ASSOCIATION OF WESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS AND

UNITED STATES DEPARTMENT OF AGRICULTURE

211 POST OFFICE BUILDING BERKELEY 1, CALIFORNIA

OFFICE OF THE RECORDING SECRETARY April 19, 1962

TO

: Western Directors

: John O. Gerald, Recording Secretary

SUBJECT: March 1962 Minutes

Attached are the Minutes of your March 7-9, 1962, meeting at Davis, California, Tables of recommended allotments of the Western RRF for 1963 are attached. If you find errors or misinterpretations in any of these Minutes or budgets, I will appreciate your calling them to my attention so that corrections can be given to all Directors at the Summer 1962 meeting.

The following listing of items for your specific attention is given for your convenience. As some of you know, those needing immediate attention were relayed to you by letter shortly after the meeting.

| For Specific Attention of | Page No. | Sidehead or Other Identification |
|---------------------------|------------|---------------------------------------------------------------------------------|
| All Directors | 2 | Corrections in November 1961 Minutes |
| All Administrative | | |
| Advisers | 5 | "Menual" revision |
| | 5 | Committee of Nine, April meeting |
| | 14 | Action on RRC Report, "Policy and Procedure for P & C Funds" |
| | 20 | Revisions of Section 2 of Western Directors' Travel Policies of July 1961 |
| | B-1 - B-17 | Budget allotments |
| RRC Members | 11 | Action on "General Comments, Item 1" |
| | 12 | Action on "General Comments, Item 2" |
| | 15 - 16 | Action on RRC Report, Summary and Review of Project Rating Survey |

2-Western Directors-4/19/62

| For Specific Attention of | Page No. | Sidehead or Other Identification |
|---------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adams | 10 | Action on RRC report for W-38 Revision |
| Alexander | 7 8 9 9 | Action on RRC report for WM, (WM-17R) Action on RRC report for WM-33 Action on RRC report for WM-38 Action on RRC report for WM, (Coordination and Integration) |
| Asleson | 10-11 12 13-14 17-18 | Action on RRC report for W-48 Revision RRC report on W-56 RRC report, "Other Project Recommendations, Item 6" Resolution on transfer of Weather Bureau data to punch cards Time and place of Summer 1962 Meeting |
| Bohmont | 14 | RRC report, "Other Project Recommendations, Item 8" |
| Boyce | 22 | Date and place of Spring 1963 Meeting |
| Briggs | 9 | Action on RRC report for W-6 Revision |
| Buchanan | 12 13 | RRC report on WM-37 RRC report, "Other Project Recommen-dations, Item 3" |
| Cameron | 22 | Date and place of Spring 1963 Meeting |
| Curry | 10 13 | Action on RRC report for W-24 Revision RRC report, "Other Project Recommendations, Item 5" |
| Ely | 12 | RRC report on W-46 |
| Ensign | 11 17 - 18 | Action on RRC report for W-58 Revision Resolution on transfer of Weather Bureau data to punch cards |
| | 19 | Proposals to the Committee of Nine of CRF Projects for 1963 Activation |
| | 21 22 -2 3 | Other invitation Action on Resolution of Appreciation |
| Farris | 5 | Ensign proposal re-endorsed |
| Frevert | 6-7 | Action on RRC report for W, Farm Labor |
| | 13 | RRC report, "Other Project Recommen- dations, Item 2" |

3-Western Directors-4/19/62

| For Specific Attention of | Page No. | Sidehead or Other Identification |
|---------------------------|----------------|-------------------------------------------------------------------------------------------------|
| Frevert (Cont'd.) | 13 | RRC report, "Other Project Recommen- dations, Item 4" |
| | 18 | Proposed Meeting of Home Economists to Plan Research |
| | 21 | Eaton invitation |
| Henderson | 11 | Action on RRC report for WM+35 Revision |
| Hilston | 7-8 | Action on RRC report for WM-23 |
| | 11 | Action on RRC report for W-57 Revision |
| Huffman | 12 | RRC report on W-70 |
| | 13-14 | RRC report, "Other Project Recommen- dations, Item 6" |
| | 14 | RRC report, "Other Project Recommen- dations, Item 7" |
| | 19 | Reimbursement of Expenses of Re- cording Secretary |
| | 21 4 | Time and Place of Summer 1962 Meeting |
| Knoblauch | 4 | Actions In Response to Report of CSESS Representative |
| | 21 | Other invitation |
| Myers | 18 | Proposed Meeting of Home Economists to Plan Research |
| Price | 12 | RRC report on W-39 |
| | 17-18 | Resolution on transfer of Weather Bureau data to punch cards |
| Sharp | 14 | RRC report, "Other Project Recommen- dations, Item 7" |
| | 17-18 | Resolution on transfer of Weather Bureau data to punch cards |
| | 18 | Proposed Meeting of Home Economists to Plan Research |
| | 18 | Appointments to represent Western Region on Meat Quality |
| | 22 | Date and place of Spring 1963 Meeting Also see listings above for Boyce, Briggs and Camerson/ |
| Thorne | 18 | Appointments to represent Western Region on Meat Quality |

4-Western Directors-4/19/62

| For Specific Attention of | Page No. | Sidehead or Other Identification |
|---------------------------|----------|--------------------------------------------------------------|
| Wheeler | 14 | RRC report, "Other Project Recommendations, Item 8" |
| | 17-18 | Resolution on transfer of Weather Bureau data to punch cards |
| | 18 | Meat Quality |
| Attachments | | Gerald |

MINUTES OF WESTERN DIRECTORS' MEETING Davis, California

March 7-9, 1962

The meeting was called to order by Chairman Ensign. The following were present during all or part of the meeting:

| R. K. Frevert | Arizona |
|-------------------|----------------|
| H. E. Myers | Arizona |
| A. M. Boyce | California |
| F. N. Briggs | California |
| S. H. Cameron | California |
| D. E. Jasper | California |
| H. H. Laidlaw | California |
| E. G. Linsley | California |
| P. F. Sharp | California |
| H. J. Vaux | California |
| D. W. Bohmont | Colorado |
| S. S. Wheeler | Colorado |
| M. M. Rosenberg | Hawaii |
| R. D. Ensign | Id a ho |
| J. E. Kraus | Idaho |
| J. A. Asleson | Montana |
| J. E. Adams | Nevad a |
| R. E. Ely | Nevada |
| A. S. Curry | New Mexico |
| P. J. Leyendecker | New Mexico |
| R. M. Alexander | Oregon |
| R. W. Henderson | Oregon |
| F. E. Price | Oregon |
| D. A. Burgoyne | Utah |
| D. W. Thorne | Utah |
| M. T. Buchanan | Washington |
| L. W. Rasmussen | Washington |
| N. W. Hilston | Wyoming |
| N. F. Farris | CSESS |
| H. C. Knoblauch | CSESS |

R. A. Allen

Department of Commerce

J. O. Gerald

Recording Secretary

Introductions

Briggs introduced H. H. Laidlaw, Associate Dean, College of Agriculture, University of California, Davis campus.

Curry reintroduced D. W. Bohmont, Associate Director, Colorado, and asked if his initiation into the Western Association of Agricultural Experiment Station Directors could be prevented. Following the vote, and upon presentation of due credentials, the Chairman declared Bohmont to be duly initiated, on a trial basis.

Curry introduced Asleson as full Director of the Montana Station.

The Chairman called on Dean Briggs for announcements, and then reviewed the preliminary agenda with Directors. Following this, an agenda was adopted.

Corrections in November 1961 Minutes

The Recording Secretary reported two corrections in the November 1961 minutes:

1. On page 2, the last sentence of the first paragraph was changed to read as follows:

"This committee recommended an annual joint meeting among Extension, Experiment Station and State Department of Agriculture personnel concerned with marketing research, extension and service programs."

2. On page 10, 12th line from the bottom of the page, 'WSMRAC" was changed to read 'ESMRAC".

Without objection, the Chairman ruled the Minutes approved as corrected.

Comments of CSESS Representative

Knoblauch presented the following items in his discussions with Directors:

"I. Summary of the hearings before the Subcommittee on Agricultural Appropriations of the House was presented. The statement prepared by the Experiment Station Directors and CSESS, entitled 'Efficient Use of Federal-Grant Funds for Scientific Research, was accepted by the Chairman of the Subcommittee for inclusion in the Record of the Hearings. The information in the report was briefly reviewed before the Subcommittee, with particular attention to the questions raised on duplication in research and the need for centralization of research effort. The presentation before the Committee involved the development of the effectiveness of the Federal-Grant program in the university environment. Directors were given an opportunity to review a book of colored prints that was used during the Hearings to present to the Committee research in progress and results of Experiment Station research.

"CSESS staff reviewing Station programs will be considering with Directors and Station staff members possible illustrative material that might be used for the next budget presentation. Reference was made to bulletins of the Pennsylvania, Virginia, and New York Experiment Stations to indicate the kind of review that Station scientists are constantly carrying out so as to use available research resources with maximum effectiveness. The House Subcommittee expressed special interest in the publication of the New York Agricultural Experiment Station, entitled 'Agricultural Research Benefits Consumers.' It was pointed out that the Subcommittee requested additional information

in relation to plans for the use of the \$1 million increase being requested in grants for basic research, under the authority of Public Law 85-934.

- "II. Hearings before the Senate Subcommittee. It was possible to make a descriptive presentation of some of the work of the Experiment Stations before the Senate Subcommittee. The publications and colored prints referred to above were also used in Hearings before the Subcommittee of the Senate.

 Weed research was discussed briefly in relation to the earmarked item in last year's appropriations
- "III. Hearings on Facilities Bill (H.R. 890). I appeared as representative of the Department and expressed strong endorsement for the legislation. Several significant questions were asked by members of the House Subcommittee on Research and Extension, regarding the authority requested in relation to authority existing under the Hatch Act.
- "IV. The Directors were advised as to the status of the 1961 Study of Agricultural Research which was carried out by ARS and the State Agricultural Experiment Stations.
- "V. Forestry Research Legislation (H.R. 8535-McIntire). It was pointed out that a recent conversation with Congressman McIntire indicated that hearings would be held on this legislation in the near future.
- "VI. Several Experiment Station Directors have raised questions on plans for future workshops for Directors and business officers. Plans are being developed to have workshops either in late September or early October of 1962. We expect to advise the Directors at the time of the Summer meetings as to specific dates.
- "VII. Abstracts of Federal-Grant Projects Provided on Form 20. The situation regarding the unsatisfactory condition of the sets of Form 20's provided to the Stations by the contractor was discussed with the Directors. Because of the condition of the abstracts, payment to the contractor has been withheld by the Government Printing Office. We are requesting that the replacement sets be sent to the CSESS office, where they will be checked, updated and expressed directly to the State Stations. The new sets will not be shipped in file boxes. Therefore, the Directors should keep the boxes, and when the new sets of Form 20's are received the old abstracts and dividers can be destroyed and the boxes used for the new sets. We would like to ask that the Experiment Stations use the Form 20 for non-Federal projects. CSESS will proceed with the process of having the sets of non-Federal project abstracts printed and made available to the State Stations.
- "VIII. The Directors were advised that the publication on Experiment Station Research Policy and Procedure is in the final

stages of editing and will be going forward to the printers at an early date. We are hopeful that it will be available for distribution May 1-10.

