

MINUTES OF
WESTERN DIRECTORS' MEETING
Berkeley, California

March 2-4, 1959

The meeting was called to order by Chairman Myers at 9:00 a.m., March 2, in Room 245, Giannini Hall, on the campus of the University of California. The following were present during all or part of the meeting:

Harold E. Myers	Arizona
R. K. Frevert	Arizona
Paul F. Sharp	California
A. M. Boyce	California (Riverside)
D. E. Jasper	California (Davis)
K. A. Ryerson	California (Berkeley)
H. J. Vaux	California (Berkeley)
S. S. Wheeler	Colorado
Morton M. Rosenberg	Hawaii
James E. Kraus	Idaho
R. D. Ensign	Idaho
Roy E. Huffman	Montana
J. A. Asleson	Montana
J. E. Adams	Nevada
C. E. Fleming	Nevada
Robert H. Black	New Mexico
F. E. Price	Oregon
R. M. Alexander	Oregon
Wynne Thorne	Utah
Mark T. Buchanan	Washington
L. W. Rasmussen	Washington
N. W. Hilston	Wyoming
John Vaughn	Wyoming
E. C. Elting	ARS (Washington, D.C.)
N. F. Farris	SESD
Keith Arnold	Forest Service (Berkeley)
Robert E. Olson	Recording Secretary

November Minutes
Approved

Sharp moved, Buchanan seconded, that the minutes of November 1958 be approved as distributed. Passed.

COMMENTS OF E.C. ELTING and RELATED DISCUSSION

Knoblauch ill

Dr. Elting extended greetings from Dr. Knoblauch who has been ill since January but is expected to return home from the hospital soon. (See page 18 of these Minutes for copy of letter from Western Directors to Dr. Knoblauch.)

Dr. Beacher was not able to be present due to illness in his family. (Letter from the Western Directors, page 18.)

Utilization Research

Status of the utilization and physical facilities bills in Congress is not clear cut. General consensus is that some kind of bill for utilization research may be enacted. Last year the Department of Agriculture opposed the bill which provided for separate administration of utilization research. The Dickson bill will accomplish the same purpose except that administration will be within the USDA. Hearings were held on the bill the 18th and 19th of February. Dollar authorization is not provided in the bill.

1960 Appropriations

Few increases were included in the 1960 appropriations bill. There is \$250,000 for research in the field of humane slaughter of livestock and \$200,000 for a national arboretum. There are funds for new facilities at Logan, Utah for regional work primarily in sugar beets. Last year there were fewer Federal grant projects. Non-Federal funds increased in the experiment stations from 84 million in 1957 to 96 million in 1958. Last year's expenditures by States on research supported by gifts and grants were 8.25 million.

National Science Foundation

Questions have been raised about the NSF project designed to show the impact of certain research on national economy. The survey was not intended to secure information about broad State research programs, but on projects dealing specifically with the national economy.

Range Research

Compilation of reports on range research in 17 Western States has been proposed. It has been suggested that the compilation job be done by personnel of the SESD. The proposed report would be something like the annual report of pasture research prepared in the Northeast.

There was some discussion of this proposal by the Directors. Farris indicated no action was needed now as a letter outlining the proposal will be sent later to each Director for consideration.

Biological Control of Weeds

Dr. Elting stated that Director Sharp had sent an inquiry to the Agricultural Research Service relating to the possibility of using Public Law 480 funds for research on biological control of weeds.

✓The following answer was received from H. W. Marston:

"Director Sharp's suggestion, in his letter of February 19 to you, for using PL 480 funds for research on biological control of range weeds is certainly a reasonable use of these funds.

"The survey teams that visited Europe and Asia have already suggested that biological means for controlling weeds would be a most acceptable subject for research. The Survey team in India is exploring the possibility of work on halogetin in that country. We can suggest to countries where PL 480 funds are available our interest in studies of biological methods for controlling weeds. It would, however, be helpful in making suggestions to know which countries are the native home of the weed and where the natural enemies of the plants occur.

"Our office must depend upon our research people to indicate their opinion of importance of the several weeds that should be studied."

Price moved, Ensign seconded, that:

WHEREAS, certain exotic weed species have become established on rangeland and other non-cropland areas, and

WHEREAS, these weeds are capable of over-running the rangeland reducing and even eliminating its producing capacity, and in some instances being poisonous to livestock, and

WHEREAS, these and other weeds also are able to infest cropland increasing costs of production, and

WHEREAS, the chemical and cultural methods of weed control are too costly or otherwise not practical for controlling large areas of weed infested rangeland, and

WHEREAS, the potential of biological control of certain weed species has been demonstrated,

BE IT THEREFOR RESOLVED,

That we recommend the initiation or expansion of the Agricultural Research Service in foreign exploration program for insects or other biological means of control for selected weed species. We further suggest that use of P.L. 480 funds be explored and be made available to support this work in the appropriate foreign countries.

Passed.

Soil and Water
Facilities Report

The report by the Secretary to Congress relating to Soil and Water Research Facilities will probably be released soon. There was some discussion by the Directors of the matter of soil and water facility locations.

OTHER BUSINESS

Report, SESD Farris

1. The Committee of Nine will meet March 25-27 and again June 9-12 (probable date). There will be no other meetings until November. New or revised project outlines should reach SESD by June 1 to insure review by the Committee of Nine.
2. Administrative advisers are requested to notify SESD and the Research Division Director when Department line projects are accepted by technical committees as contributing projects.
3. When submitting station projects to SESD for approval and recording as contributing projects, please indicate that they have been accepted by the technical committees.
4. Occasionally SESD representatives report that little or no work has been done on certain contributing projects. SESD will notify station Directors in order that transfers or adjustments may be made if necessary or advisable.
5. Station Directors are requested to indicate all contributing projects (by regional project number) on the 1960 station research programs. This will prevent having them removed from the SESD regional research files.
6. SESD should be notified when contributing projects supported only by State funds are terminated or withdrawn.
7. Within-station RRF transfer requests should be submitted by June 1 and between-station transfers by May 1 to allow adequate time for processing. Time can be saved by transmitting requests through Dean Myers and Director Coyt Wilson (chairman of the Committee of Nine) for signature.
8. Technical committee representatives should be the persons engaged in the actual research work.

Report, ESCOP

By consent of the Directors, it was agreed the minutes of ESCOP would not be read as each Director received a copy.

Director Fleming summarized the highlights of the minutes.

The basis for budgeting in July for fiscal year 1960-61 is expected to be on the assumption of 14 million dollars increase in total grant funds. It is expected

that 5 million of the increase would be devoted to research in forestry and 5 million to soils and water research. Considerable attention has been given to developing projects in these research areas for State projects, but the regional program needs to be developed. The minimum quota for research in marketing will probably apply to the 14 million increase requested.

Legislative Subcommittee,

ESCOP

Myers

Myers reported on the activities of the Legislative Subcommittee meeting since last November. He explained that the physical facilities and utilization bills have been combined and that the combined bill has been approved in principle by the Secretary of Agriculture. Myers discussed in some detail the testimony of the subcommittee before Congressional committees and expressed optimism about some increase in research funds.

Liaison Between ESCOP
and its Subcommittees

Recommendation for close liaison between Legislative Subcommittee and other subcommittees of ESCOP was made.

Fleming moved, Frevert seconded, that the Western Directors recommend that Director Farrell, chairman of ESCOP and Director Myers, of the Legislative Subcommittee, confer concerning the necessity of requesting the chairman of the Subcommittee on Forest Research, the chairman of the Subcommittee on Increased Industrial Use of Agricultural Products, or the chairman of any other subcommittee, to be in attendance at any meeting of the Legislative Subcommittee when his presence would be helpful in the deliberations of the Legislative Subcommittee. Passed.

Experiment Station
Policy Toward USDA
Soils and Water
Facilities Report

Thorne reported that the soils and water research facilities would be devoted to seven major kinds of research: irrigation, climate and environment, tillage and soil structure, hydrology, basic soils and minerology, drainage, and watersheds.

Wheeler moved, Rosenberg seconded, that the Western Directors recommend that the Soil and Water Subcommittee of ESCOP prepare a statement defining the position of the State Experiment Stations relative to U. S. Department of Agriculture's report on National Soil and Water Facilities, and that this statement be transmitted to the chairman of ESCOP for its consideration before the April meeting. Passed.

