical genetic material should not be distributed or sold under different names, varieties or brands. End users should know the genetic identity of what they are purchasing.

Some of the points made above are controversial and, if adopted, would probably result in the two North Central states being in non-compliance. It is likely that other states including some in the Western region are considering some form of exclusive release. The Subcommittee's position at present is that exclusive release is appropriate only when it helps insure that the release be used; it is not appropriate when the goal is to simply raise funds for the institution. Thus, it would seldom be appropriate for major crops. The rationale for this position is that public releases of major crops have been very successful. Public releases of minor crops have usually not been successful.

Input is needed from Directors, especially if there is disagreement with the direction the subcommittee is taking.

DRAFT
4/88

PROPOSED BUDGET

for

Federal Funding of State Agricultural
Experiment Stations and Affiliated Groups
Through
Cooperative State Research Service
of the
U. S. Department of Agriculture

FISCAL YEAR 1990
With projections into Fiscal Year 1991-1992

Recommended by the
Experiment Station Committee
on Organization and Policy
May 1988

SUMMARY**NEW RESEARCH INITIATIVES
FOR THE
STATE AGRICULTURAL EXPERIMENT STATIONS
JANUARY 1988****I. Managing Natural Resources**

- Adequate quantity and acceptable quality of water
- Sustainable soil productivity through low input, economical and conservation production systems
- Enhance environment

II. Improving Profitability of Farms, Ranches, Forests and Nurseries

- Application of biotechnology to plant and animal productivity
- Increase biological efficiency of plants and animals
- Develop alternative crops
- Control pests and diseases
- Electronic systems for plant and animal production

III. Expand Uses of Agricultural and Forest Products

- Develop new consumer acceptable products
- Identify and expand non-food uses
- Reduce processing costs and enhance quality

IV. New and Expanded Markets

- Develop new more efficient market strategies
- Strengthen domestic and international commodity trade
- Establish new policies and initiatives to improve profitability
- Enhance comparative advantage of U.S. agricultural commodities

V. Protecting Consumer Health and Improving Well-Being

- Identify dietary-health relationships
- Develop accurate procedures for assuring a safe food supply
- Improve nutritional status worldwide

VI. Improving Rural Family and Community Social and Economic Base

- Identify economic alternatives for rural families and communities
- Strengthen rural institutions and services
- Assess impacts of new technologies
- Reduce stress associated with social and economic change

Table 1. Federal Funding of State Agricultural Experiment Stations and Affiliated Groups Through CSRS/USDA
(Thousands of dollars)

	Appropriation FY '88	ESCOP Recommendations		ESCOP Projections	
		FY '89	FY '90	FY '91	FY '92
FORMULA FUNDS					
Hatch Act	\$155,545	\$168,922	\$222,400	\$254,250	\$275,080
McIntire-Stennis Act	17,500	25,000	29,500	33,750	36,520
Evans-Allen Program	23,333	25,333	37,200	42,550	46,040
Animal Health (Sec. 1433)	5,476	5,947	10,400	11,900	12,880
Sub total	201,854	225,202	299,500	342,450	370,520
RESEARCH GRANTS a/					
Special Grants (89-106, Sec. c)	31,185	64,935	79,527	94,127	99,672
Competitive Grants (Sec. b)	42,372	54,500	96,500	114,500	130,384
Sub total	73,557	119,435	176,027	208,627	230,056
OTHER AUTHORIZATIONS					
Rangeland (95-113)	475	475	475	475	475
Critical Materials (98-284)	4,918	688	688	688	688
Aquacultural Centers (95-113)	3,500	3,500	3,500	3,500	3,500
Agricultural Productivity (98-198)	3,900	3,900	3,900	3,900	3,900
Alternative Crops (95-113)	675	391	391	391	391
Federal Administration	4,094	1,100	1,100	1,100	1,100
Sub total	17,562	10,054	10,054	10,054	10,054
TOTAL	\$292,973	\$354,691	\$485,581	\$561,131	\$610,630

a/ Details are shown in Tables 2 and 3.

Table 2. Special Grants (PL 89-106, Sec. c) a/
(Thousands of dollars)

	Appropriation FY '88	ESCOP Recommendations		ESCOP Projections	
		FY '89	FY '90	FY '91	FY '92
CONTINUING NATIONAL RESEARCH PROGRAMS					
Integrated Pest Management	\$2,940	\$2,940	\$3,440	\$3,940	\$3,940
Pesticide Clearance	1,369	1,369	1,440	2,190	2,190
Minor Use Animal Drugs	229	229	250	250	500
Pesticide Impact Assessment	1,968	2,468	2,468	3,218	3,218
Rural Development Centers	475	475	475	725	725
Animal Health (Sec. 1414)	5,705	5,705	8,705	11,705	15,000
Aquaculture	660	660	660	1,660	1,660
Germplasm Resources	0	1,000	1,000	2,000	2,000
Tropical and Subtropical	3,091	3,091	3,091	3,091	3,091
Acid Precipitation	661	661	661	661	661
Biological Impact Assessment	0	250	250	1,600	1,600
NEW NATIONAL RESEARCH ACTIVITIES					
Water Quality & Management	0	25,000	25,000	25,000	25,000
Food Safety	0	5,000	8,000	10,000	10,000
Family Well-Being	0	2,000	4,000	4,000	4,000
Rural Viability	0	0	6,000	10,000	12,000
SPECIAL PROBLEM RESEARCH b/					
	14,087	14,087	14,087	14,087	14,087
TOTAL	\$31,185	\$64,935	\$79,527	\$94,127	\$99,672

a/ Awards are made on a competitive basis to fund national programs except those state specific grants identified by the Congress.

b/ Special problem grants are established to deal with acute situations in specific states. Where the problems persist, they often can be incorporated into the ongoing programs of the State Agricultural Experiment Stations.

Table 3. Competitive Research Grants (PL 89-106, Sec. b) a/
(Thousands of dollars)

	Appropriation FY '88	ESCOP Recommendations		ESCOP Projections	
		FY '89	FY '90	FY '91	FY '92
Plant Science	\$12,126	\$12,126	\$18,126	\$18,126	\$18,126
Plant Science Centers b/	0	3,358	6,858	6,858	8,858
Human Nutrition	2,377	3,000	6,000	12,000	12,000
Animal Science	6,000	7,000	14,000	14,000	18,000
Biotechnology	19,016	21,616	32,116	42,116	48,000
Pest Science c/	2,853	0	0	0	0
Stratospheric Ozones	0	7,400	7,400	7,400	7,400
Food Science	0	0	6,000	8,000	10,000
Soil Science	0	0	6,000	6,000	8,000
TOTAL	\$42,372	\$54,500	\$96,500	\$114,500	\$130,384

a/ This program is supported as a funding mechanism to enrich and expand research in several fundamental areas important to the agricultural and general economy of this nation. ESCOP also endorses the restoration of competitive research grants in forest science that have been included in the USDA Forest Service Budget.

b/ Initiated as a joint USDA-NSF-DOE competitive grant program in plant sciences to focus research on basic aspects of plant biotechnology, rhizosphere dynamics and microbial ecology.

c/ Funding for pest science was incorporated into the plant and animal sciences research programs in the FY '89 recommendations.

Table 4. Summary of FY '90 Recommended Budget Increases by Research Categories (Thousands of dollars)

BUDGET CATEGORY	HATCH	MC-INTIRE- STENNIS	EVANS-ALLEN	ANIMAL HEALTH (1433)	SPECIAL GRANTS	COMPETITIVE GRANTS	TOTAL INCREASE
Natural Resources	15,000	2,000	1,630	0	0	7,575	26,205
Profitability	28,048	2,000	4,576	4,453	3,592	17,600	60,269
Expanded Uses	6,630	500	1,900	0	0	9,075	18,105
Expanded Markets	1,800	0	600	0	0	1,200	3,600
Consumer Health	1,000	0	907	0	4,000	6,550	12,457
Rural Families/ Communities	1,000	0	2,254	0	7,000	0	10,254
TOTAL	53,478	4,500	11,867	4,453	14,592	42,000	130,890

I. MANAGING NATURAL RESOURCES

To provide adequate quantities and acceptable quality of water while sustaining agricultural, industrial and municipal activities, develop economically feasible production systems that protect the soil resources while reducing inputs needed to sustain productivity.