"IX.It was proposed that the CSESS technical staff devote far less time to the review of accounts and spend more of their time on the actual review of research in progress. The specialists would be available to answer any questions regarding the use of Federal-Grant funds that might develop in the business office. It was pointed out that the Stations have the responsibility for the proper maintenance of accounts and that the CSESS function is one of service rather than being an audit.

"X. Relationship of Graduate Students to Station Research. The important relationship between research and teaching is receiving more consideration in programs of research because of the critical need for training of scientists. It is planned that CSESS will send a form to each Station requesting additional information on graduate students. This form will be transmitted to the Stations along with the request for salary roll information."

Actions in Response to Report of CSESS Representative

The consensus of Western Directors in July 1960 to support the proposed time schedule of July 1, 1962, for having all Regional, Hatch, and non-Federal projects reported on Form 20 was discussed. Current consensus was that Station Directors should adhere to the adopted schedule. The desirability of getting all U. S. Department of Agriculture projects also reported on Form 20 was discussed.

With respect to audits of expenditures of Federal funds by Experiment Stations, Rosenberg moved, Adams seconded, that CSESS be encouraged to reconsider its tentative decision to discontinue its examinations of Federal-Grant funds expenditures by the State Agricultural Experiment Stations.

Buchanan moved, Frevert seconded, that the motion be amended to read, "that CSESS be encouraged to have its examiners visit business offices annually to review procedures and general policies of these offices but without the considerable time devoted in the past to auditing of detailed expenditures accounts." Proposed amendment failed to pass. The main motion passed.

Regional Research Activities

'Weed Research"

Farris reported that weed research will be carried forward through 1963 and 1964 fiscal years. Whether or not detailed Station audits of expenditures on such research will be made depends on whether or not Congress again earmarks funds for these purposes. As in the past, examiners will ask for a segregation of earmarked items of expenditure in order that inspection of these can proceed rapidly.

"Manual of Procedures" Farris reported that three subcommittees established by the Committee of Nine for the appraisal of regional research and regional research procedures will be continued into next year. He reported that it can be expected that the Committee of Nine will continue to exercise responsibility and leadership of the regional and CRF research programs in the future. He also reported that the Manual of Procedures for Cooperative Regional Research is being revised for Committee of Nine review in June, and that copies will be available by late summer or early fall for review by Directors. It is hoped that revision of the Manual will be completed and published this year.

"Ensign Proposal" Farris discussed the Ensign proposal for eliminating contributing projects to regional projects. The Committee of Nine expects to decide in the near future if such proposal is feasible. Such procedure would perhaps thrust more responsibility on the Regional Research Committee and on Administrative Advisers for seeing to it that State contributions are in keeping with the regional project objectives. He asked if Directors would reaffirm or rescind the endorsement given by Western Directors in July 1960 of the general idea of a single outline. The consensus, from the July 1960 meeting, that such general idea be endorsed was reaffirmed. The earlier consensus specified that details of the procedure would have to be developed by the Committee of Nine and CSESS.

"CRF Proposals"

Farris commented upon the request by the Committee of Nine for proposals from the Regional Associations of Directors for funding from the Central Research Fund. None of the Associations had provided only two proposals as requested, but it was assumed that these would be forthcoming from the meetings of Directors currently and subsequently to occur.

The Chairman distributed a list of titles of proposals received in January and February 1962 from individual Directors for CRF projects and reminded Directors that selection of two of these for submission to the Committee of Nine would be an item of business later in the agenda.

"Committee of Nine Meeting" Farris reminded Administrative Advisers that the Committee of Nine meets April 16-18 and that materials for review by it at this meeting should be delivered to him at least a week in advance of the meeting. Some of this meeting will be held jointly with ESMRAC in connection with the meat quality research review that has been in process.

ESCOP

Price reported on matters now of concern to him as Chairman of ESCOP and to ESCOP in general. In particular, he noted the need for an executive committee that would function for ESCOP in response to very rapid developments. He also noted the need for the executive membership of ESCOP to be elected for relatively long terms, but pointed out that long terms burdened the ones elected. Several other items were commented upon by Price.

The group expressed appreciation for Price's devotion to, and performance of, duties in connection with his tenure as Chairman of ESCOP.

Legislative Subcommittee Buchanan and Frevert reported on several items that have been actively pursued by the Legislative Subcommittee since November 1961.

ESMRAC

Alexander reported that ESMRAC plans to meet in mid-April jointly with the Committee of Nine. He indicated no new developments of major import since his report to Directors in November 1961.

Committee of Nine

Rosenberg reported that the Committee of Nine has not met since November and that therefore there is nothing additional to report at this time.

WAERC

Asleson, reporting for Huffman, called the attention of Directors to the WAERC recommendations distributed to Directors by the Chairman and the Secretary of the Council. He indicated that the RRC has been studying and would report on most of these recommendations.

WSWRC

Thorne reported that regional soil maps are under preparation now that boundaries of benchmark soils have been set. The maps should be ready for publication later this year. No decision on publishing Station or on method of financing the publication has been reached as yet by the work group.

RRC Report

REPORT OF THE COMMITTEE ON REGIONAL RESEARCH

to

THE WESTERN DIRECTORS Davis, California

March 7-9, 1962

The following were present at the March 5-6, 1962, meeting of the Regional Research Committee:

L. W. Rasmussen

J. A. Asleson

N. W. Hilston

N. F. Farris

J. O. Gerald, Recording Secretary

A. NEW PROJECT OUTLINES REVIEWED

W______, Farm Labor (A new project authorized in March, 1961).

Capital-Labor Substitution and the Hired Farm Work

Force, represented an area needing work. However, the outline reflected that the committee had not adquately planned for the work to be done. The justification section was good, but the extensive bibliography was not utilized in the discussion under previous work. There was no indication that any evaluation of previous work was made. In addition, procedures for all objectives were vague, and no procedures were specified for Objective 5. Cross referencing of objectives and procedures to contributing projects was not done.

RRC recommends that the project outline be returned to the committee for further development. The committee needs to make decisions as to what each of the states will do, and how the overall objectives of the project will be accomplished. State funds can possibly be used in further planning and development of this area; consequently, RRC recommends that no regional research funds be allotted to this project in 1963.

Rasmussen moved, Myers seconded, acceptance of the recommendation. Rosenberg asked if the outline could be returned to the technical committee with suggestions for revision and with authority to resubmit the proposal for funding later in the year. The Administrative Adviser suggested that he would discuss the RRC recommendation and the question by Director Rosenberg with the Directors whose Stations are concerned in the project. At a later time he reported that, in his opinion, and in the opinion of the Directors with whom he had discussed the possibilities, the RRC recommendation was appropriate. The motion passed.

WM__, (WM-17 Replacement, authorized in July 1951 as a new project.) Competitive Position of the Western Region in Marketing Processed Fruits and Vegetables, indicates no explicit need for a regional project in this area. It seems to be a mechanism whereby workers could get together to discuss methods. Also, there was no cross referencing of objectives, procedures, and contributing projects. The State projects seemed quite independent of each other, but were good as State projects. Publications listed in the review of WM-17 seemed to be primarily of the "service to industry" type, and RRC asked if there had been no advancement of basic knowledge from the project. RRC recommends that this replacement outline not be approved on the grounds that it is not a regional project.

/Rasmussen moved, Myers seconded, adoption of the recommendation. Price asked if the disapproval of this area of work was to be considered to hold for all time. Rasmussen responded that RRC had not considered such eventuality but had merely recommended disapproval of the project submitted. The motion passed.

WM-23, (A replacement authorized in March, 1961.) Descriptive Marketing of Western Wools, was a very well prepared outline that reflected considerable advance planning. Wool is an important commodity in the West, yet the work that has been conducted previously in this area seemed fraught with difficulties, and the former technical committee demonstrated a lack of ability to produce useful results. On the grounds of the very well prepared outline, and on the knowledge of some changes in personnel assigned to the project, RRC recommends approval of the project as WM-23 on a preliminary term of only two years. If the project

seems to be productive or potentially productive at the end of this term, RRC would then extend the project as necessary, up to a full five year term, for completion of the work.

 \overline{R} asmussen moved, Myers seconded, adoption of the recommendation. The question was raised as to what was the nature of the change in the proposal from the current project that will make the new work successful. Rasmussen responded that the degree of specification of objectives and procedures and the indicated organization of technical personnel for the performance of the proposed work seemed adequate. The motion passed. However, at a later session, Rasmussen reported that RRC had reviewed the funding needs of currently active projects and of the need for increasing the trust fund to cover expenses of the Recording Secretary. In view of the limited available funds, RRC also decided to reappraise its recommended actions relative to the approval of new projects. Based on this reappraisal, RRC considered it advisable that the previous action on WM-23, Wool Marketing, be reversed to deny approval of the area of work. The justification for this recommendation was that funds are more urgently needed on existing projects than for the activation of new work. Rasmussen moved, Rosenberg seconded, rescission of the earlier action on WM-23. Passed. /

WM-33, (A replacement project authorized in July, 1961.)

Identification and Characterization of Biochemical and Biophysical Factors Related to Beef Quality and Marketability, was well written and complete in and of itself. RRC notes, for the guidance of the technical committee, that contributing projects will have to be submitted to CSESS for funds certification purposes, nonetheless. RRC recommends approval of the project as WM-33 to June 30, 1967. The project may require revision and continuation beyond that date to bring it to fruition.

/Rasmussen moved, Myers seconded, adoption of the recommendation. Question was raised as to how the proposed work will coordinate and integrate, or conflict with, recommendations relative to meat quality factors and consumer preference research which may come from discussions now being conducted by ESMRAC. Rasmussen responded that RRC had reviewed this question with the Administrative Adviser to WM-33 and had learned that this proposed work was one of determining and developing methods for identification and characterization of factors related to beef quality and marketability, and not with the question of specification of characteristics that are preferred by consumers. The motion passed.