National Soil Research
Committee

Thorne reported on the review of the National Soil Research Committee. (See motion directing review, Minutes of November 1958, page 7.) He recommended termination of the 1954 Memorandum of Understanding with the Department of Agriculture which established

the National Soil Research Committee. It was pointed out that the North Central Region has urged continuation of the Committee. The Committee meets in Kansas City on April 8 to review the National Soils and Water Research Facilities Report.

Thorne moved, Rosenberg seconded, that since the situations which led to the establishment of the National Soil Research Committee have significantly changed, there does not now appear to be a general need for its continuation as constituted; therefore, the Agricultural Experiment Stations of the Eleven Western States and Hawaii herewith notify the various agencies of the U. S. Department of Agriculture concerned, and the Experiment Stations of the other three regions, that each of the western states will terminate participation in the revised Memorandum of Understanding Relative to Soil, Water and Fertilizer research as signed by the Western Directors between January 16 and April 1, 1954, and by B. T. Shaw on May 10, 1954. Passed.

Thorne moved, Wheeler seconded, that R. A. Whitney be authorized to attend the next meeting of the National Soil Research Committee. Passed.

Western Soil and Water
Research Committee

Thorne moved, Frevert seconded, that the presently organized Western Soil and Water Research Committee is permitted to continue in accordance with the revised Memorandum of Understanding among the Western States, as approved by the committee on December 1, 1955, without formal approval of the the Memorandum by the Agricultural Experiment Station Directors. Passed.

Soil and Water Work
Groups Authorized
to Meet

Adams moved, Jasper seconded, that the Regional Soil Survey Work Group, Clinton Browne, chairman, be authorized to meet. Passed.

Thorne moved, Rosenberg seconded, that the Phosphorus Work Group, W. R. Schmehl, chairman, be authorized to meet. Passed.

Thorne moved, Jasper seconded, that the Clay Mineralogy Work Group, L. D. Whittig, chairman, be authorized to meet. Passed.

Thorne moved, Wheeler seconded, that the Work Group on Water Requirements of Crops, S. A. Taylor, chairman, be authorized to meet. Passed.

ARS Contribution to
Regional Research
on Soils and Water

Frevert discussed the progress in construction of the Soils and Water Laboratory at Phoenix. A Memorandum of Understanding with the experiment stations is being developed. Frevert commented that,

apparently, not much progress has been made in getting ARS to submit contributing projects to regional research in the soils and water area.

Dr. Elting indicated that he will work with the research people concerned in ARS on this problem.

Myers proposed that Price and Thorne bring this problem to the attention of ESCOP.

Committee of Nine
Ensign

Ensign indicated that Elting and Farris covered most of the points relating to Committee of Nine. The Committee of Nine has noted that administrative advisers have not always been present at the time important administrative decisions were taken by technical committees. The Committee on Regional Research has also considered this and has included a recommendation in its report (see page 20).

USDA Editorial Policy

Price reported that there seems to be no uniformity in editorial policy among the research agencies of the USDA. Frequently reviews emphasize grammar and punctuation and not content and policy. Some USDA agencies insist on ribbon copy of the manuscript which is needed by the Station editor for certain types of reproduction.

After some discussion of this problem, it was agreed that the matter would be referred to the Federal-States Relations Committee, that Price will distribute to the Directors copies of the letter from his Station editor outlining these problems, and that the Directors would be prepared to discuss the matter further at the next meeting.

ESMRAC

Huffman indicated no report. The next meeting will be the third week of April.

The official status of ESMRAC was explained. It is a technical advisory committee of the Department of Agriculture established under the RM Act which parallels the USDA commodity advisory committees. Although its members are suggested by ESCOP, it is an official Department of Agriculture committee and its members are entitled to Federal travel allowance to meetings.

No Report

The following Standing Committees had no report to submit:

Federal-States Relations, Price

Research Information and Public
Relations, Adams

ESCOP-ECOP, Price

Exchange of Plant
Breeding Materials
with USSR

Chairman Myers read a letter from Director Farrell relating to the exchange of plant breeding materials with the Soviet Union.

"A matter has arisen which you may wish to bring to the directors of your Region at their spring meeting.

"I understand that as a result of the Crops Research Task Force of the United States Department of Agriculture which visited Russia last summer, an agreement between the two nations providing for exchange of plant breeding materials is being negotiated. This will provide that all requests for plant materials from research agencies in this country will be channelled through the New Crops Research Branch of the Crops Research Division of ARS under the supervision of Mr. C. O. Erlanson. Once this agreement is approved Dr. Elting is planning to inform the directors of the channels for carrying on such an exchange with Russia. I understand that a few stations are carrying on direct correspondence with certain institutions in Russia.

"If your group has an interest, or sees any problems in connection with this matter they may wish to have them presented to ESCOP through your representatives."

The Directors indicated no problems in this connection.

Representative Planning
Committee National
Seed Foundation
Project

Vaughn moved, Frevert seconded, that A. G. Law, State College of Washington, be named by the Western Directors as representative of the Western Region on the Planning Committee, National Seed Foundation project. Passed.

Federal Insecticide,
Fungicide and
Rodenticide
Act of 1947

Rasmussen discussed the changes proposed in the Federal Insecticide, Fungicide and Rodenticide Act of 1947 and requested discussion of these proposals by the Western Directors. No action was taken by the group. Rasmussen will circulate to the Directors a letter with a more detailed statement of the proposed changes.

White Muscle Disease

Alexander reported that Nevada, Montana and Oregon are doing research on White Muscle Disease and that Idaho and California are planning work. Representatives of the interested States met, briefly, to discuss White Muscle research while in attendance at another meeting. Seven of the eight States' representatives present felt that another meeting would be desirable. The group recommended some system of coordination of the work on White Muscle Disease but not necessarily a regional project. They recommended appointment of an administrative adviser and authorization for a meeting.

Alexander moved, Huffman seconded, that an administrative adviser be appointed to call together interested States doing or planning research on White Muscle Disease with understanding that no regional funds would be involved. Motion lost.

Black Spot Disease

Rasmussen reported it was not necessary to hold the meeting authorized by the Western Directors and that the researchers interested in the problem had worked out satisfactory means of communication

WAERC

Huffman reported the recommendations of the WAERC had been submitted to the Committee on Regional Research and commented briefly on them.

Heritability for Solids Not Fat Protein

Buchanan moved, Jasper seconded, that Dr. A. O. Shaw serve as the representative of the Western Directors in any meeting(s) that may be called prior to action by the Western Section, American Dairy Science Association on the request by the Directors' to them for recommendations on questions relating to the establishment of a breeding project in the area of heritability of solids not fat. Passed.

Extension Research

Price indicated that the item will be on the agenda of the Extension Directors for discussion. No action has been taken with regard to the Western Directors' statement of July 1958 relative to the extension research. There appears to be need for the studies proposed in the document issued by the Federal Extension Service, but the document has dodged the main issue raised by the experiment station directors.

Huffman moved, Rosenberg seconded, that the Western Directors reaffirm the position taken in July 1958 regarding Extension Research. Passed.

The action of July 1958 was:

"The Western Experiment Station Directors recommend that 'Research' be dropped from the name of the Division of Extension Research and Training of the Federal Extension Service, and that appropriate revisions be made in the statement prepared by the Federal Extension Service on the function of this division consistent with the recommended change in name.

"If we were asked to suggest a name for this Division, we would propose 'The Division of Extension Evaluation and Training.' Passed." Minutes of July 1958, page 14.7

Meeting at the Western Utilization Research and Development Division

The meeting convened at 8:30 a.m. on March 3 at the Western Utilization Research and Development Division.

Opening of Meeting and Introductory Remarks by the Chairman, Dean Harold E. Myers, University of Arizona

Welcoming Remarks - W. B. Van Arsdel, Acting
Director, Western Utilization Research and
Development Division

Recent Developments in Program and Staff -
W. B. Van Arsdel, Assistant Director

New Studies of Forage Crop Composition -
George O. Kohler, Chief, Field Crops Laboratory

Castor Bean Utilization Research -
Leo Goldblatt, Oilseed Investigations and
Floyd DeEds, Chief, Pharmacology Laboratory

New Knowledge of Natural Flavors--discussion
and demonstration -
Joseph W. Corse, Fruit and Vegetable Laboratory

Expanded Facilities for Wool Processing Research--
discussion and inspection of new building -
Harold P. Lundgren, Chief, Wool and Mohair Laboratory

Personnel of Western Utilization Research and Develop-
ment Division present at meeting of Western Experiment
Station Directors, March 3, 1959, Albany, California.