Budgeted Increases Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	15,000	1,600	6,094
McIntire-Stennis	2,000	600	900
Evans-Allen	1,630	200	600
Competitive Grants	7,575	0	3,500
	-----	-----	-----
	26,205	2,400	11,094

II. IMPROVING PROFITABILITY OF FARMS, RANCHES, FORESTS AND NURSERIES

To increase productivity and economic efficiency in agricultural and forestry production through new technology.

Budget Increase Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	28,048	8,400	9,834
McIntire-Stennis	2,000	1,650	1,870
Evans-Allen	4,576	300	990
Animal Health	4,453	500	500
Special Grants	3,592	5,500	3,295
Competitive Grants	17,600	4,000	5,384
	-----	-----	-----
	60,269	20,350	21,873

III. EXPAND USES OF AGRICULTURAL AND FOREST PRODUCTS

To enhance quality, develop new applications and reduce costs of agricultural and forest products by improved harvest, storage and processing procedures.

Budget Increases Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	6,630	8,900	2,663
McIntire-Stennis	500	1,000	0
Evans-Allen	1,900	1,000	400
Competitive Grants	9,075	5,000	6,000
	-----	-----	-----
	18,105	15,900	9,063

IV. DEVELOPING NEW AND EXPANDED MARKETS

To increase U. S. agricultural's share of domestic and international markets.

Budget Increases Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	1,800	5,720	1,350
McIntire-Stennis	0	1,000	0
Evans-Allen	600	1,000	0
Special Grants	0	500	0
Competitive Grants	1,200	0	0
	-----	-----	-----
	3,600	8,220	1,350

V. PROTECTING CONSUMER HEALTH AND IMPROVING WELL-BEING

To expand knowledge base on dietary health relationships and to develop more accurate procedures for assuring a safe food supply.

Budget Increases Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	1,000	5,590	154
Evans-Allen	907	1,200	0
Animal Health	0	1,000	480
Special Grants	4,000	5,350	250
Competitive Grants	6,550	9,000	0
	-----	-----	-----
	12,457	22,140	884

VI. IMPROVING RURAL FAMILY AND COMMUNITY SOCIAL AND ECONOMIC BASE

To develop strategies to meet special needs of rural America.

Budget Increases Required:

	FY 90	FY 91	FY 92
	-----	-----	-----
Hatch	1,000	1,640	735
Evans-Allen	2,254	1,650	1,500
Special Grants	7,000	3,250	2,000
Competitive Grants	0	0	1,000
	-----	-----	-----
	10,254	6,540	5,235

**REPORT
ESCOP SPECIAL INITIATIVES SUBCOMMITTEE
JUNE 1988**

The ESCOP Special Initiatives Subcommittee met in Washington, D.C. March 29 and 30, 1988. The purpose of the meeting was to synthesize and brainstorm ideas to enhance the long-term funding for agricultural research. The Special Initiatives Subcommittee, over the past years, has developed a significant number of new initiatives, but has been frustrated by the fact that funding has not been developed for either these initiatives or other important agricultural research needs. Thus, the Subcommittee felt that its spring meeting should creatively focus on issues and suggest ways to improve the long-term funding of agricultural research.

Appendix A, attached to this report, is the agenda for the Subcommittee meeting and provides a listing of participants in the meeting. The first day of the meeting was devoted to receiving input and engaging in discussion with the indicated participants. On the second morning, the Subcommittee entered into a mode of brainstorming and creative synthesis of the input. In Appendix B, the summary statements from the Subcommittee meeting have been formulated by perceptions about agricultural research and possible short-term strategies to enhance agriculture through research. There are 49 perceptions listed which are categorized according to funding, competence, goals/priorities/directions, politics, and system organization. Under Possible Short-Term Strategies to Enhance Agriculture Through Research, 24 strategies are categorized by goals/priorities/directions, funding and political strategies, and organization.

To further focus the outcome from the March Special Initiatives Subcommittee Meeting, principal perceptions, principal short-term strategies, long-term strategies, and an action plan are presented herein.

Principal Perceptions about Agricultural Research

From the list of 49 perceptions (Appendix B), the Subcommittee has focused on 8 principal perceptions:

- What do we get from formula funds? (A strong feeling that there is a need to develop a succinct, attractive document to illustrate results and accomplishments from formula funds, as well as a long-range plan for their use.)
- "Doing the same old thing in the same old way". (A perception that agricultural research is not at the cutting edge, but extremely steeped in a status quo.)
- Competitiveness equates to quality. (A perception that competitive review and the system of competitiveness perceived with NSF and NIH gives validity to research and does not exist in the agricultural research setting.)
- Agricultural research is not "real" science. (A perception that agricultural research is not really science but a diminished effort relative to true scientific research.)
- The issue of agricultural surpluses. (Why do we need more research when we have such large surpluses of agricultural commodities?)
- Agriculture is not a full science partner within Land-Grant Institutions. (A perception that even with Land-Grant Institutions, agricultural research is not valued and appreciated as a full scientific partner.)
- Agriculture is more than food and feed. (A perspective that agriculture needs to look at alternatives with particular reference to non-food applications.)

- Research and Extension are seen collectively. (Congress does not generally perceive the research and extension function separately, but views agriculture as one entity encompassing both research and extension.)

Principal Short-term Strategies to Enhance Agriculture Through Research

From the listing of 24 possible short-term strategies (Appendix B), the Subcommittee has focused on six possible short-term strategies:

- Diversify sources of support by tapping other federal agencies such as NSF, NIH, EPA, DOE, etc.
- Develop a brief (two-pages) document which can articulate the agricultural research system in the Land-Grant Universities for particular use with Congress.
- Develop an agribusiness advocacy.
- Exploit increased linkages with society's increasing concern for diet, health, and food safety.
- Develop a plan for working with NASULGC in terms of the budget building process and advocacy in Congress for the agricultural research system.
- Develop a major high level marketing plan for agricultural research. (It is suggested that the system enlist an outside agency capable of conducting a national survey and summarizing results for decision-making from which a first-class, highly attractive plan can be developed and marketed to tell the story.)

Longer Term Strategies to Enhance Agriculture Through Research

Possible longer term strategies (over the next two to five years) have been identified:

- Develop a stronger, more aggressive administrative entity for enhancement of research and extension at the federal level. (The objective is to build a structure which will be better able to relate with Congress and maintain a more consistent and positive image.)
- Develop a new coalition of Land-Grant Universities and non-Land-Grant Universities. (The development of an enhanced image of agricultural science with emphasis on the biological sciences will require closer ties with universities such as Washington University, St. Louis; Stanford; Harvard; Yale; Cal Tech; etc.)
- Develop a goal-oriented, Competitive Grants Program. (The existing Competitive Grants Program within the USDA is limited to a few specific program areas, but there is a need to expand the Competitive Grants Program to other areas including social, economic, engineering, and environmental subjects. It would be expected that this mechanism would enhance multidisciplinary research oriented to problem-solving and systems analysis.)
- Develop a new organization such as "Agricultural Research Institute". (Congressman George Brown has proposed an organization similar to an institute at NIH to become a focal point for applied and basic research directed at solving critical agricultural biotechnology problems.)

- **Develop a new Initiatives Research Institute.** (Dr. R. W. F. Hardy has suggested that a new Initiatives Research Institute be developed to provide technology to increase competitiveness and provide new uses for agricultural products.)
- **Develop new research liaison with other foreign countries for research and development funds.** (For example, one might conceive of developing a Japan/U.S. Research and Development Fund or with other countries similar to BARD which is the Binational Agricultural Research and Development program between the U.S. and Israel.)