WM-38, (A replacement authorized in July, 1961.) Financial Management of Agricultural Cooperatives, as with the Farm Labor proposal, indicated some inadequacy of the evaluation of previous work. Subject to revision of the previous work and present status section to show relationship of previous work to what is proposed for this project, RRC recommends approval of the project as WM-38 to June 30, 1965. The revision should be completed, and the outline resubmitted to RRC by May 1, 1962, for June, 1962 review by the Committee of Nine. As with WM-33, the technical committee is advised that individual contributing projects will have to be submitted to CSESS.

Rasmussen moved, Henderson seconded, adoption of the recommendation. Passed.

WM__, (A new project authorized in March, 1961.) Relation of Integration to Growth and Development of Agricultural Industries in the West, represents an area needing work, and RRC noted that the outline seemed to be satisfactorily prepared. However, the considerable uncertainty as to whether personnel would be available, and, if so, what their views of the research proposed might be, causes RRC to recommend that the project not be activated in 1963.

Rasmussen moved, Hilston seconded, adoption of the recommendation. Wheeler asked if approval or disapproval of a proposal should be based on personnel changes on contributing projects that RRC might, by chance, learn of. He stated that, in his opinion, each Station Director was responsible for finding personnel to carry forward the work under its contributing project and that changes that occur should be of no concern to RRC or Western Directors as groups in their reviews of proposed new work. The motion passed.

B. PROJECT REVISIONS

W-6, The Introduction, Multiplication, Preservation and Determination of the Value of New Plants for Industrial and Other Purposes, was found to be in accordance with previous recommendations for re-orienting this project. It strengthens the primary station for the introduction and evaluation of new plants. RRC recommends approval as W-6 on a continuing basis. This project should be reviewed critically after five years. It is urged that the Administrative Adviser continue to provide firm guidance, particularly in regard to funding and the role of contributing projects.

/Rasmussen moved, Hilston seconded, adoption of the recommendation. Passed. /

W-24, Evaluation and Modification of Machinery Components to Aid in Cotton Seedling Emergence and Stand Establishment, has been revised to meet criticisms of the 1961 proposal. Approval as W-24 to June 30, 1967 is recommended. The technical committee with guidance from the Administrative Adviser is urged to give special attention to coordination of the work of participating States which appears to be quite diverse.

Rasmussen moved, Henderson seconded, adoption of the recommendation. The Administrative Adviser asked why a new number was not recommended by RRC. Rasmussen responded that the proposed work was so closely related to the work that had been conducted under the current W-24 project that RRC felt no new number was necessary. Motion passed.

W-38, Crop Residues and Root Diseases, lacked cross-referencing of the objectives, procedures, and participating Stations. A proposed supplement to show cross-referencing was received, but it lacked specificity. RRC recommends approval as W-38 to June 30, 1967, subject to preparation and submittal of a more complete supplement specifying contributing project responsibilities. This supplement should be submitted by April 1, 1962 to permit Committee of Nine review of the project at its April meeting.

/Rasmussen moved, Henderson seconded, adoption of the recommendation. Passed. /

W-48, Weather Patterns, was found not to be acceptable. It is recommended that it be returned to the technical committee. If resubmitted, the justification would have to be strengthened and the procedures section should indicate how work in the States will be brought together, analyzed and presented as a regional publication. Objective No. 3 should be deleted as no one has plans for working on it. If the technical committee resubmits the proposal by May 1, 1962, Directors should send comments, if any, to the Chairman of the RRC by May 15. Failure to criticize will be inferred as acceptance and RRC will be guided accordingly in formulating a recommendation.

Price moved, Asleson seconded, that the course of action recommended by RRC be authorized by Western Directors. Sharp asked if the preparation of data for analysis on electronic computers could be done by the Weather Bureau. Asleson explained that the Weather Bureau has prepared data for main stations from 1948 to date in such manner, and will, as their personnel and equipment permit, transcribe data for these main stations for periods prior to 1948. He reported that the West is so diverse in climatological characteristics that main-station data are not nearly adequate for the

purposes of the W-48 project thereby necessitating the transcription of data for substations. Motion passed. _/

W-57, Amino Acid Utilization as Affected by Vitamins, was submitted a year early as it is not to be activated until July 1, 1963. The proposal was acceptable and approval to June 30, 1968 as W-57 is recommended.

/Rasmussen moved, Myers seconded, adoption of the recommendation. Passed. /

W-58, Relation of Temperature to Forage Crops, was supplemented by the technical committee in response to previous criticisms by the RRC. RRC recommends approval as W-58 to June 30, 1967. It requests the technical committee at its next meeting to give consideration to the accomplishing of Objective No. 3 or revise that objective in line with work proposed in contributing projects as written.

Rasmussen moved, Henderson seconded, adoption of the recommendation. Passed. /

WM-35, Facilitating the Marketing of Seed through Improved Testing Procedures, was generally satisfactory. RRC recommends approval as WM-35 to June 30, 1967 subject to submittal of a supplement to give cross-referencing of objectives, procedures and contributing states.

/Rasmussen moved, Myers seconded, adoption of the recommendation. Passed. /

C. GENERAL COMMENTS ON OUTLINES

- 1. The RRC noted two rather general weaknesses in project proposals:
 - (a) The section on previous work and present status is frequently treated very superficially. There is failure to indicate how and to what extent the proposed work will relate to the available information.
 - (b) The procedure section fails to specify responsibility to the contributing projects for the proposed accomplishment of each objective. Cross-referencing is lacking.

It is recommended that the Administrative Advisers or the CSESS representatives inform the technical committees of the requirements for the preparation of complete project outlines.

The question was asked if more specific instructions should be given to technical committees to assist them in overcoming such shortcomings; i.e., should RRC prepare a supplementary guide to the discussion of project preparation given in the Manual of Procedures.

2. Many proposals are submitted late which unduly burdens the RRC to accomplish a careful review. It is requested that proposals be submitted to RRC not later than two weeks previous to the planned meeting of the committee. Hereafter, late submittals will be deferred for review until the meeting following the one immediately coming up.

/It was suggested that RRC send reminders of dates by which materials must be submitted prior to such deadlines./

- D. REVIEWS OF PROJECTS DUE TO TERMINATE JUNE 30, 1963
 - W-39, Fluorine Effects, still needs considerable basic research in the area. RRC recommends that Western Directors look with favor on a proposal to continue work beyond June 30, 1963, provided that basic research rather than service research for industry can be assured. RRC suggests that the technical committee give consideration to possibilities for and benefits of continuing to concentrate the work at only a few Stations.
 - W-46, Stresses on Cattle and Sheep, is progressing satisfactorily for the low funding level enjoyed. RRC recommends that Western Directors look with favor on a revision of this line of work.
 - W-56, Nematodes and Root Diseases, has also been funded for only a short time at a low level. RRC recommends that Western Directors look with favor on a revision that would concentrate the work in this new area on the most pressing problems.
 - W-70, On-Farm Use of Water, was activated July 1, 1960. Although the project was written for a five-year term subject to review at the end of three years, RRC and Directors approved the project for only a three-year term. RRC recommends that the technical committee appraise its position in relation to completion of work, and if necessary, to submit a justification and request for extension to June 30, 1965. The committee should seek assurances that work can and will be continued as a cooperative regional effort, particularly in those States where personnel changes are known to have occurred.
 - WM-37, Transportation of Livestock and Meats, is expected to be completed on schedule by June 30, 1963. RRC recommends that Western Directors look with favor on proposals for new work in livestock marketing that would concentrate the efforts now devoted to WM-37 and WM-39 into one project. WM-39, Direct Marketing, is scheduled to terminate June 30, 1964, and the work seems to be possible of completion by then. However, new work could be started July 1, 1963 as replacement for WM-37, and then augmented in 1964 after completion of WM-39.

/In the absence of objections, RRC recommendations on the five projects reviewed were adopted. /

E. OTHER PROJECT RECOMMENDATIONS

1. RRC acknowledges receipt of the W-42, Ground Water Laws, termination report.

/No action required.7

2. RRC recommends that W-51, Drainage Design, be extended to June 30, 1964, in accord with the action recommended following review of the project by RRC in July 1961.

/Rasmussen moved, Frevert seconded, extension as recommended. Passed. /

3. RRC acknowledges the WAERC recommendation that W-59, Price and Income Policy, be terminated June 30, 1963, a year ahead of its scheduled termination. RRC finds this recommendation to be satisfactory.

No action required.7

4. RRC recommends that W-62, Farm Power and Machinery Costs, be extended to June 30, 1963, to permit completion of the work underway. Such extension was authorized by RRC and Directors in July 1961 on a contingency basis.

/Rasmussen moved, Henderson seconded, extension as recommended. Passed. /

5. RRC recommends that WM-41, Cotton Marketing, be extended to June 30, 1963, in line with the WAERC recommendation, with the stipulation that a one or two page statement of any proposal for new work in this area be submitted to RRC at its summer 1962 meeting, at which time a future course for the project will be recommended.

Rasmussen moved, Asleson seconded, adoption of this recommendation. The Administrative Adviser questioned if the technical committee would be able to meet the summer 1962 schedule suggested. Rasmussen responded that RRC would accept the statement of proposed new work in November if it cannot be ready by summer.

Passed.

6. RRC noted the response of WAERC to the referral by RRC and Directors in November 1961 of a letter from Mr. Ralph Miracle, Executive Secretary, Montana Cattle Growers Association, requesting a study of ranch property values. RRC concurs with WAERC that considerable information is available and that no project should be activated at this time to be exclusively devoted to this topic.

No action required. Asleson was asked to relay the essential message contained in the WAERC report to Mr. Miracle. If a need to discuss this matter further appears, he will report back to Western Directors.

7. RRC and Directors asked WAERC to recommend someone to represent the Western Region on the technical committee of IR-3, National Policies and Programs. RRC concurs in WAERC's recommendation of Dr. Sydney Hoos, University of California, Berkeley, for a four-year term ending June 30, 1956, and so recommends.

/Rasmussen moved, Hilston seconded, appointment of Dr. Hoos as recommended. Passed. /

3. RRC reviewed a request from Wheeler, Administrative Adviser to W-60, Textile Research, that he be relieved of this assignment after June 30, 1962, and that Bohmont be appointed Administrative Adviser for 1962-63. RRC recommends this shift in assignment.

/Rasmussen moved, Wheeler_seconded, adoption of the recommendation. Passed. /

F. POLICY AND PROCEDURE FOR P & C FUNDS

The RRC reviewed current practices and problems incident to the handling of P & C funds. It also considered practices followed in other Regions.

It is recommended that Administrative Advisers instruct their technical committees to appraise their P & C fund with the aim towards setting up an amount of the fund to avoid inadequacy and excess of more than \$500. Furthermore, the persons traveling on P & C funds should be specifically instructed to submit their expense vouchers properly processed promptly. Claims received within 30 days of the close of the committee meeting should be paid to the extent of available funds. If for some reason a claim cannot be submitted within 30 days, a letter from the Station Director stating the amount of P & C funds to be requested will permit the claim to receive the same treatment as those received within the 30 day limit.