W. B. Van Arsdel, Acting Director
S. J. Adams (Regional Business Office, ARS)
I. J. Girgich
R. H. Nagel
C. H. H. Neufeld
R. T. Prescott

Field Crops Laboratory

G. O. Kohler
G. A. Goldblatt
C. R. Thompson
W. C. Hale

Poultry Laboratory

Hans Lineweaver

Fruit and Vegetable Laboratory

W. F. Talburt
J. W. Corse

Wool and Mohair Laboratory

H. P. Lundgren

Engineering and Development Laboratory

W. D. Ramage
C. L. Rasmussen

Pharmacology Laboratory

Floyd DeEds

Pioneering Research Laboratory
E. F. Jansen

Agricultural Marketing Service
R. V. Enochian

The Directors attended luncheon at the Laboratory featuring products developed at the Laboratory, and reconvened on the campus of the University of California for the afternoon session.

REVIEW OF REGIONAL PROJECTS

Chairman Myers called for comments or questions concerning individual regional research projects. He limited this to items not covered by the report of the Committee on Regional Research.

W-1, Beef Cattle Breeding
Review at Corvallis
Beginning at Noon
July 8, 1959

Wheeler indicated that the chairman of W-1 has suggested the possibility of presenting a review of the project and its accomplishments to the Western Directors at the Oregon meeting. He suggested the possibility of scheduling this review on Wednesday, July 8, 1959. Price invited the Directors to a salmon barbecue the evening of July 8th (the meeting of the Western Directors begins July 9th).

Buchanan moved, Thorne seconded, that the Directors accept with thanks the invitation of the W-1 Committee to meet at Corvallis for review of the project beginning at noon, July 8, 1959, and the invitation of the Oregon Station to a salmon barbecue the evening of the 8th. Passed.

W-8, Housing
Use of Trust Funds
For Publication

Rasmussen moved, Wheeler seconded, that the special trust fund held for W-8 by the California Experiment Station be used to finance the publication of the technical bulletin being prepared by Mrs. May Coombs of the Colorado Station covering the environmental studies conducted under W-8. It is estimated that the available funds will be sufficient and that the draft of the publication will be completed by July 1, 1959. Passed.

W-16, Range Economics

Fleming reported the technical committee has issued 31 publications.

W-61, Sheep Breeding

The technical committee needs to work on the definition of what constitutes carcass merit. The committee has recommended equal distribution available regional research funds to the participating States. There was some discussion among the Directors relative to the merits of equal distribution of small amounts vs. concentration of available regional research funds on one or a few contributing projects.

Soils and Water

Thorne prepared a brief history and sequence of the development of the regional soil and water projects, which has been circulated to all Directors. (This is a report called for at the fall meeting, November 1958, page 7.)

BRIEF HISTORY OF REGIONAL SOIL AND WATER RESEARCH PROJECTS

The first project W-9 (Irrigation and soil management studies, including drainage, salinity and fertilization) was developed at the request of the Western Agricultural Experiment Station Directors and approved for activation on July 1, 1949. This project was broad in scope and came in for frequent criticism.

After five years, in 1954, the W-9 project was thoroughly reexamined and the work included in W-9 was separated into three projects: W-28, Irrigation water application and drainage; W-29, Soil-water-plant relationships under irrigation; and W-30, Measurement, evaluation and modification of soil structure.

The W-28 project included studies on water application and on drainage. The technical committee concluded that the work could be better planned and coordinated if the drainage phases were removed from W-28 and placed into a new project. In 1956 the project proposal entitled "Drainage design for irrigation agriculture" was submitted to the directors and approved as W-51. Regional funds were not allocated in sufficient amount to support this proposal and so the separation of drainage work from W-28 was delayed and will not be fully accomplished until July 1, 1959.

As the five-year period for projects W-28, W-29 and W-30 approached each project was again examined and the areas of overlapping were critically examined. As a result the area of investigation originally covered by W-9 project is now proposed to be divided into five projects as follows:

W-65, Hydraulics and efficiency of irrigation application (from W-28)

W-51, Drainage design for irrigated agriculture (from W-28)

W-68, Water movement in soils (combining some work previously included in W-29 and W-30)

W-67, Soil-moisture-plant growth relationships (from W-29)

W-66, Structural stability of soil (from W-30)

The relationships between the objectives of this sequence of projects are shown in the attached table (see page 19 of these Minutes).

Two additional projects in the general field of soil and water were approved for activation July 1, 1955. These represent lines of work different from those included in the original W-9 project. These two projects are:

W-31, The conservation and improved use of nitrogen in western soils.

W-32, Basic hydrologic factors in precipitation disposal related to water conservation.

WM-19, Fruit and
Vegetable Packing

To be closed June 30, 1959.

WM-24, Horticultural
Specialties

Termination planned June 30, 1960.

WM-21, Livestock
Information

Considerable progress has been made on activation of a service program to continue the information activities initiated under this project. The program is to be cooperative between Extension and Agricultural Marketing Service. The function will be implemented with approximately \$15,000 from Federal Extension Service, \$15,000 from AMS and \$15,000 from the State Extension Services.

WM-21 terminates June 30, 1959.

Buchanan Nominated to
FAO Committee

Alexander moved, Rosenberg seconded, that Director Buchanan be recommended to serve as representative of the Experiment Stations Section as one of five members (one each from teaching, extension, home economics, veterinary medicine and experiment stations) of a committee of the Division of Agriculture, Land-Grant College Association to foster appropriate communications with the Food and Agriculture Organization.
Passed.

W-62, Power and
Machinery Costs

Frevert suggested the project would benefit from more time and motion studies. Huffman agreed. Thorne pointed out the Russians have done considerable work in this field and suggested the technical committee explore this. Alexander suggested a workshop type session to insure development of a uniform methodology.

W-69 (W-8), Housing

Huffman moved, Ensign seconded, that W-62 be referred back to the technical committee for changes in accordance with comments of the Committee on Regional Research and the Western Directors, and resubmitted to the RRC prior to May 1, for approval and funding July 1, 1959.
Passed.

Wheeler moved, Asleson seconded, that the revision of Regional Project W-8 be referred back to the administrative adviser and technical committee for recommendation to RRC of a priority of not less than two nor more than three State contributing projects for funding and activation in 1959-60, the total allotment for 1959-60 not to exceed \$16,000. Passed.

WM-16, Grain Insects

Use of the original title was recommended.

WM-40, Procurement Practices

Rosenberg moved, Thorne seconded, that the initial regional project outline for WM-40, "Procurement Policies and Practices of Large-Scale Food Retailers," be returned to the technical committee along with the comments of the Regional Research Committee. Upon revision, the outline is to be resubmitted by May 1, 1959 to the RRC for approval. If approved, the project will be initiated July 1, 1959. Passed.

W-12, Bean Improvement

Vaughn moved, Jasper seconded, that W-12 be approved for five years - through June 30, 1964 - and retain number W-12. Passed.

Administrative Advisers
W-12 and W-69

Ensign moved, Black seconded, that Rasmussen be appointed administrative adviser of W-69 (W-8), Housing, and that Vaughn be appointed administrative adviser of W-12, Bean Improvement, effective July 1, 1959. Passed.

Report of the Committee
on Regional Research

Ensign presented the report of the Committee on Regional Research. (See pages 20 through 30.)

Black moved, Rosenberg seconded, that the Directors adopt the report of the Committee on Regional Research relative to review and approval of regional projects and assignment of administrative advisers, as amended by motions of the Western Directors. Passed.

Recommended Budget
1959-60

Ensign presented the budgets recommended for the western regional projects at the no increase and three million increase levels. There was some discussion of the changes needed in the recommended budget to provide for funding of W-12 and W-69. The matter was referred back to the RRC for further recommendation. (The recommended budgets at the no increase level are included in these Minutes, pages 33 through 38.)

Rosenberg moved, Vaughn seconded, that the cuts proposed by the RRC be approved; that the cuts proposed for W-1, W-25, W-43, W-47, W-51, W-53, W-55, W-56, W-61, and W-63 be restored if new regional funds are made available by Congressional action during 1959; and that the cuts be restored prior to further supplementation of any of the regional projects should new funds be made available. Passed.

Sharp moved, Rosenberg seconded, that administrative advisers transmit to Mr. Olson by April 1, State breakdown of project budgets where adjustments are necessary at the no increase level. Passed.