Action Plan

The Subcommittee suggests a three-point action plan:

- **Conduct a strategy retreat.** (It is suggested that a group of key leaders in the Land-Grant Community meet and discuss the overall approach to address potential options.)
- **Consider feasibility of concept of a major national initiative for agricultural research and extension.**
- **Examine the concept and possibility for appointment of a Presidential Commission on the Health of Agriculture.**

Report Prepared for the ESCOP Special Initiatives Subcommittee

**N. R. Scott
Cornell University
June 21, 1988**

APPENDIX A

**ESCOPE SPECIAL INITIATIVES SUBCOMMITTEE
NATIONAL CLARION HOTEL
300 ARMY/NAVY DRIVE
ARLINGTON, VIRGINIA
MARCH 29 - MARCH 30, 1988**

Tuesday, March 29

- 8:00 a.m. Dr. William Browne
Professor of Political Science
Central Michigan University

Politics of Agriculture
- 9:30 a.m. Input from Congressional Persons
- Kathleen Merrigan (Senator P. Leahy, Vermont)
Chair, Senate Agriculture Committee
- 10:30 a.m. • Susan Warner (Rep. Matt McHugh, New York)
House Appropriations
- 11:15 a.m. Dr. Robert Long, Deputy Assistant Secretary, Science and Education
USDA
- 12:00 noon Lunch
- 1:00 p.m. Dr. Don Holt, Director of Illinois Agricultural Experiment Station,
University of Illinois, Urbana-Champaign

R & D Strategy for U.S. Agriculture
- 2:00 p.m. Rep. George Brown (Skip Stiles, California)
House Committee on Agriculture

Getting to the New Age in Agriculture
- 3:00 p.m. Dr. Ralph W. F. Hardy, President of Boyce Thompson Institute, Cornell
University

Ongoing and New Initiative Research

4:00 p.m. Mr. William Kerrey, Project Director, ESCOP/ECOP Water Quality Project
Mr. Terry Nipp, Congressional Fellow

Perspectives from Working on Water Quality Effort and with Congress

5:00 p.m. Break

7:30 p.m. Dinner

Dr. David Gibbons
Deputy Associate Director for Natural Resources
OMB

Wednesday, March 30

8:30 a.m. Brainstorming and Synthesis of Initiatives to Enhance Ag Research

10:30 a.m. Dr. Gail Buchanan, Associate Director, Georgia Coastal Plain Station

Agricultural System Leadership Development

12:30 p.m. Adjourn!



APPENDIX B**Summary Statements****ESCOP Special Initiatives Subcommittee Meeting
March 29 & 30, 1988
Washington, D.C.****PERCEPTIONS ABOUT AGRICULTURAL RESEARCH****Funding**

- Agricultural research and extension are competing for a very small discretionary pool. (There is an intense competition in, for example, the House Appropriations Committee where only 25 percent of the funds exist as a discretionary pool to be divided among 13 subcommittees.)
- Congress will not increase spending or the deficit. (It is suggested that the recent budget summit will not be violated and that Congress, at least for the FY 89 year, will not increase spending beyond the agreed summit level.)
- Special grants are a problem. (Special grants are considered "pork" and viewed very negatively, particularly with OMB.)
- Must face a zero sum game on a declining balance. (Again, a reference to the fact that increased spending and further increases in the deficit are not likely.)
- Agricultural research cannot retain the level of support of FY 1988. (A perspective that even the existing levels of funding for agricultural research cannot be retained in light of competing pressures in the future.)
- Pork tarnishes priorities. (A perception that the Special Grants create real problems with efforts to set research priorities and greatly reduces the efforts which have created system-wide research priorities.)
- Difficulties within NASULGC in terms of budget building. (Reference to the difficulty of developing a research initiative because of the need to maintain parity and carry along all parts of the system.)
- Competition with ARS and ARS Labs for funding.

Competence

- The agricultural research system is viewed by many as very capable.
- The system is considered responsive to needs. (Compared to many institutions, including universities, the agricultural research system is viewed as one which responds rapidly to specific needs.)
- Poor image. (A perspective based on a lack of competitiveness, perceptions about formula funds, and a lack of knowledge about the real strengths of the agricultural research system.)

- Agricultural research and extension did not help avoid the recent agricultural profitability problem. (A feeling that the system didn't have the right kind of program to avoid the recent crisis in agriculture.)
- Competitiveness equates to quality.
- Agricultural research is not "real" science.
- Agriculture is not a full science partner within the makeup of most Land-Grant Institutions.

Goals/Priorities/Directions

- Land-Grant Universities are oriented to commodities. (The perception that researchers work for support of commodity groups and work is not broadly applicable and basic.)
- Land-Grant Universities oriented to large-scale agriculture. (A common perspective that attributes the efforts of research to large farms rather than applicable for small farms.)
- Land-Grant Universities do not address social issues. (A perspective that agricultural research is production oriented and fails to look at the social issues affecting rural communities and society.)
- Need to develop priorities. (A feeling that the system does not have a clear set of priorities which guides its research agenda.)
- Not one consistent voice for agriculture. (A perception that there are many different spokespersons who have their own agendas in mind rather than a unified and agreed upon agenda.)
- Goals and mission are not well defined. (A feeling that the system has not articulated goals and mission statements in an understandable fashion.)
- Not clear for whom the research is directed. (A feeling that the research agenda is not defined well enough in terms of the true clientele for whom the research is conducted.)
- Need to separate ongoing research from new initiatives. (Because of the competition which appears to have developed with the establishment of the competitive research grants program a number of years ago within USDA and the competition for funds between formula and the competitive programs, it is suggested that there be a separation of the ongoing research program from efforts to develop new initiative research.)
- A plan must go forward, not attempting to defend the past. (A perspective on building for the future, rather than attempting to defend the system against attacks based on the past.)
- The problem of surpluses.
- Can postpone research without difficulty. (A perception that agricultural research doesn't require immediacy and can be rather easily delayed without creating real problems.)

Politics

- Research and extension are seen collectively.
- Attention is given to the "organized and loud". (Congress is responsive to those who create the greatest amount of attention.)
- Mixed messages a problem. (A feeling in Congress that the system has many different messages and that there is not a position of unity.)
- Agricultural research is viewed as non-partisan. (Congress doesn't perceive agricultural research as being particularly party-oriented, with most of the issues equally important to either party.)
- Not prominent. (Agricultural research compared to all the competing initiatives is not viewed as an item of major importance or prominence.)
- Must do "something" to hold one's place. (A perception that if the system did not do as it does now to put forth its position to Congress, there would be a loss of support. Thus, a suggestion that one has to keep up the effort, if not increase it, to hold one's place.)
- Not good at the political process. (A perspective that the system is not well attuned to the political processes in Washington and, therefore, fails to really develop a process to influence the political system.)
- Need to expand contact with other Congressional committees. (A need to develop increased contact with committees in Congress beyond the House and Senate Agriculture Committees.)
- Need to diversify sources of support for agricultural research. (A suggestion that agricultural research needs to develop stronger linkages with NSF, NIH, DOE, EPA, and other important federal agencies.)
- Limited period as "window of opportunity". (The point that in the political process there is a time period at which input is necessary and if not available at that time is not likely to be effective.)
- Research is subsidy. (The perspective that research is a financial subsidy in the same way that price supports are.)
- Relationship to costly farm programs. (An unwillingness to invest more funds in research given the high cost of farm programs.)
- Dwindling constituency of advocates. (Most commodity and farm groups do not carry agricultural research as a high priority item and other groups have not been mobilized as advocates for research.)
- Dwindling constituency. (With the ever decreasing number of persons on the farm and the lack of understanding about the food system among consumers, together with the reduced political strength that has previously existed in Congress, there is a substantially reduced understanding in society about the importance of agriculture and food.)
- Lack of CEO support. (There has been an inability to develop a significant support from top level persons in the industry sector in support of research.)