/Rasmussen moved, Kraus seconded, adoption of the recommendation. Passed. /

G. REVIEW OF CENTRAL RESEARCH FUND PROPOSALS

At the request of the Chairman of Western Directors, RRC reviewed the titles only of 25 proposals submitted for consideration for funding from the Central Research Fund. RRC has as its number one priority recommendation, that a marketing project be funded so as to relieve the several Regional Research Funds from marketing quotas considerably in excess of the 20 percent level specified in the act for the

total Regional Research Fund. In the absence of any marketing proposals among the 25 titles reviewed, RRC suggests the title, Transportation Costs of Marketing Agricultural Products. The WM-17 technical committee suggested such a project on the basis that highly variable methods of determining such costs for use in distribution and market competition studies are now allowed to influence results obtained from such studies. There are numerous other uses for costs, and standard methods and results should be encouraged by a national project.

From among the 25 other titles reviewed, RRC believes the following to represent possible CRF projects:

- 1. Measurement of Meat Quality.
- 2. Seasonal Farm Labor Needs, Problems and Prospects.
- 3. Rumen Function for Accelerated Performance and Efficiency.
- 4. Pesticide-Herbicide Residues in Animal Products.
- 5. The Mechanization of Apple Harvesting and Handling.
- 5. The Inter-relationship of Nutrition, Genetics, and Physiology in Reducing the Incidence of Poultry Diseases.

/No action taken relative to these suggestions of RRC. See "Proposals to the Committee of Nine of CRF Projects for 1963 Activation," page 19, for final action.

H. SUMMARY AND REVIEW OF PROJECT RATING SURVEY

IRRC studied the summary prepared by the Recording Secretary of ratings given to projects by 11 Stations as required by the motion passed in November 1961. RRC Chairman discussed these ratings with Directors; the shortcomings of the data for the purposes intended; and the differences of ratings among Stations revealed by the results. It was concluded that the ratings by projects were not adequate bases for decisions as to how to proceed in reducing the number of regional research projects that would be permitted to exist in the future. The RRC Chairman informed Directors that RRC recommends that efforts continue to be directed toward an overall reduction in number of active regional projects. To do this, RRC recommended that any proposals for new work or revisions of existing projects be submitted one year in advance as one or two-page statements of justification for and general objectives of the proposed work. Dased on consideration of such statements and current reviews of existing projects, RRC will recommend to Directors whether or not project outlines in complete detail should be prepared.

Rasmussen moved, Rosenberg seconded, adoption of these recommendations. It was requested that RRC notify Administrative Advisers of the details of needed statements.

Passed.

/Buchanan moved, Sharp seconded, that Directors commend the RRC for its continuing effort toward the development of more objective means of evaluating regional research work and toward the reduction in number of active regional projects; as RRC progresses with this study, Directors request the Regional Research Committee to consider, among the plans evaluated, one that would, (a) separate problems and projects, (b) request Directors to establish areas, priorities and fund allocations by areas, and (c) develop a colleague-evaluation plan as an additional source of advice to Directors in the approval of specific projects within the areas that receive prior approval. Passed.

Summary of RRC Actions on Active Projects

1. Projects due to close June 30, 1962:

WM-17 - Revision not approved.

WM-23 - Revision not approved, will terminate June 30, 1962.

WM-33 - Revision approved to June 30, 1967.

WM-35 - Revision approved to June 30, 1967.

WM-36 - Will terminate June 30, 1962.

WM-38 - Revision approved to June 30, 1965.

WM-41 - Extended to June 30, 1953, replacement proposal called for.

W-24 - Revision approved to June 30, 1967.

W-47 - Will terminate June 30, 1962.

W-48 - Revision not approved, to be returned by May 1, 1962.

W-51 - Revision approved to June 30, 1967.

W-58 - Revision approved to June 30, 1967.

2. Projects due to close June 30, 1963:

WM-37 - Replacement proposal to be joint with WM-39 called for.

W-39 - Revision proposal called for.

W-46 - Revision proposal called for.

W-56 - Revision proposal called for.

W-57 - Revision approved effective July 1, 1963 to June 30, 1968.

W-62 - Will close June 30, 1963.

W-70 - Extension justification called for.

Research Related
to Agriculture
Conducted by the
Weather Bureau

Boyce introduced Dr. Roger A. Allen, Weather Eureau, Department of Commerce, who discussed with Directors a number of the research and related activities of his organization. Among these were projects in the Census Bureau; the Bureau of Standards; Coast and Geodetic Survey; and atmospheric measurement, hydrologic and other projects, in the Weather Bureau itself. A number of slides of weather formations, as photographed from a satellite in space, were shown. Directors thanked Dr. Allen for a very interesting presentation.

In discussion, Dr. Allen was asked if the Weather Bureau conducted such work as is being done under regional project W-48. Dr. Allen responded that some such work is done but not on the scale that would be of interest to the technical committee of W-48. The question was raised if the Weather Bureau could transcribe data from substation weather records on to punch card or other recording device suitable for electronic computing equipment and then make these available to Experiment Stations for research. The concern was that the Experiment Stations should use their funds for research into problems of agriculture brought about by weather types as shown by information provided by the Weather Bureau. The Chairman appointed Asleson and Sharp as a committee to study these questions and to report back to Western Directors.

At a later meeting, Asleson presented and discussed the following resolution for consideration by Directors:

- "WHEREAS, Research has determined that the components of climate and weather such as temperature, precipitation, humidity, and radiation, are exerting major influences on the metabolic processes and therefore the growth and reproduction of plants and animals; and
- "WHEREAS, Engineers must design and build structures such as irrigation systems, dams, highways, and buildings which are suited to the climate in which they are located; and
- WHEREAS, A reliable description, understanding and interpretation of climate as it exists is dependent upon a thorough analysis of the thousands of long time weather records which have been taken and published by the U. S. Weather Bureau; and
- 'WHEREAS, The U.S. Weather Eureau has transferred daily weather records from 1948 to the present time to electronic computer punch cards and other State and Federal agencies have transferred many records prior to 1948 to punch cards in order to make analysis possible;
- "DE IT, THEREFORE, RESOLVED, that the Western Association of Agricultural Experiment Station Directors urge the United States Weather Bureau to enlarge its program of placing daily weather records on punch cards or other appropriate electronic computer recording devices to include all remaining valid and reliable records taken prior to 1948 and to make such cards or copies of such cards available to the State Experiment Stations for research analysis."

Asleson moved, Sharp seconded adoption of the resolution, this resolution to be forwarded to ESCOP for consideration and action. In discussion, it was suggested that the Chairman should write to the other

Regional Associations of Directors asking their support of this action and that the Administrative Adviser to W-48 should write to Administrative Advisers of projects in other Regions companion to W-48. The motion passed. /

Proposed Meeting
of Home Economists to Plan
Research

Myers reported that the meeting of Home Economics research leaders authorized in July 1961 by Western Directors met in October 1961. The group felt that study is needed of problems in the area of family relations and family economics. A committee of technical personnel from Stations interested in these areas was appointed to draw plans for a project. The group expects to obtain funds from non-Experiment Station sources. Dr. Ruth C. Hall of the University of Arizona was appointed Chairman of the group and has asked permission to meet at Tucson at an early date.

Myers moved, Asleson seconded, that a group of technical workers in the area of family relations and family economics be authorized to meet to plan a research project in this area. The motion <u>passed</u>. By consensus, it was agreed that a notice should be sent to all Directors to plan the agends when the time and place have been determined. It was also agreed, by consensus, that the Director at or near the place of the meeting would provide any administrative guidance needed by the group.

Meat Quality
Factors and
Consumer Preference for Meats

Wheeler reported that technical workers from nine Western States authorized in November 1961 to meet to discuss meat quality factor and consumer preference research and research needs, as suggested by ESMRAC, met in Salt Lake City, Utah, February 8, 1962. He distributed minutes of that meeting and pointed out the priorities for research as established by the technical group. The first priority was for study of basic biochemical, histochemical, and biophysical definitions of factors affecting eatability of meat. Second priority was granted to three areas; (a) carcass composition, as affected by management, breeding and nutrition, (b) measuring consumer acceptability of standards based on objective measures developed under the priority numberone project, and (c) reflection of quality through the marketing mechanism. Third priority was given to study of decision making in the purchase of meat. These priorities are to be presented at a national meeting of technical workers if such is called.

The ESMRAC request for regional meetings of technical workers to consider this area of work suggested also that Western Directors appoint representatives to a national meeting. The group of technical workers under Wheeler's guidance recommended Dr. Gordon A. Rowe, University of California, Berkeley campus, and Dr. James A. Dennett, Utah State University, to represent the Western Region at national meetings if called. Wheeler moved, Frevert seconded, that these two be designated to represent the Western Region at any national meetings. Passed.

The Chairman requested that Wheeler keep informed of developments in this area and report back to Directors on items of interest.

Rural Areas Development

Price reported that Extension personnel seem to be very wellorganized to carry out the functions prescribed by the Department
of Agriculture for this task. He reported that there seems to
be no great pressure for basic or applied research but that the
need is for interpretation of presently available research
materials.

Proposals to the Committee of Nine of CRF Projects for 1963 Activation

Ensign reported that he, as Chairman of Western Directors, was requested to provide to the Committee of Nine, no later than February 28, 1962, two proposals that might be considered for funding from CRF in 1963. Directors were canvassed for suggestions and some 25 proposals were submitted by Directors in the Western Region. The lack of a clear majority in favor of any two of these proposals necessitated a deferral of response to the Committee of Nine until after this meeting of the Association.

Wheeler moved, Rosenberg seconded, that the area bearing the title "Investigations of Pesticide Residues with particular reference to the effectiveness of new chemicals on agronomic and animal production and the determination of effective means of safeguarding the public's health" be proposed to the Committee of Nine for funding under CRF in Fiscal year 1963, this project to include both marketing and non-marketing aspects. In discussion, it was suggested that the public health aspect might be deleted from the proposal. Without modification or amendment, the motion passed.

Thorne moved, Rosenberg seconded, that the area under the title, "Social and Economic factors related to the alternative uses of land and water" be similarly proposed to the Committee of Nine. Passed.

Reimbursement of Expenses of Recording Secretary

Sharp explained that he had distributed a letter relating discussions he had with ERS officials relative to the experience obtained in providing services of the Recording Secretary to the Western Association. While the estimates were not precise, it appeared that approximately \$4,000 to \$4,500 of directly chargeable expenses are incurred by the office of the Recording Secretary in servicing Western Directors.