Buchanan moved, Frevert seconded, that necessary adjustments in budgets at one million level of increase be left to RRC with power to act. Passed.

Priority Rating of
Proposed Project
Titles

The Recording Secretary has tabulated the votes of the States on the list of 185 project titles developed as directed at the fall meeting (see Minutes of November 1958, page 6).

Sharp moved, Rosenberg seconded, that the priority rating list of titles be included in the Minutes. Passed.

GENERAL PROJECT TITLES

	<u>Score*</u>
1. Physiology of the gastro-intestinal tract of domestic animals (43)** The physiology and biochemical processes involved in nutrient utilization by ruminants (44)	26
2. The effects of range management on forage and water relations of watersheds (51)	15
3. Fundamental concepts of population genetics (47)	15
4. Poisonous plants and livestock poisoning on rangelands (5)	12
5. Develop preliminary plans for entire materials handling systems (pellets)/ mechanical principles (86, 181)	11
6. Water and nutrient requirements of range plants (52)	10
7. Methods of clay mineral analysis (95)	10
8. Pulmonary disease complex (49)	9
9. Physiology and genetics of forest trees (124, 125, 126, 136)	8
10. Methods of seeding and maintaining plants on arid rangeland	7
11. Curly top virus (171)	7

* A priority equals 3, B priority equals 2, and C priority equals 1.

** Denotes code numbers

	<u>Score*</u>
12. Nature of the differential resistance of plants to insect damage (177)	7
13. Insects affecting livestock (14)	6
14. Developing methods of measuring range use (54)	6
15. Physiology of verticillium albo-atrum (138)	6
16. International trade and agriculture in the western region (185)	6
17. Influence of small mammals on rangelands (53, 65, 67)	6
18. Economics of marketing western livestock on a carcass weight and grade basis (27)	5
19. Effects of liver fluke infections in sheep and cattle (35)	5
20. Economics of water conservation practices (104)	5
21. Improving the economy and effectiveness of agricultural communications (180)	5
22. Reproduction and survival of forest trees (130, 133, 134)	5
23. Range insects, forest insects (62, 68, 128)	5
24. Determination of the physiological and chemical nature of drouth resistance of agriculturally important crops on a genetic basis (74)	5

Spring Meeting 1960

The nominating committee recommended the 1960 spring meeting be held in New Mexico.

Alexander moved, Frevert seconded, that the Spring meeting be held in Las Cruces, New Mexico in 1960.
Passed.

Utilization Research Conference

Thorne moved, Rosenberg seconded, that the Western Directors authorize a meeting of representatives of the western experiment stations to meet in Berkeley to discuss and develop recommendations for areas of regional research on new or improved uses of agricultural and forestry products. The group would meet with representatives of the Western Utilization Research and Development Division to obtain information about its

utilization research activities. A Director is to be appointed to call the meeting and act as chairman of the group. Recommendations for regional research should be made to the Directors not later than November 1, 1959. Passed.

Director Sharp was appointed chairman.

W-42, Ground Water Law

Wheeler presented the request of the W-42 committee for an extension of the project for an additional year, through June 30, 1961. The request was referred to the Committee on Regional Research for action at the July 1959 meeting.

Budgeting Procedure

There was some discussion of the budgeting procedure for the western regional projects. Elting commented that he had given considerable thought to the problem. Some Directors favored a different approach to this problem. No action was taken.

State Budget Problems

There was discussion by each Director of the current status of research funds from State appropriations.

Appreciation to the
Western Utilization
Research and Develop-
ment Division

The Western Experiment Station Directors appreciate and extend thanks for the program and the luncheon provided them on March 3, 1959 by the personnel of the Western Utilization Research and Development Division, Agricultural Research Service, United States Department of Agriculture.

Appreciation to the
University of
California

The Western Experiment Station Directors having met on the Berkeley campus of the University of California, March 2, 3, and 4, 1959, express their sincere thanks to the University and specifically to Dr. Wellman, Dr. Aldrich, and Dr. and Mrs. Sharp for the fine hospitality and excellent food which we enjoyed. We also appreciate the meeting room facilities and the excellent coffee which was provided for us. This "resolution" to be transmitted by Chairman Myers.

Respectfully submitted,

Robert E. Olson
Recording Secretary
Western Directors

AGRICULTURAL EXPERIMENT STATIONS

WESTERN REGION

March 4, 1959

Dr. H. C. Knoblauch, Director
State Experiment Stations Division
Agricultural Research Service
United States Department of Agriculture
Washington 25, D. C.

Dear Harold:

The Western Experiment Station Directors in their meetings here in Berkeley have missed your attendance and friendly counsel during their spring meeting.

We send you our greetings and best wishes for a rapid recovery, and are looking forward to having you with us in Oregon next July.

Very sincerely yours,

WESTERN DIRECTORS

AGRICULTURAL EXPERIMENT STATIONS

WESTERN REGION

March 4, 1959

Dr. Bruce F. Beacher
Regional Research Coordinator
State Experiment Stations Division
Agricultural Research Service
United States Department of Agriculture
Washington 25, D. C.

Dear Bruce:

The Western Experiment Station Directors regret the illness of your wife which prevented your attendance at our meetings here in Berkeley. Dr. Farris and Dr. Elting expressed regrets that you were unable to be here.

We hope that your wife recovers soon and that you will be able to be with us at our next meeting. Best wishes to you and Mrs. Beacher.

Sincerely yours,

WESTERN DIRECTORS

SEQUENCE OF DEVELOPMENT OF REGIONAL SOIL AND WATER RESEARCH PROJECTS

W-9 Project Objectives		W-28, W-29, W-30 Objectives		Objectives of projects approved March 1959
1. Basic principles of soil-water relations as related to: (a) application; (b) infiltration; (c) water movement		W-28-1 Improving water application	W-65 Hydraulics and efficiency of irrigation application a. Sprinkler irrigation b. Surface application	
2. Soil moisture measurement		W-29-3 Soil-water relations; infiltration, retention, movement, transfer W-30-1 Effects of moisture on soil structure	W-68 Water movement in soils Formulate and test theories that describe moisture movement in unsaturated soils. Factors that influence the movement of water in unsaturated soil.	
3. Fertilizer-irrigation-cropping relations		W-29-4 Soil moisture measurement		
4. Effects of cropping and fertilizers on subsequent crops and soil properties		W-29-1 Effect of fertilizer-irrigation-cropping practices on plant growth and soils W-29-2 Effect of soil moisture on nutrient uptake and plant growth W-29-5 Factors affecting rate of water use by crops	W-67 Soil-moisture-plant growth relationships as related to: a. Growth differentiation, yield and quality of plants b. Species, variety and stage of growth c. Light, temperature, wind and humidity	
5. Develop methods for determining ground water and soil drainability		W-30-1 Methods of evaluating and measuring soil structure. W-30-2 Factors affecting soil structure: Moisture, Aeration, Temperature, soil amendments, tillage, and chemical properties of soil. W-30-3 Effect of soil structure on plant growth and soil and water conservation.	W-66 Structural stability of soil a. Nature of binding between particles b. Influence of mineralogical composition and particle size c. Role of natural and synthetic organic amendments	
6. Soil reclamation by drainage, amendments and cultural practices		W-28-2 Evaluating and improving draining	W-51 Drainage design for irrigated agriculture Engineering criteria for more rational design of drainage facilities	

Minutes of
WESTERN DIRECTORS COMMITTEE ON REGIONAL RESEARCH (RRC)
Meeting at Berkeley, California
February 28-March 1, 1959

REVIEW OF PROJECTS AND RECOMMENDATIONS TO WESTERN DIRECTORS

W-5, Avian Pleuropneumonia-Like Organisms and Respiratory Infections (Revised):

The Technical Committee should be commended on the thorough review made of the contributions each contributing State has made during the course of this investigation and the degree of accomplishment made on each objective.

The revised regional study is much more specific, all four objectives relate to PPLD infections.

The cross referencing between the procedures, the States that will work in each area, and the objectives covered by each procedure are very well integrated.

The State contributing projects appear to be in good order. It was suggested that one of the States consider the possibilities of shell transmission of the disease. The W-5 Committee has complied with recommendations of the Western Directors' Committee on Regional Research.

Recommend approval of the revised project statement and further recommend the revised project be continued through June 30, 1964, and that project number W-5 be retained.