- **Lack of communication with other federal agencies.** (The system hasn't been aggressive enough in communicating its message to the other federal agencies which have a stake in agricultural research.)
- **Congressional staffers vary greatly in their experience.** (A perspective that the majority of Congressional staffers are young and turn over frequently, resulting in a continual need to educate staffers about agricultural research.)

System Organization

- **Need to include other elements of the Land-Grant University.** (A perception that the typical Land-Grant University is too "inward" and fails to extend itself to bring in other parts of the University, such as economics, business, political science, etc. to be partners in agricultural research.)
- **Research, teaching, and extension are not multidisciplinary and coordinated.** (A perspective that suggests that the system does not exhibit as much multidisciplinary approaches as it ought to and does not have its "act together" in terms of the three major functions of research, teaching, and extension.)
- **Too segmented.** (The system is viewed as lacking unity and rather disjointed in terms of presenting a truly coordinated and unified approach.)
- **What do you get from formula funds?**
- **"Doing the same old thing in the same old way".**
- **Agricultural research is different because of its basic and applied nature and, as a result of cultural biases.** (Compared to NSF and NIH where it is perceived that basic research is predominant, the agricultural research setting is viewed as less scientific and important compared to these agencies.)

POSSIBLE SHORT-TERM STRATEGIES TO ENHANCE AGRICULTURAL RESEARCH

Goals/Priorities/Directions

- **Develop an articulated mission with goals and strategies for agricultural research and extension.**
- **Develop statements of identifiable problems with clear articulation of importance and the significance of expected results.**
- **Develop a clear definition of the clientele and constituency for whom the research is directed and who will benefit from the research which is conducted.**
- **Develop an enhanced multidisciplinary, integrated approach which clearly establishes a unified approach.**
- **Develop an agreement on research priorities on the basis of both inside and outside system inputs.**

- Develop a new working relationship jointly with USDA to be more effective in research programs, including interactions with Congress and OMB.
- Develop a working plan for an improved budget building process with NASULGC.

Funding and Political Strategies

- Develop improved and more effective processes for communication with Congress on a continuing basis.
- Develop a process for cultivation of groups and individuals which Congress identifies as its constituency.
- Establish a "targeted" formula funds program. (The objective here would be to focus on national problems of high priority and utilize formula funds in a targeted fashion to address most effectively these high priority problems.)
- Diversify sources of support with specific emphasis on federal agencies such as NSF, NIH, EPA, DOE, and other appropriate agencies.
- Develop a two-page document descriptive of agricultural research through the Land-Grant University which can be readily understood by Congress and those unfamiliar with the agricultural research system.
- Develop an effective agribusiness advocacy effort involving chief CEOs of major corporations.
- Seek an enhanced linkage with ARS to develop a joint advocacy position.
- Develop a "high level group" to more effectively represent agriculture to the Congress. (An ideal situation would be to utilize the credibility of a Nobel Prize type individual to promote the system. A ready example is the effectiveness of Dr. Kenneth Wilson with NSF in the development of the Supercomputing effort.)

Organization

- Establish an improved advocacy relationship with Congress in Washington, D.C.
- Establish a program in Washington, D.C. for Science Fellows and faculty sabbatical leaves. (A limited program has existed in the past for Congressional Science Fellows and faculty sabbaticals, but the feeling is that the concept needs to be substantially increased and probably institutionalized to present a unified voice.)
- Develop a more effective articulation between research and extension for technology transfer. (It is conceived that an enhanced articulation between research and extension would lead to improvements in the development of constituencies for both research and extension.)
- Exploit increased linkages with concerns in diet, health, and food safety.

- Develop a coalition with "new agriculture schools". (If the system moves to an increased competitively oriented funding approach, it will be important to develop linkages to schools participating in basic life science research, but not typically included in the Land-Grant system, i.e. Washington University, St. Louis; Stanford; Cal Tech; Harvard; Yale, etc.)
- Develop a new formula funds approach. (There is a suggestion that a serious effort be made to communicate the results from formula fund research and a critical need to develop a five-year plan which would detail the mission, goals and priorities of the Hatch Funds.)
- Adopt the proposal of the ESCOP Ad-hoc Committee on Regional Research Programming. (There is a proposal that regional research be organized into national research support programs and a national research program which would lead to better definition, identification, and coordination of regional research funds.)
- Develop a clear understanding of the peer review process for formula funded projects. (Although a peer review process exists, there is a lack of understanding of the rigor and effectiveness of the formula fund peer review process which leads many to question the adequacy and rigor. In fact, many persons outside the system do not believe that a peer review process is in place and functioning.)
- Develop a national or regional workshop for Experiment Station Directors. (It is suggested that many Experiment Station Directors need to develop a better understanding of the perceptions and problems perceived by Congress and those outside the system of agricultural research.)

Summarization prepared by:
N. R. Scott
Cornell University.
April 12, 1988

Revised June 21, 1988

Western Association of Agricultural Experiment Station Directors
Marriott Hotel, Ft. Collins, Colorado, July 28-29, 1988

DAL Report
L. L. Boyd

This report covers the time period from the Spring meeting in Las Cruces, New Mexico through July 22, 1988. I participated (or planned to do so) on your behalf in the following activities that required travel during this period. Those indicated by the asterisks were the ones that I had to miss due to the leg surgery.

3/29-30 ESCOP Special Initiatives, Capitol Holiday Inn, Washington, DC
4/8-9 Visit to American Samoa en route to the PBAG review
4/4/10-16 PBAG Projects Review (4/13-14), Guam
4/20 DALs and Ben Jones on 1989 Farm Bill, Washington, DC
4/20-21 (Noon-noon) ESCOP Research Planning & Budgets Subcommittee Board, DC
4/21 DAL meeting, CSRS, Washington, DC
5/3-5 ESCOP Spring Meeting, San Juan Puerto Rico
5/16-18 Users Advisory Board, Memphis, TN
*6/6-9 Northeast Dept. Heads/Chairs Workshop, Capitol Holiday Inn, Wash, DC *6/9
DAL meeting with Cath, Spurrier et al re NISARC
*6/19-21 New Directors Workshop, Hyatt Regency, Washington, DC
*6/22 USDA Honors Awards Program, Washington, DC
*6/22-23 DAL meetings, Washington, DC
6/26-29 ASAE Summer Meeting, Rushmore Plaza Civic Center, Rapid City, SD 7/7/88
DAL Meeting, 9:00 am-12:00 noon, Clarion Hotel, Denver
7/7-8 ESCOP Research Planning & Budget Subcommittee et al, Denver
7/18-19 Oregon - state visit

ESCOP Special Initiatives - Norm Scott of Cornell is providing extremely aggressive leadership for the Special Initiatives group of the ESCOP Research Planning and Budgets Subcommittee. He planned a brainstorming session for the March meeting that included presentations by: Congressional staff members - Kathleen Merrigan (Leahy, VT), Susan Warner (McHugh, NY) and Stiles (Brown, CA); William Brown, Professor of Political Science at Central Michigan University; Bob Long of USDA; Ralph Hardy of Boyce Thompson Institute; Don Holt of IL; Bill Kerrey; Terry Nipp, Congressional Fellow sponsored by the American Society of Agronomy; Gale Buchanan of Georgia; and David Gibbons of OMB. Chairman Scott and a subcommittee are drafting a document on perceptions, strategies and actions. Jim Zuiches likely will cover the activities of the Group in more detail. The Group's next meeting is in Denver, September 23-24, 1988. If you have important issues you would like us to consider, talk with Jim Zuiches, Gary Lee or me.