Sharp moved, Price seconded, that, in the light of this experience, the fund set aside for reimbursing ERS for expenses incurred in providing services of the Recording Secretary be increased to \$4,200 per year, effective in the 1963 fiscal year. Passed. The Chairman instructed RRC to make allowance for this increase in budget recommendations to be presented later in the meeting.

Greetings and Felicitations Extended

Knoblauch reported Dr. Charles G. Gray has not returned to work as yet following his illness. However, it is expected that he will return soon. Knoblauch further reported that Dr. F. D. Fromme has recovered well from major surgery in early December.

Adams reported that Dr. Fleming sent his best regards to Directors and reported him to be well and active.

Revisions of Travel Policies

As requested in the November meeting, the committee to revise travel policies reported that Section 2 of the July 1961 revision of travel policies would necessarily be revised as a result of the motion passed in November 1961 establishing means whereby more than one representative per Station can be authorized to travel at P & C expense to some technical committee meetings.

Henderson moved, Rosenberg seconded, that Section 2 of the cited travel policy be revised to read, "Each state that has an approved contributing project shall be allowed to send to technical committee meetings on P & C funds one representative, except as additional representatives per State may be authorized by the Western Directors upon request of the project's Administrative Adviser." Passed.

Agenda for Land
Craut Meetings
in November
1962

Directors discussed items that might be of interest for sessions of the Experiment Station Section and Division of Agriculture of the American Association of Land Grant Colleges and State Universities that will be held in November 1962 in Washington, D. C., in connection with the annual Land Grant conference.

Damage by Starlings and Other Birds to Agriculture Sharp discussed the considerable concern with which farmers and orchardists in California and other Western States view the great damage being done to crops and fruits by the greatly increased populations of starlings and other birds. He described some of the activities of agencies in California, such as the Board of Fisheries and the Department of Interior, in attempts to control such damage.

Long Term
Rental of Office
Space by Cooperating Agencies
of the Federal
Government

Frevert reported that Federal agencies cooperating on a longterm basis with Agricultural Experiment Stations now can, under certain conditions, lease office space and laboratory facilities for periods in excess of five years. Such long term leases permit the Universities concerned to sell bonds to pay for the construction of such facilities. This is a change from prior years when GSA was restricted from long-term leases of facilities and office space. However, he reported that the problem may still be one of obtaining agreement to a lease that is in excess of five years.

Questionnaires from Industry and Private Associations Directors discussed the difficulty of answering many of the questionnaires sent to Experiment Stations for the purpose of obtaining information about the research programs underway relative to the products, commodities or activities of interest to the Associations making the surveys. The discussion emphasized that basic research cannot be classified as to the commodity, product or activity to which it relates since such research has implications far beyond the bounds of such narrow definitions as may be of interest to these surveying groups. The variety of response among Stations to such questionnaires also led Directors to question if meaningful summaries or estimates could be drawn by the persons in charge of the studies. Directors emphasized that they have and will continue to cooperate in such studies to the extent feasible.

Time and Place of Summer 1962 Meeting

Asleson reported on difficulties he had experienced in arranging for the summer 1962 meeting of Western Directors in northern Montana. Myers moved, Jasper seconded, that the Western Directors meet in Bozeman, Montana, August 7 - 9, 1962. Passed.

Agenda Items for Summer 1962 Meeting Frevert asked if Directors wished him to reinvite Mr. E. D. Eaton, Department of Interior, to meet with them at their summer meeting to discuss research related to agriculture underway or in prospect in the Department of Interior. Mr. Eaton had planned to be at this meeting but found it impossible to attend due to the pressure of Congressional hearings. Frevert was authorized to extend such invitation.

Other agenda items were discussed and several suggestions for invitations of research leaders from the Department of Agriculture were made.

Resolution of Recognition and Gratitude

Price reported that three members of this Association who have served Experiment Stations for many years will be retiring from this Association at the end of this fiscal year. He offered the following resolution:

"WHEREAS, three distinguished Western Agricultural Experiment Station Directors will be retiring from official participation in our Association at the end of this fiscal year;

'NOW, THEREFORE, BE IT RESOLVED, that, in recognition of distinguished service to their own States, to the agriculture of the country, and especially to the agriculture of the Western States, We, the Western Association of Agricultural Experiment Station Directors, hereby acknowledge and express our sincere thanks and best wishes to you, Directors Curry, Sharp and Burgoyne, upon your retirement from our group. We will miss your counsel and advice which has been so generously given and accepted. We will miss our association with you and your wives as co-workers, friends, and colleagues.

"Although you will likely not be meeting with us formally in the future, it is our hope that we will have continued close personal relationships with each of you for many years to come. We also extend to each of you a standing invitation to meet with the Western Directors at any time you have an opportunity to do so. I move acceptance of this resolution and that this be indicated by a standing vote."

Price moved, Buchanan seconded, adoption of the resolution. Directors indicated their approval of this resolution by standing and applauding. Each of the persons named in the resolution responded in like spirit with expressions of appreciation for the long association with Western Directors and of regrets that such official association must come to an end. They were assured that their presence and advice at any future meetings and their participation in social activities of the group will be looked forward to for many years.

Recommended 1963 Budget Allotments

Tables of budget allotments recommended by RRC were distributed among Directors. Corrections brought about by the rescission of approval on WM-23, and by the action to increase the trust fund for reimbursement of expenditures of the Recording Secretary, were read to Directors for their insertion on the Tables. The impact of disapproval of three economics projects upon the budgets recommended by WAERC was also mentioned.

Rasmussen moved, Myers seconded, that the recommended allotments for non-economics projects be adopted by Directors subject to review and correction of the distribution of project budgets for W-56 and W-61, if necessary, by the Administrative Advisers, and to recommendations for State allotments by WAERC for all economics projects. Passed.

Budget recommendations as assembled following the meeting are attached, Pages B-1 - B-17.

Date and Place of Spring 1963 Meeting

Frevert reported that the spring meetings of Directors have at times conflicted with certain other meetings he and others in the Southwest should have attended. He requested that the Spring 1963 meeting date be set to occur after the middle of March so as to avoid such conflict that year. By consensus, it was so agreed.

In discussion of places at which the meeting might be held, Berkeley and Riverside were mentioned. The 1963 schedule for the biennial meeting with personnel of the Western Utilization Research and Development Division, ARS, was mentioned. It was tentatively agreed that the meeting would be held at University of California facilities in the San Dernardino area or in Riverside or Berkeley as earlier mentioned. Sharp, Boyce and Cameron were authorized to contact WURDD officials relative to their willingness to meet with Directors in Southern California and to investigate the possibilities of scheduling facilities in the San Bernardino area.

Appreciation

Myers moved, Adams seconded, adoption of the following resolution:

"The Western Association of Agricultural Experiment Station Directors and Cooperative State Experiment Station Service personnel wish to express our appreciation

- 1. To Chancellor and Mrs. Mrak, for the friendly hospitality shown and the excellent physical facilities provided during our visit on the Davis campus of the University of California.
- 2. To Dr. and Mrs. Fred Briggs and Dr. and Mrs. Don Jasper for their hospitality.
- 3. To Fred Briggs for the meeting arrangements, including coffee, orange juice, luncheons and dinners, all of which contributed to a very pleasant meeting.

- "4. To the members of Blue Key on the Davis campus for providing transportation for the members of our group.
- "5. To our other California colleagues, Paul Sharp, Al Boyce, Gorton Linsley, S. H. Cameron and Harry Laidlaw, for their many friendly gestures.
- 6. To the Student Union for the excellent meeting facilities, and especially to Mary Brown who served us at coffee breaks, luncheons and dinners.
- "7. To the California ladies who entertained the visiting wives.

We, the Directors, also convey our greetings to Dr. Gray with the wish that he will make rapid and complete recovery.

"Dr. Ensign is hereby directed to address letters to the individuals noted above expressing our appreciation.

"We express, to Dr. E. C. Elting, our appreciation for his long association with the U. S. Department of Agriculture in a capacity relating to the State Experiment Stations.

We direct our Chairman to convey these sentiments to Dr. Elting, together with our hopes that he will enjoy health and happiness in his new assignment."

Briggs responded for the University of California, Davis Campus, to the effect that Chancellor Mrak had expressed his and Mrs. Mrak's pleasure at having the group at their house, and on the Davis Campus, on Wednesday evening; that the College of Agriculture and the Deans thereof were assuredly happy to have the group on the Campus and to use the facilities and services available; and that the Davis Campus of the University of California would be happy to extend its welcome at any time and as often as the Directors should desire to return.

Adjournment

The meeting was adjourned.

Respectfully submitted,

John O. Gerald
Recording Secretary

1962-63 ALLOCATIONS TO WESTERN REGIONAL PROJECTS RECOMMENDED BY WESTERN DIRECTORS March 7-9, 1962

| | | | - 1 | | Ē | | 1507 | 21 22 4.2 | | 11.7 m.m. | Poor Brood | |
|--------|----------|-----------|--------------------|----------------------|-----------|---------------------|--------------------|---------------------|------------|-------------------------|------------|--------------------|
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| Calif. | 5,300 | 5,500 | 5.700 | 11,000 | 11,000 | 11,000 | | | | 2,650 | 2,650 | 2,650 |
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| TOB. | 22,000 | 2,200 | 3.100 | | | | | | | | | |
| Mont. | 6,600 | 6.800 | 7.100 | | | | 1,000 | 1,000 | 1,000 | | | |
| Nev. | 5,400 | 5.600 | 5.800 | | | | | | | | | |
| × | 8,300 | 8 500 | | | | | | | | | | |
| Ore | 8,300 | 8,500 | | 1,000 | 1,000 | 1,000 | 1,500 | 1,500 | 1,500 | 2,650 | 4,440 | 4,440 |
| IItah | 6.600 | 6.800 | | 2,000 | 2,000 | 2,000 | | | | 2,650 | 0 | 0 |
| Wash | 5.600 | 5 800 | | 5,000 | 5.000 | 5,000 | 27,050 | 34,900 | 34,900 | 2,650 | 3,510 | 3,510 |
| Wyo | 7,100 | 7.300 | | | | | | - | | 2,650 | 2,650 | 2,650 |
| P&C | 2,300 | 2,300 | | 1.000 | 1,000 | 1,000 | 1,700 | 1,700 | 1,700 | 1,100 | 1,100 | 1,100 |
| Trust | | | | | | | | | | | | |
| TOTAI. | \$77,200 | \$ 79,600 | | \$ 29,000 \$ 20,000 | \$ 20.000 | \$ 20,000 | \$ 20,000 \$36,000 | \$ 40,850 \$ 40,850 | \$ 40, 850 | \$17,000 | \$17,000 | \$ 17,000 |
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1/ Includes \$420 for expenses of Recording Secretary.