W-7, Breeding Improvement of Turkeys with Reference to Reproductive Traits (Revised):

The committee has prepared an excellent review of the past 10 years of work. Contributing projects seem to be consistent with request of the RRC and with the regional project objectives. The regional project has been narrowed to the problems of infertility and environmental influences dealing with turkey reproduction.

It is recommended that the Technical Committee consider a plan for exchange of stock to properly evaluate interaction between environment and heredity. Such a plan would enhance the regional value of the project.

The RRC recommends continuation of the project to June 30, 1964. The present W-7 number is to be retained.

W-8, Rural Housing:

The statement of accomplishments by objectives was very well presented. Statements on incompleted work were also clear and concise. The committee should be commended on an excellent historical presentation for it has written an excellent summary of the work done during the past 10 years.

All the information pertaining to this project was neatly presented in a single package - anyone who reviews their report has everything at hand in one review.

A new project proposal was received from the W-8 Technical Committee, "Influences of the Sun on House Comfort, Durability and Economy." The title of this regional study may not be consistent with the research proposal. There is a question about the use of the term durability. Does it pertain to house itself? If for furnishings, no State project deals with weathering effect of light and heat on durability of furnishings. There is no apparent tie in with economy either. Proposals for economic analysis are absent.

The study is primarily a study of glare and thermal movements, specifically this is a study on direct and reflected light on interior comfort of a home.

In such a project there should be more emphasis on engineering aspects. One or two projects indicate the participation of qualified thermal engineers and physicists but a majority of the projects do not indicate such participation. It is difficult to see that the objectives could be fulfilled without active participation or even leadership of thermal engineers and heat physicists by each cooperating State.

Recommend the project be given a low priority in relation to other suggestions. Should such a research proposal be activated, the old W-8 number should not be retained. /See motion for revision and continuation as W-69, Minutes of the Western Directors, March 1959, page 13.7

W-12, Bean Improvement (Revised):

This project remains open for discussion as to the appropriateness of regional research. The only unifying theme is bean improvement in the West. There is a question as to whether the contributing projects are but merely a collection of individual State projects and only of interest to individuals of the States participating. Six States have submitted projects and basically many of the projects are similar to outlines of the previous five years. There are six participating States and ARS. They are:

- California - Breeding and inheritance studies with Fusarium Root Rot.
- Colorado - Evaluation of resistance to Fusarium Root Rot organisms.
- Wyoming - Evaluate variability of Root Rot Organisms in Western States.
- Idaho - Breeding and genetic studies for virus resistance.
- Oregon - Breeding and genetic studies with strains and related strains of yellow mosaic virus.
- Washington - Transmissibility and overwintering nature of insects transmitting pathogenic viruses.
- ARS - Study of sugar beet leafhopper on vegetables.

Although these projects are without doubt excellent individual State projects, their diversity of interest allows some question for regional type research. These activities could well be carried on by individual State funds. This project needs full discussion by the Western Directors before

RRC approval. No regional budget was submitted with the outline. The RRC recommends this project be discontinued as a regional project subject to discussion by the Western Directors. This project lacks regional coordination and unification. The contributing projects are more or less State projects and have indication of lack of a unified regional approach. Western Directors recommended approval of new revised outline to continue until June 30, 1964. See Minutes of Western Directors, March 1959, page 14.⁷

W-16, Economics of Rangeland Development (Revised):

Recommend project be referred back to the Technical Committee through the Administrative Advisor for review in accordance with the following comments:

1. A critical review of accomplishments - degree of accomplishments and statement of incompleted objectives (see requirements on page 12 of March 1958 Minutes of the Western Directors) is required.
2. In the new regional project outline, the objectives and procedures have not been cross referenced to show States' participation and coordination.
3. Budgets have been submitted for the States of Idaho and Utah, but no contributing projects have been submitted.
4. The third objective is probably too broad with only one State working on it. Each State procedure is adapted to local conditions. The variation in procedures will make regional summarization difficult.
5. It is recommended that responsibility for final approval for the Western Region be delegated to the Administrative Advisor, Committee on Regional Research and Chairman of Western Directors who will then submit to the Committee of Nine. This should be done by May 1, 1959.

W-59, Price, Income and Related Policies on Western Agriculture: (New Project)

The RRC suggests that the Technical Committee consider strengthening the wool phase of this project by the addition of a contributing project from Wyoming or other Western States since only one State (New Mexico) has submitted a project using the wool industry as a tool in evaluating price policy. All other contributing projects deal with wheat.

The budget is projected for Wyoming participation at the 3-Million level but no contributing project was included.

It is urged that the W-59 Technical Committee maintain close liaison with IRM-1.

Recommend approval through June 30, 1964 with high priority.

W-60, The Effects of Atmospheric Conditions on Specific Cotton Fabrics: (New Project)

It is recommended the project be approved with high priority to be activated under W-60. The Technical Committee is commended for preparing an excellent project outline. Recommend duration through June 30, 1964.

W-62, The Cost of Owning and Operating Farm Power and Machinery Used for Seedbed Preparation: (New Project)

The Committee on Regional Research urges that the Technical Committee be sure the methodology is regional in nature and that samples are sufficiently homogenous so that the data can be assembled in a coordinated analysis and a regional report. It is believed that considerable time should be devoted to time and motion studies and that each contributing project have agricultural engineers as consultants.

Recommend referral back to the Technical Committee for review in accordance with the above comments. Should be resubmitted to the RRC by May 1, 1959.

W-63, Effect of Certain Climatic and Soil Factors on the Response of Plants to Herbicides: (Revision of W-11)

A report on the activities of W-11 was received. The summary of progress is precise and adequate. The revised outline is more basic in approach than the old W-11 Project. The Technical Committee should have as active participants well trained plant physiologists. It is recommended that the Administrative Advisor refer the regional project back to the Technical Committee for cross referencing of regional objectives and procedures to participating States. After this revision has been met, the Administrative Advisor should refer the proposal back to the RRC and the Chairman of the Western Directors for approval. The revision should be received by May 1, 1959.

We rate this project as of high priority and recommend assignment of Number W-63 for a duration through June 30, 1964.

Recommend Administrative Advisor, Committee on Regional Research and Chairman of Western Directors be given authority for final approval.

W-64, Virus Diseases of Deciduous Fruit Trees:

This project was activated in 1954.

The Technical Committee has prepared an acceptable, critical review of "Behavior and Effects of Virus Complexes of Latent Stone Fruit Varieties and Root Stocks" (W-22 Revised).

It is requested that the W-22 Technical Committee prepare an addendum to the critical review giving complete list of publications, the degree to which objectives have been accomplished and a statement of incompleted work in accordance with the policy of the Western Directors, as outlined on page 12 of the March 1958 Minutes.

A revised project outline entitled "Virus Diseases of Deciduous Fruit Trees" has been submitted by the Technical Committee. The revised outline is much more specific. The Technical Committee has prepared an acceptable delineation of research objectives and procedures. The new outline involves the behavior, transmissibility, characterization and control of deciduous fruit tree viruses. The previous outline was more of a survey - plant propagating programs with virus root stocks.

Recommend approval of this revised project to continue until June 30, 1964 and assignment of a new number, W-64.

The Technical Committee is urged to continue close liaison work with the IR-2 Committee.

W-65, Hydraulics and Efficiency of Irrigation Application: (W-28 Revised)

The old W-28 project was concerned with two broad topics: water application and drainage. A new project, W-51, was activated two years ago to undertake research with drainage problems. This necessitated revision of W-28 to deal more specifically with water application. A summarization of W-28 activities was submitted with the new outline. This report by objectives met the requirements of the RRC.

The new project outline entitled "Hydraulics and Efficiency of Irrigation Application" involves hydraulics and efficiency of both surface and sprinkler irrigation. These studies are well coordinated to determine efficiency, infiltration and hydraulics of water application.

The outlines appear well developed and approval is recommended. It is requested, however, that the Technical Committee take special care to coordinate the activities of this project. If not, there is a possibility that these studies could develop into two rather broad areas of research, one the sprinklers and the other the surfacers.

It is recommended the revised project be approved through June 30, 1964 with high priority and a new project number, W-65, assigned.

The RRC commends the W-28 Technical Committee for fulfilling review requirements as requested by the Western Directors.

W-66, Structural Stability of Soil: (W-30 Revised)

The Technical Committee is commended for developing a well coordinated regional research project. The State contributing outlines appear to be complementary and are developed on a unified approach. These studies are of basic type research in soil physics.