American Samoa - I was able to work in a visit to American Samoa on my way to Guam for the review of the PBAG project proposals. Because American Samoa is not a full participant financially in WAAESD, I asked and Mr. Tauiliili agreed to cover my expenses from Honolulu to Pago Pago and back. The visit was most useful in helping me understand the resources, both human and otherwise, that they have for their programs as well as the most urgent needs. This helped me better evaluate proposals

from American Samoa that were submitted jointly with Hawaii. I agreed to help seek clarification, and change if necessary, on the use of income from American Samoa's Land Grant endowment. Currently, they are not allowed to use these funds for the construction of facilities. This seems strange, because much of the income from the 1862 endowments is used for capital items. I had planned to visit Micronesia also, but the planes don't fly from Pago Pago to Ponape directly and not even every day. The crossing of the International date line adds to scheduling problems. Because of going to American Samoa and the need to return immediately after the PBAG sessions, I did not have a good opportunity to look around Guam. I did sit in on a meeting of the Pacific Basin group comprised of Hawaii, Guam, American Samoa, Micronesia and the Northern Marianas. They have some excellent plans for developing communication links that will enhance their research interactions. PBAG continues to fund some well defined research proposals that will contribute to the store of knowledge, to the solution of current problems and to the building of greater institutional research capacity. PBAG along with CBAG is sponsoring a workshop August 18-20, 1988 in Ocho Rios, Jamaica, West Indies on Alternative Agricultural Enterprises for the Caribbean and Pacific Basins. There will be sessions on fruits, natural resources/tourism/service, vegetables, livestock, ornamental crops, processing and other value-added enterprises, aquaculture, agro-forestry and root crops.

1989 Farm Bill - The DALs meet with Ben Jones, Jr., Chair of the ESCOP Legislative Subcommittee, to discuss what we might do to assist Congressional staff in preparing the FY1989 Farm Bill. We also discussed how to learn of impending legislation, so that we could get input into its formulation prior to its introduction. University of Illinois lobbyist Rick Schoell discussed ways to learn of legislation that had been introduced, but had no suggestions other than personal contact for that not yet introduced. We need to make an assessment of how much Directors via ESCOP should be involved in developing legislation and what level of priority this should have. Relative to the Farm Bill, Jones learned that the U S Code is in a data base. A Law Librarian down loaded the 1985 Farm Bill part onto a diskette. With Jim Cowan's assistance, we learned that the Congressional staff preferred to work with the format of the Act rather than that of the Code. Jones had his clerical staff change the Code sub-heading, sub-titles, etc. to into the format of the 1985 Act, which they placed into two Word Perfect files. One is the bill as it was passed. The second contains changes suggested to date by the DALs and probably some others that Ben and others with whom he works have suggested. I have copies of both in both electronic and hard copy form that I will make available to anyone, who is interested in reviewing the 1985 Farm Bill in detail and offering changes, deletions and additions. I did not think there would be enough interest to make a general distribution to each of you.

ESCOP Research Planning and Budgets Subcommittee - This meeting focused upon assessing the effectiveness of our present procedures, a critical look at the activities of the Special Initiatives group and the development of plans and actions for the future. Considerable time was spent on making plans for a meeting of a few selected people to consider how to proceed with a major national funding initiative at the \$500,000,000 level. This meeting was held in Denver on July 7-8, 1988 and is reported briefly below.

Jim Zuiches also will comment upon it. Included in the planning was ways to reach the new Administration very early particularly through the transition team.

ESCOP - Puerto Rico - One of the major items was the presentation of the FY90 ESCOP budget proposal by Chairman Oran Little. It was developed similar to the FY89 budget using the highest priority initiatives in the first year of a three year plan and distributing the lower priorities into 1991 and 1992. We also tried to link it to the ECOP budget proposal. It was approved by ESCOP with only minor suggestions for change. The Division of Agriculture also accepted it. A Division budget document has been completed and should be available soon. Little expects to have copies of the "final" version of the ESCOP document in the hands of Directors by about the first of September. This will include a small amount of narrative, but much less than the FY1989 budget. He has asked me to prepare some graphic materials to replace some of the tables in the FY89 budget document. Jim Zuiches will distribute copies of the draft that ESCOP approved. Jim Cowan reported some of his activities and plans now that he has becoming familiar with Division activities. He is putting considerable emphasis on CARET and on tracking legislation of interest to Division members. Alex McCalla presented a report for the ESCOP Subcommittee on Domestic and International Markets and Policy. This will be in the mail to you next week. The report was accepted and is being forwarded to the budget committee for consideration. The recommendations likely will enter the planning process this fall. Shuford briefed us on plans by the 1890 institutions for their Centennial.

UAB - The first day of the meeting was held in Memphis at the Agri-Center. I gave the group a handout the first day at Memphis and had some opportunity to discuss it with a few UAB members. I sent the same material to those who were unable to attend. A copy of the cover letter is included in the materials I am distributing to you. The Agri-Center is managed by William Walker, a member of the UAB. Walker has held many political appointments and is one of the staunch "hold the line" members of the UAB. Even so, he might support the moving of some subsidy funds to research. The group went by bus to the catfish farm of UAB member, Turner Arant of Sunflower, MS, for dinner. The following day they toured a feed plant specializing in catfish feed and the Delta Pride catfish processing plant in the morning. In the afternoon they visited the Mississippi Branch Agricultural Experiment Station at Stoneville, MS where presentations were made by both Mississippi State and ARS scientists. It was good to see Bill Chace and have an opportunity to visit with him. The group held their business meeting on the bus on the trip back to Memphis on Wednesday morning. Because this didn't appear that it would be a very fruitful discussion on the bus, I opted to begin a few days vacation on Tuesday evening. That turned out to be a bad decision, because it was about 8:00 pm that evening that I encountered the concrete at the filling station that led to my need for surgery.

Workshops - I was unable to participate in the Northeast's Workshop for Department Chairs/Heads. I regret this, because of our plans to conduct one next year. You will remember that I was encouraged to video-tape some of the presentations. I discussed the taping with Larry Quinn, Chief, Office of Government and Public Affairs, USDA with the plan to employ him to do the taping. He discouraged me from doing this

indicating that all he had seen done that way did not work out. He suggested instead that we have the taping done in a special studio that could accommodate the filming of visuals used by the speakers and using a text prepared for video-taping. I accepted his advice and planned to observe the presentations. I would then ask selected ones, if they would be willing to do a presentation for video-taping at the USDA studio or in a studio on their own campuses. The DALs and Clive Donoho have discussed workshops for Chairs/Heads and want your reaction to the concept of having one next year a central U S location. We also discussed having two sessions back to back in one week, if the enrollment was sufficiently large. I informed them that some of you were concerned about travel outside of the region. I also need to know if you want me to pursue further the video-taping and how much you are willing to invest in it. I need to add that to the budget, which I presented to the Executive Committee.

Relative to the Directors Workshop, I need an appraisal from those who attended about its effectiveness and usefulness to you. The DALs view I believe would be for ESCOP to sponsor a Workshop similar to what we had originally planned this year. It would be held in a central U S location. We would then purpose that CSRS continue to hold its Workshop on alternate years with the primary focus on familiarization with the "actors" on the Washington "scene". Please give me your views on this, so I can properly represent you. We are having our next DAL meeting next week in Chicago after the close of the ESCOP Interim meeting.

USDA Awards - The Western region fared well this year with three of the four that we nominated receiving awards. We were allowed to submit an additional nominee for his leadership as an administrator. My congratulations to Charlie Hess, Warren Kronstad (OR) and John Casida (CA-B). Keep in mind that we will need to submit nominations again about Land Grant meeting time. I encourage each state to continue to submit nominations even if you have not been successful in the past. No one is chosen for forwarding that hasn't been nominated. The Executive Committee will/has discussed whether or not more than one nomination will be accepted from each state. I express my appreciation to Pat Jordan for his efforts to have State scientist eligible for the USDA awards.