| OT ATE | W-12, Bea | n Bre | eding 1962-63 | W-16, Rai | Range Economics | 3 | W-24, Cot | tton Mech | chanization | Cotton Mechanization: W-25, Rangeland -62: 1962-63: | ngeland I | Improvement: |
|--------|-----------|-----------|--------------------|-----------|-----------------|---------------------|-----------|--------------------|-------------|-----------------------------------------------------|-----------|------------------------|
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| | . ment | increase | increase: increase | ment | : increase | :increase: increase | ment | :increase:increase | increase | ment | increase | : increase: increase : |
| Ariz. | Ş | ş | \$ | \$ 1,000 | \$ 1,000 | \$ 1,000 | \$ 6,000 | \$ 6,000 | \$ 6,000 | \$ 5,500 | \$ 5,500 | \$ 5,500 |
| Calif. | | | | 3,200 | 3,000 | 3,200 | 4,700 | 4,700 | 4,700 | 5,400 | 5,400 | 5,400 |
| Colo. | 2,800 | 2.800 | 2,800 | | | | | | | 4,700 | 4,700 | 4,700 |
| Haw. | | | | 1,500 | 2,700 | 3,000 | | | | 3,400 | 2,400 | 2,400 |
| Ida. | 7,400 | 7,400 | 7,400 | | | | | | | 008,9 | 9,800 | 6,800 |
| Mont. | | | | 2,000 | 2,000 | 2,000 | | | | 3,600 | 3,900 | 3,900 |
| Nev. | | | | 2,000 | 1,500 | 1,500 | | , | | 3,400 | 4,600 | 4,600 |
| N. M. | | | | 2,000 | 2,000 | 2,000 | 6,000 | 9,000 | 6,000 | 3,100 | 3,100 | 3,160 |
| Ore. | 2,800 | 2,800 | 2,800 | 2,200 | | | | | | 8,600 | 8,100 | 8,100 |
| Utah | | | | 1,500 | 2,500 | 2,500 | | | | 5,400 | 5,400 | 5,400 |
| Wash. | | | | | | | | | | 3,600 | 3,600 | 3,600 |
| Wyo. | 5,900 | 5,900 | 5,900 | 3,000 | 2,800 | 3,000 | | | | 4,400 | 4,400 | 4,400 |
| P&C | 1,300 | 1,300 | 1,300 | 2,000 | 2,3201 | 1 1 | 300 | 300 | 300 | 2,100 | 2,100 | 2,100 |
| Trust | | | | | | | | | | | | |
| TOTAL | \$20,200 | \$ 20,200 | \$20,200 \$20,200 | \$20,400 | \$19,820 | \$20,620 | \$17,000 | | \$17,000 | \$60,000 | \$60,000 | \$60,000 |

| STATE . | W-27, She | sep Vib | 9 | W-31, So 1961-62 | il Nitr | -63 | W-34, Rar 1961-62 | nge Lvstk | : 1961-62: 1962-63 : 1961- | W-35, Ru 1961-62 | ninant | Parasites : 1962-63 : |
|---------|-----------|------------------|---------------------|---------------------|------------------|-----------|----------------------|-------------------|----------------------------|------------------|------------------|-----------------------|
| | | . No increase | No : 1.0 m : | | . No increase | | : Allot- : ment | No increase | No : 1.0 m : increase | Allot- ment | : No : increase: | : 1.0 m : |
| Ariz. | Ş | \$ | ş | \$ 5,000 | \$ 5,000 | \$ 5,000 | \$ 4,400 | \$ 4.400 | \$ 4,400 | \$ 3,300 | \$ 3.200 | 3,200 |
| Calif. | | | | 5,000 | 5,000 | 5,000 | 5,100 | 5,100 | 5.100 | 7,000 | 7,500 | 7,500 |
| Co10. | 7,300 | 7,300 | 7,300 | 4,500 | 4,500 | 4,500 | 3,900 | 3.900 | 3,900 | 4,700 | 7,000 | 7,000 |
| Haw. | | | | 4,000 | 4,000 | 4,000 | 3,900 | 3,900 | 3,900 | 4,400 | 1,800 | 1,800 |
| Ida. | 4,930 | 4,930 | 4,930 | | | | 3,900 | 3,900 | 3,900 | 2,200 | 2,600 | 2,600 |
| Mont. | 10,100 | 10,100 | 10,100 | | | | 4,400 | 4,400 | 4,400 | 5,600 | 5,000 | 5,000 |
| Nev. | | | | | | | 5,100 | 5,100 | 5,100 | 4,500 | 4,700 | 4,700 |
| N. M. | | | | | | | 4,400 | 4,400 | 4,400 | | | |
| Ore. | | | | 5,000 | 5,000 | 5,000 | 5,100 | 5,100 | 5,100 | 3,200 | 3,600 | 3,600 |
| Utah | 6,170 | 6,170 | 6,170 | 5,500 | 5,500 | 5,500 | 5,100 | 5,100 | 5,100 | 5,300 | 5,000 | 5,000 |
| Wash. | | | | 6,000 | 6,000 | 6,000 | 3,900 | 3.900 | 3,900 | 5,200 | 5,700 | 5,700 |
| Wyo. | 5,500 | 5,500 | 5,500 | | | | 4,400 | 4.400 | 4,400 | 3,100 | 2/ 2,400 | 2,400 |
| P&C | 1,000 | 1,000 | 1,000 | 1,500 | 1,500 | 1,500 | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 |
| Trust | | | | | | | | | | | | |
| | \$35,000 | \$ 35,000 | \$ 35,000 \$ 35,000 | \$36,500 | \$ 36,500 | \$ 36,500 | \$56,000 | \$56,000 \$56,000 | \$56,000 | \$50,900 | \$50,900 | \$50,900 |
| | | | | | | | | | | | | |

 $\frac{2}{}$ to be split between 717 \$1000 719 $\frac{1400}{$2400}$

| O TA A THE | W-37, Ran | ngeland G | :W-37, Rangeland Grasshoppers:W-38, | W-38, Funs | gus Ro | ot Diseases: W-39, | | norine. | Effects 1962-63 | W-40, Br | eeding | Forage Plants: |
|------------|-----------|-------------------|-------------------------------------|------------|-----------|--------------------|----------|--------------------|----------------------------|----------|-----------|----------------------|
| | : Allot- | | : 1.0 m | : Allot- | | : 1.0 m | | | : 1.0 m | : Allot- | • • • | : 1.0 m : |
| | ment | increase | increase: increase | ment | :increase | increase; increase | e ment | :increase:increase | increase | nent | increase | increase: increase : |
| Ariz. | Ş | \$ | S | & | \$2,500 | \$ 2,500 | \$ | & | · : | \$ 5,000 | \$ 5.000 | \$ 5.000 |
| Calif. | 2,800 | 2,800 | 2,800 | 5,200 | 5,200 | 5.200 | 7,000 | 7.000 | 7,000 | 1,000 | 1 000 | 1.000 |
| Colo. | 2,800 | 2,800 | 2,800 | 4,400 | 4.400 | 4.400 | | | | 1,000 | 1,000 | 1.000 |
| Haw. | | | | | 2.800 | 2.800 | | | | 5,200 | 5,200 | 5,200 |
| Ida. | 2,800 | 2,800 | 2,800 | 3,000 | 3,000 | 3.000 | 2,000 | 2.000 | 2,000 | 2,100 | 2,100 | 2,100 |
| Mont. | 2,800 | 2,800 | 2,800 | 3,500 | | | | | | 4,100 | 4,100 | 4,100 |
| Nev. | | | | | | | | | | 5,000 | 5,000 | 5,000 |
| N. M. | | | | 2,000 | 2,500 | 2,500 | | | | 3,000 | 3,000 | 3,000 |
| Ore. | | | | 5,000 | 5,000 | 5,000 | 6,000 | 6.000 | 6.000 | 7,000 | 6,900 | 6,900 |
| Utah | | | | | · | | 9,000 | 000 6 | 9,000 | 5,000 | 5,000 | 5,000 |
| Wash. | | | | 2,600 | 2,600 | 2,600 | | | | | | |
| Wyo | 2,800 | 2,800 | 2,800 | 2,500 | | | | | | 1,000 | 1,000 | 1,000 |
| P&C | 1,000 | $\frac{1}{1.420}$ | $\frac{1}{1.420}$ | 2,100 | 2,300 | 2,300 | 1,000 | 1,000 | 1,000 | 1,300 | 1,400 | 1,400 |
| Trust | | | | | | | | | | | | |
| - | \$15,000 | 9.5.420 | \$ 15,420 | \$30,300 | \$30,300 | \$30,300 | \$25,000 | \$25,000 | \$5,000 \$ 25,000 \$40,700 | | \$ 40,700 | \$ 40,700 |

| | :W-41,Uri | W-41, Urinary Calculi | | .W-44,Cho | | esterol Metabolism:W-45, Pesticide | :W-45, Pes | | Residues | .W-46, Stresses, Cattle Sheep | esses, Cat | Lle&Sheep: |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|-----------|-------------------|------------------------------------|-----------------------|---------------------|----------|-------------------------------|-------------------|---------------------|
| STATE | : 1961-62 | | 1962-63 | : 1961-62 | | 1962-63 | 1961-62 | | 1962-63 | : 1961-62: | . 19 | 1962-63 |
| - | : Allot- | : No | : 1.0 m | : Allot- | : No | 1.0 m | : Allot- | ο _N | 1.0 m | : Allot- | oN : | 1.0 m |
| | ment | : increase | increase: increase: | ment | : increase | increase: increase | ment | :increase:increase; | increase | ment | :increase | increase; increase; |
| Ariz. | ళు | SO. | ঞ | \$ 4,500 | \$ 5,000 \$ 5,000 | \$ 5,000 | \$ 6,150 | \$ 6.150 | \$ 6.150 | \$ 2,600 | \$ 2,600 | \$ 2,600 |
| Calif. | 3,500 | 3,200 | 3,200 | 4,500 | 4,000 | 4,000 | 4,500 | 1 | | 2,800 | 2,800 | 2,800 |
| Colo. | 6,200 | 6,200 | 6,200 | 3,500 | 4,000 | 4,000 | 4,000 | 4.000 | 4,000 | 2,300 | 2,300 | 2,300 |
| Haw. | | | | 2,500 | 2,000 | 2.000 | 4,000 | 4,000 | ¢.000 | | | |
| Ida. | 4,100 | 4,100 | 4,100 | 2,600 | 3,600 | 3,600 | | | | 2,200 | 2,200 | 2,200 |
| Mont. | 7,200 | 7,200 | 7,200 | 4,500 | 4,000 | 4,000 | | | | 2,100 | 2,100 | 2,100 |
| Nev. | | | | | | | | | | 2,800 | 2,800 | 2,800 |
| N. M. | | | | | | | | | | 2,300 | 2,300 | 2,300 |
| Ore. | | | | 4,500 | 4,000 | 4,000 | 5,650 | 5,650 | 5,650 | 2,400 | 2,400 | 2,400 |
| Utah | | | | 5,000 | 5,000 | 5,000 | | 3,700 | 3,700 | 2,500 | 2,500 | 2,500 |
| Wash. | | | | | | | 5,650 | 5.650 | 5,650 | | | |
| Wyo. | 4,300 | 4,300 | 4,300 | | 4,000 | 4,000 | | | | 2,000 | 2,000 | 2,000 |
| P&C | 700 | 1,000 | 1,000 | 1,100 | 1,400 | 1,400 | $2,350^{\frac{1}{2}}$ | 2,050 | 2,050 | 2,000 | 2,000 | 2,000 |
| Trust | and the second s | | | | | | | | | | | |
| TOTAL | \$26,000 | \$26,000 | \$26,000 | \$32,700 | \$37,000 | \$37,000 | \$32,300 | \$35,700 \$35,700 | | \$26,000 | \$26,000 \$26,000 | \$26,000 |