The RRC recommends approval of the revised outline entitled "Structural Stability of Soil," with high priority and assignment of Western Regional Research Project Number W-66.

A critical review of W-30, Measurement, Evaluation and Modification of Soil Structure, was received and it is commended by the RRC.

W-67, Soil-Moisture-Plant Growth Relationships: (W-29 Revised)

The RRC recommends approval of this new project to replace W-29. It is recommended that the critical report on this project, as prepared for W-29 and W-30, be a part of the outline folder. This report is conclusive and approval is recommended. (See W-68, Water Movement in Soil.)

The new project entitled "Soil-Moisture-Plant Growth Relationships" deals largely with soil moisture stresses. As previously mentioned (Minutes of the Western Directors, November 1958), the project involves considerable plant physiology and it is recommended that the Technical Committee enlist plant physiologists as participants.

Recommend the project be approved through June 30, 1964 with high priority and that W-67 be assigned as a new number.

W-68, Water Movement in Soil (W-29 -30):

This outline was reviewed by the Directors in November 1958 and a critical review of previous work was requested covering activities of the W-29 and W-30 projects in the area of water movement. A comprehensive 14-page report of these projects was received. The RRC recommends approval of this report. A revised project outline entitled "Water Movement in Soil" was submitted. Major support for this research is anticipated from the Signal Corps. A request for \$5,000 RRF was submitted as follows: \$3,000 old W-29 and \$2,000 from old W-30. The RRC recommends that Western Regional Research Project Number W-68 be assigned and the termination date be June 30, 1964.

The combined review of soil and water research projects for the Western Region was received and was helpful in reviewing the new areas in soil and water research.

WM-16, Maintaining Grain Marketability by Insect Control in Storage (Revised):

This project has been active for five years and a revised outline has been submitted for review. A history of the project with an evaluation of previous work was presented.

Revised regional project has a title "The Control of Stored Grain Insects in Storage as a Factor in Maintaining Grain Marketability." Contributing projects were submitted by California, Idaho, Oregon, Washington and Arizona.

The RRC recommends the project outline be referred back to the Technical Committee with the following comments:

1. The Regional Research Committee feels the Technical Committee should make the statements of objectives and accomplishments in the critical review more specific and complete.
2. They should include a more detailed statement of work to be done.

3. Some of the objectives, especially those in the Oregon and Washington projects, are general and should be made more specific.
4. Objective 1 in the regional project is very broad and should be more specific - Ecology is a broad term.
5. Recommend reconsideration of the title of the proposed regional project. The original title is more appropriate than the revised title.

It is recommended that final approval for the Western Region be delegated to the Administrative Advisor, the Committee on Regional Research, and the Chairman of the Western Directors before submission to the Committee of Nine. Resubmit to the RRC by May 1, 1959. Upon proper revision recommend this outline retain the project number WM-16.

WM-17, Frozen Fruits and Vegetables (Revised):

The Technical Committee has complied with the request to cross reference objectives and procedures in the regional project outline.

The Chairmen of Technical Committees of WM-17 and WM-26 have met and prepared a joint statement relating to the question of possible duplication between the two projects. They do not consider there is duplication. The RRC recommends the two Technical Committees maintain coordination. One Administrative Advisor should serve the two projects.

WM-26, Consumer Purchases - Fruits and Vegetables (Revised):

The RRC received a revised outline which appears to be a summation of Phase I of present active project and is not a truly revised regional project. It is recommended that the Technical Committee proceed in accordance with the objectives of the original outline, which continues two more years. Although the new revised material was informative, the RRC did not consider it to be a revised outline but merely committee reorientation material.

WM-32, Marketing Cotton: (Closing Out Report)

A review of the project was received.

It is recommended that the Technical Committee revise the critical review to include a list of publications and a more informative statement on the degree objectives were accomplished.

WM-39, An Economic Analysis of Direct Marketing of Cattle and Sheep in the West: (New Project)

It is recommended that the Technical Committee make provisions to use research information for a future regional report. Such was not indicated in the regional outline. It is urged that the Technical Committee use uniform methodology and that the samples be sufficiently homogenous so that data can be assembled in a coordinated analysis and a regional report. The

RRC believes this is an important area of economic marketing research in the West and the Technical Committee should be commended for a good outline. Approval recommended until June 30, 1962.

WM-40, Procurement Policies and Practices of Large-Scale Food Retailers: (New Project)

This project is primarily concerned with the principles and consequences of the buying policies and practices of large-scale food retailers. Six States have contributing projects and each State proposes to work with commodities most prevalent in its State. Since many of the large western retailers operate region-wide and we assume their buying policies are region-wide, there is some question whether or not the Technical Committee should limit this study within State boundaries as some State outlines so indicate. The Technical Committee will need to evaluate the merit of a more region-wide study and coordinate their analysis so that at the end of such a study the data and report will have regional unity and will not be reports of individual State situations.

The USDA should be encouraged to submit an outline covering phases as they are now doing or will do as it relates to this project.

Because of the nature of the work, the Technical Committee is encouraged to make plans for prompt publication of findings in order to preserve the timeliness of the data. The RRC recommends this outline be returned to the Technical Committee and reviewed in light of the above comments and the comments by Director Buchanan. To be returned to the RRC by May 1, 1959.

WM-41, Influences of Recent Technological Developments on Marketing and Market Acceptance of Western Cotton: (WM-32 Revised)

Concise title is descriptive and the objectives are specific and clear, and should be attainable within a three-year period. The procedures are well coordinated with the objectives. Approval recommended through June 30, 1962.

WM-42, The Market Structure and Marketing Practices Associated with the Initial Processors of Timber Obtained from Small Woodlands: (Revised WM-31)

This study largely involves the collection and analysis of foundation data necessary to project desirable marketing practices of particular groups of small woodland producers and processors. Five Western States are cooperating. It appears from the regional outline that over emphasis will be given to collection of data with lesser attention given to proper analysis and interpretation of data to determine desirable marketing practices. It is urged that the Technical Committee give major emphasis to Procedure B of the outline which is considered the important part of the study; that is, to interpret the data and recommend desirable marketing practices. The objectives of the State contributing project outlines are essentially the same as those of the regional outline. The procedures by States are, however, definite to State needs. Due to the type of study it is acceptable that objectives be unified as they are, so long as these objectives are well coordinated and do not deter individual thinking.

In view of the fact that this outline's objectives and procedures are quite different and more explicit, it is, therefore, recommended that a new regional project number, W-42, be assigned. This is a three-year study, terminating June 30, 1962.

Population Genetics: (New Outline)

The RRC received a proposed regional project on population genetics. A proposal on this subject was submitted about one year ago as an inter-regional project but was not approved by the Western Directors. The present proposal came unsolicited on the part of the Western Directors. No Administrative Advisor was assigned to this area to develop a project. Such an area may have considerable merit and the RRC believes that the Western Directors should take some action when considering new research.

The objectives and procedures of the regional outline are well coordinated. The three State contributing projects do not seem to be regional in character, indicating lack of communication. If approved, such a study is considered basic and may be of considerable value in developing systems of selection for domestic animals of commercial value. The small animal projects have the advantage of low cost and short intervals between generations. This research may be a valuable supplement to W-1 and W-61.

SUMMARY OF RRC REVIEW - MARCH 1959

Projects Approved for Activation July 1, 1959:

W- 5	W -66 (W-30)
W- 7	W -67 (W-29)
W-69 (W-8)	W -68 (W-29 -30)
W-12	WM-17
W-59	WM-39
W-60	WM-40
W-64 (W-22)	WM-41
W-65 (W-28)	WM-42

Critical review covering all Western Regional Projects on Soil and Water.

Projects Referred Back to Committee to Revise and Return by May 1, 1959:

W-16	- Fleming	WM-16	- Boyce
W-62	- Curry	WM-32 (Critical	
W-63 (W-11)	- Curry	review)	- Curry
		WM-40	- Buchanan

Approval Delayed or No Action Taken:

WM-26	- Kraus	Population Genetics - Fleming
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GENERAL COMMENTS

The Regional Research Committee's comments on regional projects in general are as follows:

1. The Administrative Advisors should notify all stations when regional projects are to be revised.

2. In the regional project outline the Technical Committee should make certain the objectives and procedures are cross referenced with State contributing outlines.

3. In budget allocations the RRC notes that some Technical Committees attempted to allocate a small amount of RRF equally to all State contributing projects. It is recommended that when small amounts of RRF are available such funds should be allocated to one or two choice projects rather than "dividing up the pie."