ASAE - I advanced from Vice Chair/Secretary of the American Society of Agricultural Engineers Research Committee to Chair for the next year. I was actively involved in the development of four (4) priorities, which we will publish by December for general distribution. We also are prepared to forward fifteen (15) priorities to ESCOP for consideration. A very interesting session was a presentation/discussion of the research needs of the Farm Machinery/Equipment industry. This was sponsored by the Farm and Industrial Equipment Institute. After refinement FIEI plans to publish a document that will be used by the Industry to lobby. There is some discussion within the Industry of the need for a government supported national farm machinery/research center similar to that at Silsoe, England. Apparently, this is because they don't believe the Experiment Stations are meeting their needs. I encourage you to discuss this session with your Agricultural Engineering Department Chairs/Heads. I would further suggest that you have some discussions with leading industry executives in your states. I certainly don't

think we need a Silsoe. It would be far better for us to meet the Industry's needs and get its support for our programs. Perhaps we need some regional efforts to work with Industry.

ESCOP Funding Initiative group - A group chaired by Chancellor Ted Hullar of the University of California-Davis met in Denver to discuss a major funding initiative, perhaps as large as \$500,000,000. This meeting was initially planned by the ESCOP Research Planning and Budgets Subcommittee under the leadership of Neville Clarke. Included in addition to the "Executive Committee" were Deans Durwood Bateman of North Carolina and Don Crossan of Delaware and Jim Tavares of National Academy of Sciences. President Sam Smith of Washington and Chancellor Martin Massengale of Nebraska joined for about 30 minutes via conference telephone. The DALs participated as observers. The next meeting will be held in Washington, DC the second week of September. Jim Zuiches will have reported on this by the time I give this report.

Oregon State visit - The first day of the visit I received a good tour of the field research facilities in the Corvallis area. I also had an opportunity to discuss research operations with the Vice President for Research, George Keller. He has a geology educational background, but has worked primarily in Oceanography. He has considerable interest in ground water issues. Apparently, the Agricultural Experiment Station has excellent relationships with him. I also had a brief visit with Bob Witters, who is back from Egypt and is looking forward to another overseas assignment soon. We had an interesting two hours session at lunch and following with Department Chairs. After that I spent about two hours with Margy Woodburn, Dean Kinsey Green and Department Chairs in the College of Home Economics. Later, I had an opportunity to discuss several issues with Dean Roy Arnold. The second day Thayne Dutson took me on a trip to a field day at the Powell Butte Branch Station in central Oregon. I had not been in that part of the state. In addition to having the opportunity to exchange ideas with Thayne, I learned something of central Oregon's agriculture and how it is financed. New facilities at the Powell Butte station were built with Lottery funds. Also, I recommend Thayne as a guide. He took two different very scenic and interesting routes.

Land Grant Meetings - I have provided a handout of the schedule for the meetings, which will be held in Dallas, November 14-15, 1988. There are some Committee meeting on Sunday. Let me know, if you have important issues to come before the Experiment Station Section session on Tuesday afternoon. Note also, that the Experiment Station Section is having a Luncheon on Monday from Noon to 1:30 pm. I was not aware of this previously. Our Regional meeting is scheduled from 2:30 - 5:00 pm on Monday. If we need more time, we probably would need to schedule it on Sunday afternoon or evening. Members of ESCOP should note that its meeting is scheduled for Wednesday 8:00 a.m. - 1:30 p.m. I encourage all Directors to participate in the Division's reception and dinner on Monday evening.

Washington, DC in 1989 - I believe that Directors and ESCOP needs to have as much impact as possible on USDA, the Congress and the Administration. As reported above we are working on changes in the Farm Bill to present to Congressional staff. We need some new concepts to offer and not just minor polishing of the 85 Bill. The group

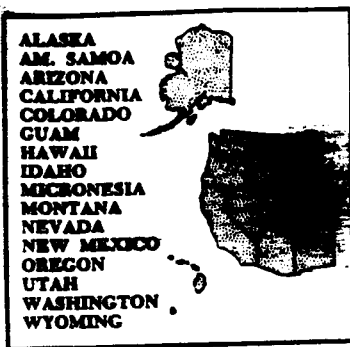
working on the major funding initiative plans to get it's material to the transition team, so it can be considered. If you know any transition team members (when they are identified) well, let us know so we can benefit from your contact. I strongly believe that we need to surface about four (4) names of people (two that would be acceptable to each party) that we believe would provide strong, effective leadership as Assistant Secretary for Science and Education. We also need to be sensitive to who may be the Secretary of Agriculture, so we can have some assurance that our suggestions for Assistant Secretary would be acceptable to him/her. In fact, it might even be useful to have some suggestions for Secretary. It also would be useful to have suggestion for the Science Advisor to the President and for the OSTP top staff positions.

ESCOPE Initiatives - In the past I have strongly encouraged each of you to make copies of the Research Initiatives available to your Commodity groups. I still believe that they should be encourage to submit their priorities to the National group from which ESCOP will be soliciting input. A very good example would be your state "cattle" organizations feeding into the National Cattlemen. There are several others that may be even more importance as far as lobbying support is concerned. Also, be certain to talk with your CARET representatives about the initiatives. I also encourage you to make certain that your Department Chairs/Heads understand the planning process, so they can provide input both through you and through the professional societies.

Regional Research - Between now and the first of September, we will be sending information to Administrative Advisors about the participation, personnel, funding and publications for each of the RRF projects. I appreciated the suggestions I received last year from a few of you about how to make the information more useful. We need a few AAs to give more attention to the projects for which they are responsible. This is particularly true when the project outline is being developed. Most of you are doing a good job and some an outstanding job. We thank you. It makes Harriet's and my job easier. I want to spend some time analyzing how well our W and WRCC projects match up with the priorities we send forward to ESCOP. I plan to have this done not later than March and may be able to complete it by the Land Grant meetings.

Appreciation - I want to express my appreciation to each of you who responded promptly to my Dialcom and Clive Donoho's letter asking you to contact Congressional leaders about the location earmarks by the Senate. As I write this I don't know how successful we were, but I do appreciate your efforts.

I again want you to know that I continue to enjoy representing you in various ways. I also again want to encourage you to provide some feedback relative to what you believe is important. Thanks.



WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

OFFICE OF THE DIRECTOR-AT-LARGE

May 16, 1988

TO: Members of the Users Advisory Board

SUBJECT: Budget Request Development Processes of the Agricultural Experiment Stations

At the UAB's February meeting during the discussion to develop a response to the President's FY1989 budget, several of you indicated a strong desire to become involved in the budget process much earlier. There were indications that you wanted to talk with OMB about the targets they set and with some leaders in USDA. On behalf of ESCOP and more specifically the Budget Development Group of the ESCOP Subcommittee for Planning and Budgets, I have put together the attached materials to provide you with background about how ESCOP budget proposals are developed.

In the early 70s OMB told us that we had to provide cost-benefit information that would justify additional investments in agricultural research. Several Stations provided people to develop this information, which showed annual internal rates of return of from 20% to over 100% with an average of about 40%. As soon as this was done OMB told us we "didn't have our act together", e.g. our requests were fragmented. Also we were told that we didn't speak with one voice. While we had done considerable nationally planning since the mid 60s, we decided that we had to make an even greater effort. The result was the establishment of the ESCOP Research Planning and Evaluation Subcommittee chaired by Dr. Neville Clarke of Texas A & M University. The first printed materials coming from that committee's efforts was: Research 1984. A copy (Attachment A) of the cover page is included. If you do not have a copy of this document, let me know and we will try to get one for you. It is good background.

Following that effort ESCOP set out to further develop a comprehensive planning process which would be updated in minor ways every year with a major update every 5 years. We began this effort in June of 1985 with a Symposium to focus our efforts. UAB's Jeanne Edwards was one of the speakers. (Attachment B) of the cover page and the table of contents of the proceedings is included. We followed this with a solicitation of commodity and trade organizations and of professional societies for the priorities that they saw for agricultural research. After we received this information, small groups of knowledgeable people within the Land Grant system made extensive efforts to digest and prioritize the information. We also used the information from the Joint Council efforts. The results of these efforts culminated in early 1986 in: Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations. A copy (Attachment C) of the cover and selected pages of this publication is attached. It is absolutely essential for you to have a copy of this publication and to know in a general way, at least, of what it contains and the processes used to develop it. You will note that it includes our best estimates of the funding required to initiate and continue each of the 21 listed priorities. Marshall Tarkington included

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May 16, 1988, page 2

In your packet the two year update entitled "Research Initiatives: A Midterm Update of the Research Agenda for the State Agricultural Experiment Stations." The Update uses the priorities of the 1986 publication and adds those that have surfaced in the past two years. We ask you to review it also.