| | W-48 Weather | ther and | | | 1 I | Breeding Railures: W-50, Stresses | W-50, Str | ଔ | Perform-Hens: W-51, Drainage Design | W-51, Drai | inage Des | esign : |
|-------|----------------|----------|----------|----------------|----------|-----------------------------------|----------------|-------------------|-------------------------------------|------------|--------------------|----------|
| SIALE | STATE: 1901-02 | 1 | - | 1901-02 | | 1902-03 | 1301-02: | SE SE | 1902=03 | 1301-02 | S | 1.0 m |
| | Allot- | : NO : | increase | Allot. ment | : NO : | increase | : ment | 386 | in | , | increase: increase | increase |
| Ariz. | \$ 1,285 | \$ 1,957 | | \$ 4,300 | \$ 3,800 | | - \$ 1,360 | \$ 1.360 | \$ 1.360 | \$ | \$ | ø |
| | | 1,957 | 1,957 | 6,000 | | • | 2,300 | | | 7,500 | 7.500 | 7.500 |
| Colo. | | 1,957 | 1,957 | 5,900 | 5,300 | 5,600 | 2,300 | 2,300 | 2,300 | 4,600 | 4,600 | 4.600 |
| Haw. | | | | | • | | | | | | | |
| Ida. | | | | 4,600 | 4.300 | 4.550 | | | | | | |
| Mont. | 5.285 | 5,957 | 5,957 | 4,100 | 3,900 | 4.150 | 1,850 | 1.850 | 1.850 | | | |
| Nev. | | | | 2,200 | 2,500 | 2.750 | | | | | | |
| N. M. | | | | | | | 1,360 | 1.360 | 1.360 | | | |
| Ore. | 1.285 | 1,957 | 1,957 | 4,600 | 4.200 | 4.500 | 1,360 | 1.360 | 1.360 | 4,000 | 4,000 | 4,000 |
| Utah | 1,285 | 1.957 | 1,957 | | 2.800 | 3.050 | 1,850 | 1.850 | 1.850 | | | |
| Wash. | | | | 7,000 | 6.700 | 7.100 | 1,360 | 1,360 | 1.360 | | | |
| WYO. | 1,290 | 1.958 | 1.958 | | | | 1,360 | 1.360 | 1.360 | | | |
| P&C | 2,300 | 2,000 | 2,000 | 1,300 | 1,300 | 1,300 | 1,500 | $\frac{1}{1,920}$ | $\frac{1}{1,920}$ | 006 | 009 | 009 |
| Trust | | | | | | | | | | | | |
| TOTAL | TOTAL \$15,300 | \$19,700 | \$19,700 | \$40,000 | \$40,000 | \$ 42,500 | \$16,600 | \$17,020 | \$ 17.020 | \$17,000 | \$16,700 \$16,700 | 16.700 |

| Q TA TE | W-52, Btoc | hem, Her | | Action: W-54, Adjusting | | Farming 1962-63 | W-56, Nema | it,&Root | t Diseases | :W-57, Amir | o Acid | Utilization: |
|---------|------------|-----------|--------------------|-------------------------|--------------------|-----------------|---------------------------------------------|--------------------|------------|-------------|-------------------------|-----------------------|
| | : Allot- | No | : 1.0 m | : Allot- | 2 | 1.0 = | | å | 日 | - | 2 Z | 1.0 m |
| | | :increase | :increase:increase | : ment | :increaseincrease: | increase: | ment | :increase:increase | increas | ment | :increase: increase: | increase |
| Ariz. | \$ | ¢) | €. | | \$ 2.900 | 000 8 | \$ | S | SO. | | 2005 \$ | \$ 4.500 |
| Calif. | | | 3,000 | | | 2.900 | | | | 4,000 | 220.5 | 5 4.500 |
| Colo | | | | 6.000 | 6.700 | 7,500 | • • • • | | • | 5,000 | 2209 | الم 5.5 0 0 |
| Haw. | | | | 4,000 | 3,500 | 3,500 | 2,300 | 2,300 | 2,300 | 4,000 | 6000 5.500 | |
| Ida. | | | | 2,000 | 2,000 | 2,000 | | | | | | |
| Mont. | 2,500 | 2,500 | 3,000 | 1,000 | 1,000 | 1,000 | | | | 5,000 | | |
| Nev. | | | | 2,100 | 1,500 | 1,600 | | | 2,250 | | | |
| N. M. | | | | 1,000 | 1,500 | 2,100 | 3,000 | 3,000 | 3,000 | 2,500 | | |
| Ore. | 3,000 | 3,000 | 3,000 | 2,900 | 5,700 | 9,000 | 3,700 | 3,000 | 3,000 | 4,500 | 6 CTC 5.500 | 5.500 |
| Utah | | | | 1,500 | 2,500 | 2,500 | 1,600 | 2,300 | 2,300 | | 358 | 2.500 |
| Wash. | | | | 4,100 | 4,800 | 5,000 | | | | 9,500 | 9.00 8.500 | 8.500 |
| Wyo. | 2,500 | 2,500 | 3,000 | 1,900 | 1,900 | 1,900 | | | | 4,500 | 6 070 5. §0 0 | 5.500 |
| P&C | 1,300 | 1,000 | 1,000 | 2,800 | 2.920^{1} | 2,920 | $\frac{1}{2,300^{1}}$ | 2,000 | 2,000 | 2,000 | $\frac{1}{2.420}$ | 2,530 |
| Trust | | | | | | | | | | | | |
| TOTAL | \$ 9,300 | \$ 9,000 | \$13,000 | \$34,900 | \$39,620 | \$41,920 | 841,920 \$12,900 \$12,600 \$14,850 \$45,000 | \$12.600 | \$14,850 | \$45,000 | \$ 45.420 \$ 45.420 | \$ 45.420 |

| STA A CHI | :W-58 Forage | age Crop | Crop Production:W-59, Price | W-59 Pric | | & Income Policy:W-60, Textiles | W-60, Tex | 1 1 | 1962-63 | :W-61, Sheep Breeding | sep Breed: | eding : |
|-----------|--------------|-------------------|-----------------------------|-----------|----------|--------------------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|---------|
| SIRIE | A110t- | No | : 1.0 m | Allot- | No | 1.0 m | Allot- | | 1.0 m | Allot- | No | 1.0 m |
| Aria | #ent | \$ 6 000 | s coo s coo | S | \$ | S S | S | s | S | \$ 1,220 | \$ | \$ |
| Calif | 4.500 | 2 000 | 5,000 | | | | 2,500 | 2.500 | 2.500 | | 1,345 | 1,345 |
| Colo | | 2.500 | 2.500 | | | | 1,300 | 2.000 | 2.000 | 1,220 | 1,345 | 1,345 |
| Haw. | 3,500 | | | | | | | | | | | |
| Ida, | | | | 2,000 | 2,300 | 3,000 | | | | 1,220 | 1,345 | 1,345 |
| Mont. | 3,600 | 2.500 | 2.500 | 1,000 | 1,000 | 1.000 | | | | 1,220 | 1,345 | 1,345 |
| Nev. | 3,500 | 4.800 | 008.4 | | | | 1,200 | 1.500 | 1.500 | 1,220 | 1,345 | 1,345 |
| N. M. | | | | 1,000 | | | 1,300 | | | 1,220 | 1,345 | 1,345 |
| Ore. | | 2.500 | 2.500 | 2,500 | | | 1,000 | 1.000 | 1.000 | 1,220 | 1,345 | 1,345 |
| Utah | | | | | | | | | | 1,220 | 1,345 | 1,345 |
| Wash. | 3,000 | | | 4,600 | 3,000 | 3,000 | | | | 2,0003 | 2,0953 | 2,0953/ |
| Wyo. | 4,000 | 2.500 | 2.500 | | | | | | Annual Control of the | 1,220 | 1,345 | 1,345 |
| P&C | 1,500 | | 1,500 | 1,000 | 8201 | / 820 <u>1</u> | 1,200 | 1,520 | $\frac{1}{1,520}$ | 2,000 | 2,000 | 2,000 |
| Trust | | | | | | | 1,500 | 1,900 | 1,900 | | | |
| TOTAL | \$27,600 | \$27,600 \$27,300 | \$27,300 | \$12,100 | \$ 7,120 | \$ 7,820 \$10,000 | | 10,420 | 10,420 | \$16,200 | 16,200 | 16,200 |

3/ Includes \$765 for processing data.