4. Administrative Advisors, for budget accounting purposes, might consider allocating funds in multiples of \$100 rather than allocation of odd dollars to each of several projects.

5. The RRC concurs with the Committee of Nine recommendation that the Administrative Advisors make an effort to meet with the Technical Committees, especially when important administrative matters are involved. Should an alternate meet with the Technical Committee he should be fully informed.

6. All new or revised project outlines which have been approved at this meeting (March 1959) must be signed by the Administrative Advisor and the Chairman of the Western Directors. The Chairman of the Western Directors will forward three copies to Dr. Farris (SESD) by March 20, 1959 for Committee of Nine review and approval. The spring meeting of the Committee of Nine will be held in Washington, D. C. on March 25-27, 1959.

7. Status of historical reports and critical reviews of recently completed projects:

- a. On March 3, 1958 the Western Directors established the policy that a critical historical report on a regional project be submitted for record purposes upon the termination or revision of the project. This closing out report should include:

- (1) Summary of accomplishment
- (2) Complete list of publications
- (3) Critical analysis of the degree to which objectives have been accomplished
- (4) Statement of uncompleted work, if any

- b. Closing out reports have not been received for the following projects:

WM-13 - Rasmussen	W-12 - Henderson
WM-15 - Sharp	W-16 - Fleming
WM-18 - Rasmussen, Buchanan	W-22 - Henderson
WM-19 - Alexander	W-23 - Ensign
WM-22 - Wheeler	W-33 - Thorne
WM-25 - Buchanan	W-36 - Curry
WM-27 - Huffman	
WM-31 - Sharp, Vaux	
WM-32 - Curry	

- c. In November 1958 the Western Directors requested a 10 year complete review on all active projects. This 10-year review has not been received on the following projects:

W-1 - Wheeler

W-6 - Sharp, Hodgson

8. The RRC wishes to express its appreciation for the assistance of Mr. Olson, Recording Secretary of the Western Directors. Many preliminary items were assembled and this was very helpful for the recommendations of the Committee on Regional Research. The work performed by Mr. Olson, we feel, makes the RRC and we think the Western Directors' deliberations more efficient.

4/1/59

ADMINISTRATIVE ADVISORS WESTERN REGIONAL PROJECTS

	<u>Current Administrative Advisor</u>	<u>Assignment * Effective July 1, 1959</u>
W- 1 Beef Cattle Breeding	Wheeler	Wheeler
W- 5 Poultry Disease	Rasmussen	Rasmussen
W- 6 New Plants	Sharp & Hodgson	Sharp & Hodgson
W- 7 Turkey Breeding	Rasmussen	Rosenberg
W-12 Bean Improvement	Henderson	Vaughn
W-16 Range Economics	Fleming	Fleming
W-24 Cotton Mechanization	Curry	Curry
W-25 Brush Infested Rangelands	Fleming	Fleming
W-27 Vibriosis in Sheep	Sharp & Jasper	Sharp & Jasper
W-31 Nitrogen	Myers	Myers
W-32 Water Conservation	Thorne	Thorne
W-34 Range Livestock Nutrition	Fleming	Hilston
W-35 Internal Parasites of Ruminants	Sharp & Jasper	Sharp & Jasper
W-37 Rangeland Grasshoppers	Wheeler	Wheeler
W-38 Fungus Root Diseases	Henderson	Vaughn
W-39 Fluorine Effects	Price	Price
W-40 Breeding Forage Plants	Ensign	Ensign
W-41 Urinary Calculi	Sharp & Jasper	Sharp & Jasper
W-42 Ground Water Laws	Wheeler	Wheeler
W-43 Forage Crop Insects	Sharp & Boyce	Sharp & Boyce
W-44 Cholesterol Metabolism	Myers	Wheeler
W-45 Pesticide Residues	Sharp & Boyce	Sharp & Boyce
W-46 Environment and Farm Animals	Black	Black
W-47 Root Responses	Ensign	Ensign
W-48 Weather and Crop Production	Asleson	Asleson
W-49 Breeding Failure in Cattle	Sharp & Jasper	Thorne - Burgoyne
W-50 Altitude & Temperature, Poultry	Rasmussen	Rosenberg
W-51 Drainage Design	Price	Frevert
W-52 Biochemistry of Herbicidal Action	Curry	Rasmussen
W-53 Insects and Mites of Grasses	Sharp & Boyce	Rasmussen
W-54 Farming Adjustment	Huffman	Asleson
W-55 Small Fruit Viruses	Henderson	Vaughn
W-56 Nematodes in Root Disease	Rosenberg	Vaughn
W-57 Amino Acid Utilization	Myers	Hilston
W-58 Forage Production	Ensign	Ensign
W-59 Government Price & Income Policies	Huffman	Buchanan
W-60 Textiles	Thorne	Wheeler
W-61 Sheep Breeding	Adams	Adams
W-62 Farm Power & Machinery Costs	Curry	Frevert
W-63 Weed Control	--	Curry
W-64 Stone Fruit Viruses	--	Kraus
W-65 Irrigation Hydraulics	--	Frevert
W-66 Soil Structure	--	Thorne
W-67 Soil-Plant-Water Relationships	--	Thorne
W-68 Water Movement	--	Thorne
W-69 Rural Housing	--	Rasmussen

* Appointed at the meeting of the Western Directors, March 1959.

	<u>Current Administrative Advisor</u>	<u>Assignment * Effective July 1, 1959</u>
WM-16 Maintaining Grain Marketability in Storage	Sharp & Boyce	Sharp & Boyce
WM-17 Frozen Fruits and Vegetables	Rosenberg	Alexander
WM-20 Marketing Hay and Feed	Fleming	Asleson
WM-23 Wool Marketing	Thorne & Burgoyne	Hilston
WM-24 Horticultural Specialty Crops	Rosenberg	Rosenberg
WM-26 Consumer Purchases-- Fruits and Vegetables	Kraus	Alexander
WM-33 Utilization of Red Meats	Myers	Alexander
WM-34 Handling Fluid Milk	Sharp	Sharp
WM-35 Facilitating Seed Marketing Through Testing	Price	Price
WM-36 Dairy Marketing	Sharp	Sharp
WM-37 Transportation of Livestock & Meat	Wheeler	Buchanan
WM-38 Marketing Cooperatives	Alexander	Alexander
WM-39 Direct Marketing of Livestock	Buchanan	Buchanan
WM-40 Procurement Organization and Practices--Retailers	Buchanan	Buchanan
WM-41 Marketing Cotton	Curry	Curry
WM-42 Marketing of Forest Products	--	Sharp & Vaux
Western Agricultural Economics Research Council	Huffman	Huffman

INTERREGIONAL

IRM-1 National Policies for Agricultural Prices and Income	Huffman	Huffman
IR -1 Solanum	Kraus	Kraus
IR -2 Deciduous Tree Fruit Stocks	Kraus	Kraus

WESTERN REGIONAL RESEARCH FUND 1959-60

Recommended allotments by States

No Increase over 1958-59

STATE	WM-16 : Grain : Insect : Control :	WM-17 : Frozen : Frts. & Vegts. :	WM-20 : Hay : and : Feed :	WM-23 : Wool :	WM-24 : Hort. : Crops :	WM-26 : Consumer : Purchases : F & V :	WM-33 : Meat :	WM-34 : Handling : Milk :	WM-35 : Seed : Market- : ing :	WM-36 : Dairy : Consump- : tion :	WM-37 : Lvstk. : Transp. : oper- : atives :	WM-38 : Mgt & : Org Co- :	WM-39 : Direct : Buying : Lvstk. :
Arizona	2,200		3,700							2,500	3,300		2,600
California	3,300*	14,500				9,800	4,100	*	3,200	*	1,750	4,900	
Colorado				3,450	4,000				2,700	3,400		1,600	4,500
Hawaii		1,500			2,000*					2,000		2,000	
Idaho	3,500									5,000	3,000		2,000
Montana			5,000*	4,350						1,000	3,550	4,000	4,300
Nevada			2,700							1,500	1,900	1,500	2,400
New Mexico			3,400	4,875							4,000	3,300	
Oregon	2,500	7,700*		3,450	4,000	*	2,900*		3,200*	3,000		3,850*	
Utah			3,600	3,100						2,700	3,400		
Washington	3,500	4,500	5,100							5,000	3,000*	7,400	3,500*
Wyoming				4,275*						1,800	3,500		1,500
Alaska										5,000			
* P & C	1,500	800	1,200	1,500	1,000	1,700			900	1,800	1,500	1,600	1,250
Trust						4,500 ¹					6,050		
Other Trust:	300#											300#	
TOTAL	16,800	29,000	24,700	25,000	11,000	16,000	7,000		10,000	34,700	34,950	30,450	22,050

1/ For Pilot studies of quality - States to be determined and allocations made directly to 3 or 4 States involved.