When we established the ESCOP Planning and Evaluation Subcommittee, we decided that we should develop our budget proposals from the priorities. This was done in the past, but in a less specific way because we didn't have estimated costs to start up and maintain programs. The FY1989 ESCOP budget proposal was the first budget developed that fully utilized the information in Research Initiatives (1986 edition). We decided to include the top 25% of the highest priority objectives within the initiatives in the FY1989 request and to divide the remaining objectives equally between the FY1990 and the FY1991 projected requests. When Dr. Gast, Chair of the FY1989 Budget Subcommittee, and his committee saw what would be the magnitude of this request, we decided to include only the operating costs in the request, i.e. we excluded the startup costs. One may argue the specific amounts we decided upon, but one can not dispute that the budget was built upon a comprehensive planning process. Also attached is a copy (Attachment D) of the ESCOP FY1989 Budget request as amended following the receipt of the President's budget. The amounts are included in the NASULGC document, which you have received. However, we believe that Congressional staff need greater detail and background. In fact, several staff have indicated a need for it. Further, we believe that it should be useful to the UAB and other interested groups.

Following the stated desire of at least some of you to enter the budget process at an earlier date, I have attached a copy (Attachment E) of the FY1990 ESCOP budget request for your information. Dr. Kaltenbach provided you a copy of the FY1989 request last year. Again we have followed the planning process and the priorities indicated both Research Initiatives documents (i.e. the 1986 edition and the 1988 Update). Dr. C. Oran Little of Louisiana State University chairs the FY1990 ESCOP Budget Subcommittee. Again we took the highest priority objectives and put them into the FY1990 request and divided the remaining ones into the FY1991 and the FY1992 projected requests. We are preparing to make a formal presentation of the FY1990 ESCOP Budget request, to answer questions and to receive your suggestions at your August meeting. Dr. Jim Zurich, who succeeded me as Director in Washington, is the Chair of the FY1991 Subcommittee. We already are developing concepts and will hold our first meeting late September. The FY1991 also will drive from the planning process and presentation. Dr. Zurich and I will welcome your input as we develop the request.


The planning process is continuous and is well underway for the major update to be published in early 1990. We already have made preliminary contact with commodity and trade organizations and with professional societies. Many have responded that they plan to submit priorities. Also each of the subgroups within the Land Grant system with whom we work are updating its priorities. I have attached a diagram (Attachment F) of the structure of the ESCOP Subcommittee on Planning and Budgets. This should help you understand the linkages between the planning and budget activities. In addition to the publications I cited above, ESCOP frequently requests small groups with the needed expertise to develop position and information papers on selected subjects that are surfacing as probable high priority issues. Marshall Tarkington will receive enough copies of future publications for distribution to all UAB members.

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Lastly ESCOP would like to pursue with you what many of us believe is an excellent opportunity to secure additional funding for agricultural and related research. It appears obvious the support payments will be reduced drastically. We believe that the investment of a small portion of this likely reduction in agricultural research to assist producers and processors in maintaining and regaining, where needed, their competitiveness in world markets would be very wise. At your February meeting at least a few of you raised the issue of transferring funding from support payments to research and extension activities. ESCOP and the Directors of the Experiment Stations in each state are prepared to discuss this issue with you and to work with you in making it happen.

Thank you for the opportunity to be with you and to make this information available to you. If you have questions or need additional information, please let me know. Regards.

Sincerely,


L. L. Boyd
Director-at-Large

cc Clive W. Donoho, Jr., ESCOP Chair
Neville P. Clarke, Chair, ESCOP Subcommittee
on Research Planning & Budgets
Robert G. Gast, Chair, FY1989 ESCOP Budget
C. Oran Little, Chair, FY1990 ESCOP Budget
James J. Zuichas, Chair, FY1991 ESCOP Budget
J. Patrick Jordan, Administrator, CSRS-USDA
James E. Halpin, Southern Director-at-Large
Keith Huston, North Central Director-at-Large
Dale W. Zinn, Northeast Director-at-Large

Attachments:

- A - cover of Research 1984
- B - cover of Research Perspectives
- C - Research Initiatives: cover, contents - pages vii, viii, xi and xiv
[Marsha] Farkington gave them the 1988 update]
- D - FY1988 Proposed Budget: March 1988 response to the Executive Budget
- E - FY1990 Proposed Budget: 4/88 Draft approved by ESCOP
- F - Diagram of the ESCOP Subcommittee for Research Planning and Budgets

FACSIMILE TRANSMISSION

TO: Dr. Landis L. Boyd Western Agricultural Experiment Station Directors XXXXXXXXXX 303-491-7904	DATE: July 14, 1988
FROM: Keith Huston NC Experiment Station Directors	NO. OF PAGES TO FOLLOW: 4
SENDER'S ORGANIZATION:	SENDER'S FAX PHONE NUMBER: 216-263-3713
REMARKS: Attached is the schedule for the Division of Agriculture sessions at the 1988 NASULGC Annual Meeting, Sheraton Park Central Hotel and Marriott Park Central Hotel, Dallas, Texas. To the Division of Agriculture schedule, please add the following events: Sunday, Opening Reception, 6-7:30 p.m., Sheraton Tuesday, 9-10 a.m., First Plenary Session, Sheraton 10:30-11:45 a.m., Breakout Sessions (3), Marriott 12:15-2 p.m., Second Plenary Session and Luncheon CARET sessions will be held Saturday and Sunday morning in the Marriott; there will be an Office/Information Center in each hotel; Press Room will be in the Sheraton; Registration will be in the Sheraton. Registration begins at noon on Saturday and continues Sunday (all day) and Monday morning.	

ALL AG SESSIONS
(As of July 14, 1988)

Saturday, November 12

1-5 p.m.	ECOP Business Meeting	Marriott
13	C-30	
U-B C-V3		

Sunday, November 13

7-8:30 a.m.	International Agriculture Regional Groups Continental Breakfasts	Marriott
23	4 rooms. 3 C-15s and 1 C-20 (South)	
U-B C-V4	Southern - Northeastern - North Central - Western -	
8 a.m.-Noon	ESCOP Home Economics Subcommittee	Sheraton
25	C-20	
U-B C-V2		
8:30 a.m.-4 p.m.	ECOP Business Meeting	Marriott
29	C-30	
U-B C-V3		
8:30 a.m.-4 p.m.	ECOP Budget Subcommittee	Marriott
30	C-15	
U-B C-V3		
9-11:45 a.m.	ICOP and International Agriculture	Marriott
31	SR-80	
U-B C-V4		
9 a.m.-5 p.m.	Experiment Station NE Region Directors	Marriott
36	C-30	
U-B C-V2		
Noon-1:30 p.m.	ICOP Luncheon	Marriott
42	C-15	
U-B C-V4		
1-3 p.m.	ESCOP 1990 Budget Committee	Marriott
52	C-20	
U-B C-V2		
1-3 p.m.	ECOP Home Economics Subcommittee	Marriott
53	C-15	
U-B C-V3		
2-4 p.m.	1890 Extension Administrators	Marriott
62	C-20	
U-B C-V3		