For expense of Recording Secretary - to be included in P & C fund.

4/1/59

WESTERN REGIONAL RESEARCH FUND 1959-60

Recommended allotments by States

No Increase over 1958-59

STATE	WM-40	WM-41	WM-42	TOTAL MARKETING	W-1	W-5	W-6	W-7	W-12	W-16	W-24	W-25
Arizona		2,500		16,800	4,000		4,000				6,900	5,275
California	9,000		4,000*	54,550	5,300	7,800	*	2,670		5,000	3,550	5,175
Colorado	5,000		5,500	30,150	8,300*			2,670	2,800			4,500
Hawaii	2,500			10,000	4,100		250	*		4,000		2,200
Idaho	4,000		4,000	21,500	5,300		1,000		7,400			6,600
Montana				22,200	6,600					2,000		3,450
Nevada				10,000	5,400					2,000*		3,275*
New Mexico		2,500*		18,075	8,300					2,000	6,250*	2,975
Oregon	3,150		3,800	37,550	8,300	1,000	1,000	2,670	2,800	1,000		8,350
Utah				12,800	6,600	3,500		2,670		1,500		5,175
Washington	4,900*		1,000	37,900	5,600	6,700*	27,050	2,670				3,450
Wyoming	1,500			12,575	7,100		1,000	2,670	5,900*	3,000		7,575
Alaska				5,000								
* P & C	1,450	200	900	17,300	2,300	1,000	1,700	980	1,300	1,000	300	2,000
Trust				10,550						1,000		
Other Trust:	300#			900				300#			300#	
TOTAL	31,800	5,200	19,200	317,850	77,200	20,000	36,000	17,300	20,200	22,500	17,300	60,000

WESTERN REGIONAL RESEARCH FUND 1959-60

Recommended allotments by States

No Increase over 1958-59

STATE	W-27	W-31	W-32	W-33	W-34	W-35	W-37	W-38	W-39	W-40	W-41	W-42	W-43
	Sheep	Soil	Water	Economics	Range	Ruminant	Range	Fungus	Fluorine	Breeding	Urinary	Ground	Legumi-
	Vibri-	Nitrogen	Conser-	of Water	Lvstk	Para-	land	Root	Effects	Forage	Calculi	Water	nous
	osis		vation	Appli-	Nutri-	sites	Grass-	Diseases		Plants		Laws	Forage
				cation	tion		hoppers						Insects
Arizona		4,000*	1,000			3,500							2,400
California	*	3,900	6,000		4,600	7,600*	2,800	5,200	7,000		3,000*		3,400*
Colorado	7,300	3,900	6,000		5,100	4,500	2,800*	4,400		4,600	6,200	4,500*	
Hawaii		3,000			2,800	4,200							
Idaho	4,800				3,800	3,400	2,800	3,000	2,000	*	4,100		1,500
Montana	10,100		1,500		6,000	5,800	2,800	3,500			7,200	2,000	
Nevada					7,800	4,400				5,000			
New Mexico		3,000			4,100			2,000				1,000	
Oregon		3,900			4,100			5,000	*	5,500		1,000	
Utah	6,170	4,400	4,000*	*	8,600	6,000			9,000	6,000		1,500	3,750
Washington		1,200			3,000	5,000		2,600	6,000				3,800
Wyoming	5,500	3,700	4,000		4,100*	4,500	2,800	2,500*		3,000	4,300		3,000
* P & C	1,000	2,000	1,500	300	2,000	2,000	1,000	1,800	1,000	900	1,200	1,000	1,150
Trust													
Other Trust:	300#	300#						300#	300#				
TOTAL	35,170	33,300	24,000	300	56,000	50,900	15,000	30,300	25,300	25,000	26,000	11,000	19,000

WESTERN REGIONAL RESEARCH FUND 1959-60

Recommended allotments by States

No Increase over 1958-59

STATE	W-44	W-45	W-46	W-47	W-48	W-49	W-50	W-51	W-52	W-53	W-54	W-55
	Cholesterol	Pesticide	Stresses	Root	Weather	Cattle	Stresses	Drainage	Biochemistry	Grass	Adjusting	Fruit
	Metabolism	Residues	and Sheep	Responses	Crops	Failure	and Perfor-	Design	Herbicides	Insects and	Farming	Disease
Arizona	5,000	3,800	2,000	3,500		2,800		*			4,100	
California	5,000	3,900*	2,500			6,300	2,500	1,500			2,750	
Colorado	3,000*	3,500	2,600	3,800		6,400	2,500				3,850	
Hawaii				700			*				1,500	
Idaho	5,000		1,900	*		4,500					2,000	
Montana	5,000		1,800		4,000*	4,400	2,000				1,000*	
Nevada			2,700			2,700					2,000	
New Mexico			1,500*								1,000	
Oregon	5,500 ¹	4,500	1,800	3,000		4,100			3,900		2,950	
Utah	2,000		2,200			*	2,000				2,500	
Washington	1,000	3,900				7,500			*		4,000	
Wyoming			2,200								1,300	*
* P & C	1,500	2,015	1,800	800	1,000	1,300	750	500	1,100		2,265	
Trust												
Other Trust:				300 [#]								
TOTAL	33,000	21,615	23,000	12,100	5,000	40,000	9,750	2,000	5,000		31,215	

1/ \$500 for referee investigations

WESTERN REGIONAL RESEARCH FUND 1959-60

Recommended allotments by States

No Increase over 1958-59

STATE	W-56	W-57	W-58	W-59	W-60	W-61	W-62	W-63	W-64	W-65	W-66	W-67
Arizona		6,000 ¹	4,000			740	1,900*	2,900		*	3,500	2,000
California		3,500	4,500		1,125	740	3,000	3,300	4,000	3,500	2,500	5,000
Colorado		8,000 ²			875*	740		3,900	2,000	4,000	3,000	5,500
Hawaii		6,000	3,500				500			1,000	2,400	
Idaho			*	3,000		740	1,000	4,700	2,000*	1,000		
Montana			3,600	1,000		740	C	3,100	2,000	1,000	2,600	2,000
Nevada			3,500		875	740*	2,000	3,500				
New Mexico		2,000		1,000	1,325	740	1,000	2,800*			3,600	
Oregon		3,500		2,500	1,075	740	900	3,600	5,500	2,000		5,000
Utah		6,000			925	740	500	2,800	5,000	3,000	3,000*	5,500*
Washington			3,000	4,200*		1,500 ³	2,550	3,800	4,400	4,000		5,000
Wyoming	*	6,000*	4,000			740	1,700	3,900		2,000	2,600	3,000
* P & C	2,000	2,000	1,200	1,500	1,300	1,100	1,800	1,700	1,100	1,500	1,300	1,500
Trust					2,500 ⁴							
Other Trust:												
TOTAL	2,000	43,000	27,300	13,200	10,000	10,000	16,850	40,000	26,000	23,000	24,500	34,500

1/ Includes \$2,500 for Amino Acid Pool

3/ Includes \$760 for IBM work

2/ Includes \$2,000 for statistical work and publication 4/ Cloth

WESTERN REGIONAL RESEARCH FUND 1959-60
Recommended allotments by States
No Increase over 1958-59

STATE	W-68	W-69	Soil : Housing : Moisture : Movement :	TOTAL OTHER RESEARCH	GRAND TOTAL
Arizona	500	5,500		72,315	96,115
California	500	3,500		132,610	187,160
Colorado	500			121,735	151,885
Hawaii	500			36,650	46,650
Idaho				70,540	92,040
Montana	500			86,690	108,890
Nevada				45,890	55,890
New Mexico				44,590	62,665
Oregon	500			95,685	133,235
Utah	500*			105,530	118,330
Washington	500	6,000*		118,420	156,320
Wyoming				92,085	104,660
Alaska					5,000
* P & C	1,000	1,000		60,460	77,760
Trust				3,500	14,050
Other Trust:				2,100	3,000
TOTAL	5,000	16,000		1,055,800	1,413,650