3-5 p.m. 64 U-B C-V	Division of Agriculture 1990 Budget Committee C-20	Marriott
4:30-6 p.m. 198 U-B C-V	Division of Agriculture Legislative Committee C-20	Marriott
7:30-9 p.m. 73 U-B C-V	Division of Agriculture Board of Directors C-30	Marriott
8-10 p.m. 74 U-B C-V	Biotechnology Committee C-15	Marriott
8-10 p.m. 76 U-B C-V	Water Initiatives Committee C-15	Marriott
<u>Monday, November 14</u>		
7-8:30 a.m. 83 U-B C-VI	Western CAHA Breakfast C-15	Marriott
7-8:30 a.m. 82 U-B C-VI	Northeast CAHA Breakfast C-15	Marriott
7-8:30 a.m. 81 U-B C-V2	ESCOF Seed Policy Committee Breakfast C-20	Marriott
7-9 a.m. 87 U-B C-V	International Agriculture Section Continental Breakfast R-60 (standing lighted lectern)	Marriott
8:30 a.m.-Noon 91 U-B C-V	Division of Agriculture Plenary T-450	Marriott
Noon-1:30 p.m. 103 U-B C-V2	Experiment Station Section Luncheon R-100	Marriott
Noon-2 p.m. 106 U-B C-V1	CAHA Luncheon R-60	Marriott
Noon-2 p.m. 105 U-B C-V5	Resident Instruction Section Luncheon R-75	Marriott

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12:15-2 p.m. 104 U-B C-V3	Extension Section Luncheon R-120	Marriott
1-5 p.m. 117 U-B C-V3	ECOP Home Economics Subcommittee C-15	Marriott
1:30-4 p.m. 118 U-B C-V2	ESCOP Home Economics Subcommittee C-15	Marriott
2-4 p.m. 122 U-B C-V1.4	International Agriculture Section and CAHA T-125	Marriott
2-4:30 p.m. 125 U-B C-V3	Extension Section T-100	Marriott
2:15-5 p.m. 126 U-B C-V5	RICOP T-100	Marriott
2:30-5 p.m. 119 U-B C-V2	Experiment Station Region Directors Meetings 4 Rooms, U-30 (15 ex. chairs in Mesquite)	Marriott
6-9 p.m. 142 U-B C-VW	Division of Agriculture and Division of International Affairs Reception and Dinner R-650 round table with flowers and place card near lectern	Sheraton
<u>Tuesday, November 15</u>		
7-8:30 a.m. 78 U-B C-V2	1890 Research Directors Breakfast R-60	Marriott Richardson
7:30-9 a.m. 148 U-B C-V4	International Agriculture Budget Committee Breakfast C-10	Marriott
1:30-3:30 p.m. 156 U-B C-V5	Resident Instruction Section T-150	Marriott
2-4 p.m. 166 U-B C-V2	Experiment Station Section SR-96, HT-6	Marriott
2-4 p.m. 162 U-B C-V2	1890 Research Administrators C-20	Marriott

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2-4 p.m. 160 U-B C-V3	1890 Extension Administrators C-25	Marriott
2-4 p.m. 158 U-B C-V3	Extension Regional Directors 4 rooms, U-30 each	Marriott
2-4 p.m. 197 U-B C-V4	International Agriculture Regional Meetings C-20 (Southern), C-12, C-12, C-12 Southern - Northeastern - North Central - Western -	Marriott
3:30-4 p.m. 165 U-B C-V5	RICOP New Officers C-15	Marriott
3:30-4 p.m. 164 U-B C-V5	Resident Instruction Regional Meetings 3 rooms, C-25	Marriott
4-5 p.m. 161 U-B C-V	Division of Agriculture 1991 Budget Committee C-20	
4:15-5:15 p.m. 163 U-B C-V	Division of Agriculture Business Meeting T-150	Marriott
 <u>Wednesday, November 16</u>		
8 a.m.-Noon 167 U-B C-V3	ESOP Executive Committee C-12	Marriott
8 a.m.-1:30 p.m. 168 U-B C-V2	ESOP Business Meeting C-35 & T-15	Marriott

WATER QUALITY AND MANAGEMENT PROJECT
REPORT TO THE
WESTERN REGIONAL DIRECTORS ASSOCIATION
STATE AGRICULTURAL EXPERIMENT STATIONS
JULY 28, 1988

BY BILL KERREY
ESCOP/ECOP/NASULGC

OUTLINE

- I. STATEMENT OF GOALS
 - A. WATER QUALITY FUNDING
 - B. BROADER AGRICULTURAL ISSUES
- II. PROGRESS TO DATE
 - A. APPROPRIATIONS
 - B. AUTHORIZATION LEGISLATION
- III. SUGGESTIONS FOR FUTURE ACTIVITIES
 - A. WASHINGTON, D.C. PRESENCE
 - B. TACTICS

I. STATEMENT OF GOALS AND OBJECTIVES

These goals were determined by ESCOP and ECOP. The objectives were decided upon in consultation with ECOP, ESCOP and NASULGC.

A. WATER QUALITY FUNDING

The goal was to achieve in USDA funding for FY 1989:

1. \$25 million in CSRS for water quality research, and
2. \$15 million in ES for water quality education.

The objectives were to:

1. Testify before the House and Senate Appropriations Subcommittees on Agriculture and Rural Development.
2. Have Directors of SAES and CES make personal visits, make telephone calls, and send letters to the 23 members of these committees, the full Appropriations Committees and all state delegations.
3. Hold briefings illustrating the SAES and CES activities on water quality.
4. Build coalitions with groups that are also interested in water quality and water quantity issues.
5. Testify at hearings relating to water quality but not appropriations.

B. BROADER AGRICULTURAL ISSUES

It is difficult to isolate water issues from the broader agricultural issues of natural resources management, agricultural policy and food policy. It is also difficult to isolate agriculture from the broader issues of general economic development, community development and international relations.

It is suggested that there is some value in considering positioning the water quality and management (and other agricultural research and education) requests in the context of these larger issues while still targeting the political strategies and tactics to capture funding.

II. PROGRESS TO DATE

A. APPROPRIATIONS

1. The House has recommended \$5 million in FY 1989 funding for water quality research and education as follows:

***ARS	\$2,000,000
***CSRS	\$2,000,000
***ES	\$1,000,000

2. The Senate has recommended \$11 million in FY 1989 funding for water quality research and education as follows:

***ARS	\$5,000,000
***CSRS	\$4,000,000
***ES	\$2,000,000

On the house side there is no ear marking. On the Senate side there is ear marking of the CSRS funding: \$1.5 million for University of North Dakota Institute of Mining and \$250,000 for Iowa State.

The Conference Committee is expected to settle on something between these figures.

B. AUTHORIZATION OR GENERIC LEGISLATION

The Congress is considering legislation on groundwater quality research. The House has passed HR 791 which gives the major role to the USGS and authorizes about \$155 million for each of three years. S 20 and S 1105 are being considered by the Senate.

We have testified to the effect that education should be included in this research and that SAES, ES, the Land Grant Colleges and the USDA be given a major role in this effort.

III. SUGGESTIONS FOR FUTURE ACTIVITIES

A. WASHINGTON, D.C. PRESENCE

1. One Option: My initial suggestion to this group has been to have a full time person in Washington, D.C. that can represent you on all issues including the Hatch Act funding as well as special requests such as water quality funding. This is still my suggestion.

2. Another Option: After talking to other groups that come to Washington, D.C. to capture funding, I recommend you also consider forming a special water quality and management committee that is representative of the key states on the Appropriations Subcommittee on Agriculture and hire a lobbyist to see that the funding is included in each year's funding. This is essentially what you do today but only strengthened.

B. TACTICS

1. I suggest that you hold more briefings on Capitol Hill and that you even consider a committee that would be responsible for organizing Capitol Hill briefings on agricultural issues, including water quality.

2. USDA and EPA should invite their constituencies (environmentalists and agricultural organizations) to sit down and build a stronger coalition.

3. Use grass roots citizens groups to write letters and contact their representatives and Senators when the latter are in the states or districts.

4. Build a stronger Capitol Hill working relationship between CSRS and ARS.

5. Use Capitol Hill fellows interns to strengthen the presence of the agricultural sciences in the political process. Also, use fellows located at the University campuses and target the state offices of the politicians.