| | 11 69 Barre | Dome & | 11 60 Earn Deser & Machinery W-63. | 138 | leed Control | | .W-64, Fruit | it Viruses | | :W-65, Irrigation Hydraulics | gation Hy | draulics: |
|-------|-------------|-------------------|------------------------------------|------------|--------------------|----------|-------------------|-------------------|-----------|------------------------------|-----------|-----------|
| | W-02,581 | 10% | 1962-63 | ١v | 196 | 2-63 | 1961-62: | 196 | 1962-63 | 1961-62: | 196 | 1962-63 |
| STAIR | : 1961=62: | S | 1.0 m | . Allot- : | S | 1.0 ₪ | Allot-: | No : | 1.0 m: | Allot- : | No | |
| | | increase:increase | increase | ment | increase: increase | increase | ment | increase;increase | increase: | ment | increase: | increase |
| Ariz | _ | \$ 2,300 | | | \$ 3,100 | \$ 3,100 | Ş | \$ | S | \$ | \$ 1,500 | \$ 1,500 |
| 00146 | | | | 3,500 | 3,500 | 3,500 | 4,600 | 4,600 | 4,600 | 5,350 | 5,350 | 5,350 |
| 0107 | | | | 4,100 | 4,100 | 4.100 | | | | 5,350 | 5,350 | 5,350 |
| n age | 1 000 | | | | | | | | | 1,000 | 1,000 | 1,000 |
| 170 | 1,500 | | | 4,900 | 4,900 | 4,900 | 2,600 | 2,600 | 2,600 | 2,400 | 2,400 | 2,400 |
| 1007 | | | , | 3,300 | 3,300 | 3,300 | 2,400 | 2,400 | 2,400 | 2,000 | 2,500 | 2,500 |
| Nev | | | | 3,700 | 3,700 | 3,700 | | | | | | |
| W | 1.000 | 1.000 | 1,000 | 3,000 | 3,000 | 3,000 | | | | | | |
| Ore | 1 900 | | | 3,800 | 3,800 | 3,800 | 5,800 | 5,800 | 5,800 | 3,000 | 3,000 | 3,000 |
| litah | 1.700 | | | 3,000 | 3,000 | 3,000 | 5,600 | 5,600 | 5,600 | 3,000 | 3,000 | 3,000 |
| Wash | 2.600 | 1,500 | 1,500 | 4,000 | 4,000 | 4,000 | 4,900 | 4,900 | 4,900 | 4,000 | 4,000 | 4,000 |
| Dao | 1,500 | | 1,500 | 4,100 | 4,100 | 4,100 | | | | 2,000 | | |
| P&C | 1.900 | 1 | <u> </u> | 1,600 | 1,600 | | 1,100 | 1,100 | 1,100 | 1,600 | 1,600 | 1,600 |
| Trust | | | | | | | | | | | | |
| TOTAL | \$15,900 | \$ 7,500 | \$ 8,000 | \$42,100 | \$ 42,100 \$42,100 | \$42,100 | \$27,000 \$27,000 | ı | \$27,000 | \$29,700 | \$29.700 | \$ 29.700 |

|) | | | | . 67 | 1-01-01 | 1 D ont Mator | Ling SAL | -Moisture | .u-68 Soil-Moisture Movement:W-69. | ı | Housing | |
|-------|-----------------------|-----------|--------------------|----------|----------|-------------------|------------|-------------------|------------------------------------|-------------------|--------------------|----------|
| | W-66, Soil | LI Stru | 6 | 1961-62 | 19 | 1962-63 | 1961-62: | 19(| 1962-63 | 1 . | | 1962-63 |
| STAIR | : 1901-02 : Allot- | No | e | Allot- | No | : 1.0 ⊞ | : Allot- : | No | : 1.0 m | | oN : | 1.0 ₪ : |
| | ment | :increase | :increase:increase | : ment | increase | increase:increase | : ment | increase:increase | increase | ment | :increase:increase | ıncrease |
| Ariz. | \$ 3,600 | \$ 3,600 | \$ 3,600 | \$ 3,200 | \$ 3.200 | \$ 3.200 | \$ 800 | \$ 800 | \$ 800 | \$ 4,750 | \$6,000 | \$6,000 |
| Calif | 2,600 | 2.600 | 2,600 | 5,000 | 5.000 | 5.000 | 800 | 800 | 800 | 4,750 | 2,000 | 2,000 |
| 6010 | 3 100 | 3,100 | 3,100 | 5.500 | 5, 500 | 5.500 | 1,100 | 1,100 | 1,100 | 5,000 | 6,500 | 6,500 |
| n n | 007 6 | 2.400 | 2.400 | | | | 1,450 | 1,450 | 1,450 | | | |
| Trans | | | | | | | | | | | | |
| Mont | 2,600 | 2.600 | 2.600 | 3,200 | 3,200 | 3,200 | 1,550 | 1,550 | 1,550 | | | |
| Nev | 2,700 | 2,700 | ļ | | | | | | | | | |
| 2 | 3 700 | 3 700 | | | | | | | | | | |
| Ore | | | | 5,000 | 5,000 | 5,000 | 1,550 | 1,550 | 1,550 | | | |
| Iltah | 3,100 | 3,100 | 3,100 | 5,500 | 5,500 | | 800 | 800 | 800 | | | |
| Wash | | | | 5,000 | 5,000 | 5,000 | 1,650 | 1,650 | 1,650 | 5,500 | 5,500 | 5,500 |
| WVO | 2.600 | 2.600 | 2,600 | 3,600 | 3,600 | | | | | | | |
| P&C | 1.400 | - | | 1,500 | 1,500 | | 1,300 | 1,300 | 1,300 | 1,000 | 1,000 | 1,000 |
| Trust | | | | | | | | | | | | |
| TOTAL | \$27,800 | \$27,800 | \$27,800 | \$37,500 | \$37,500 | \$37,500 | \$11,000 | \$11,000 | \$11,000 | \$21,000 \$21,000 | 1 | 21,000 |

| 1 | :W-70, On-Farm Water Use | -Farm Wat | | W-71, Tre | se Seedlin | :W-71, Tree Seedling Estable: W-72, Forest Insects | W-72, Fo | rest Inse | sects | :W-73, Water Conservation | ter Conse | servation |
|-------|--------------------------|--------------|---------------------|-----------|------------|----------------------------------------------------|------------------|-----------|--------------|---------------------------|------------------|-----------|
| STATE | . Allot- | No | 目 | Allot- | No | No : 1.0 m | : Allot- ment | No | No : 1.0 m : | Allot- | No | 1.0 m |
| Aria | menr. | י דווכן במסב | increase: Increase. | \$ 2.500 | \$ 2,650 | \$ 2.650 | \$ | \$ | \$ | \$ 3,300 | \$ 3.300 \$3.300 | \$3,300 |
| Calif | 3.000 | 3,000 | 3.000 | 3,150 | 3,150 | | | | | 4,700 | 4,700 | 4,700 |
| Colo | | | | 2,500 | 2,650 | 2,650 | | | | 3,900 | 3,900 | 3,900 |
| Haw. | | | | | | | | | | | | |
| Ida. | 1.400 | 2,000 | 2.000 | 3,000 | 3,000 | 3,000 | | | | | | |
| Mont. | | | | | | | | | | 3,100 | 3,100 | 3,100 |
| Nev | 2.000 | 1.500 | 1.500 | | | | 7 | 7 | į | | | |
| N. M. | 1,700 | 1.700 | | | | | MDE | MDE: | MDE | | | |
| Ore. | | 3,000 | | 3,150 | 3,150 | 3,150 | a IC |)I E | A TC | 4,500 | 4.500 | 4.500 |
| Utah | 1,800 | 1,200 | | 3,000 | 3,000 | 3,000 | Ñ | Ñ | N | 4,000 | 4,000 | 4,000 |
| Wash. | 1,000 | 2,000 | 3,000 | | | | | | | | | |
| Wyo. | | | | | | | | | | 3,000 | 3,000 | 3,000 |
| P&C | 1,000 | 1,400 | 1,400 | 1,000 | 1,000 | 1,000 | | | | 1,500 | 1,500 | 1,500 |
| Trust | | | | | | | | | | | | |
| TOTAL | \$11,900 | \$15,800 | \$17,300 | \$18,300 | 18,600 | 18,600 | | | | \$28,000 | 28,000 | 28,000 |

| | 77. 17. | | - 1 | 4001 25 11. | • | | T | • | + 60 | | | |
|--------|------------|-----------------|--------------------------|----------------|-------------------|--------------------------|----------------|------------------|--------------------------|----------------|-------------------|---------------|
| STATE | . 1961-62: | 3 Ge | 1962-63 | 1961-62 | 2: 19 | . 1 | 100 | Lanor | 1962-63 : 19 | : 1961-62: | וי | 1962-63 : |
| : | : Allot- | : No : increase | . No : 1.0 m : increase: | Allot- ment | : No :increase | : No : 1.0 m : increase: | Allot- ment | . No increase | : No : 1.0 m : increase: | Allot- ment | : No :increase | : No : 1.0 m: |
| Ariz. | \$ 2,500 | \$2,450 | \$2,450 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Calif. | 3,500 | 3,450 | 3,450 | 3,400 | 2,600 | 3,400 | | | | | | |
| Colo. | | | | 3,500 | 2,000 | 2,100 | | | | | | |
| Haw. | | | | | | | | | | | | |
| Ida, | 2,150 | 2,100 | 2,100 | | | | | | | | | |
| Mont. | | | | 2,900 | 2,300 | 3,000 | | | | | | |
| Nev. | , | | | | 1,500 | 1,500 | ā | Ū | ิต | ā | <u>a</u> | Ū |
| N. M. | 1,800 | 1,800 | 1,800 | | | | ONDE | NADE | NNDH | NNDE | лири | JUND. |
| Ore. | | | | | | | OI F | I TO | I TO | I TO | I TO | I TO |
| Utah | 3,750 | 4,900 | 4,900 | | | | Ñ | Ŋ | Ĭ | Ī | Ī | Ī |
| Wash. | 1,500 | 1,500 | 1,500 | | | | | | | | | |
| Wyo. | 2,500 | 2,450 | 2,450 | | | | | | | | | |
| P&C | 1,600 | 1,550 | 1,550 | 700 | 800 | 800 | | | | | | |
| Trust | | | | | | | | | | | | |
| TOTAL | \$19,300 | \$20,200 | \$ 20,200 | \$10,500 | \$ 9,200 | \$10,800 | | | | | | |

and the second of the second o

| 1 | :WM-16,Gr | ain Inse | Control | :WM-17,Frts. | ts. & Veg | & Vegts, Mktg.:WM-20, Hay and | :WM-20, H | 171 | | :WM-23, Wool | | |
|--------|-----------|-----------|---------------------|--------------|-----------|-------------------------------|-----------|----------|---------------------|--------------|----------|---------------------|
| STATE | . Allot- | No | 1.0 m | Allot- | No | 1.0 m | Allot- | No | 1.0 m | Allot- | No | 1.0 m |
| | ment | Increase | Increase: increase: | ment | Increase | increase: increase: | ment | increase | increase; increase; | ment | ıncrease | increase; increase; |
| Ariz. | \$ 3,300 | \$ 3,300 | \$ 3,300 | Ş | \$ | \$ | \$ 5,500 | \$ 4.500 | \$ 4,500 | S | Ş | Ş |
| Calif. | 3,300 | 3,300 | 3,300 | 13,500 | 10,000 | 10,000 | | | | | | |
| Colo, | | | | | | | | | | 3,450 | | |
| Haw. | | | | | | | | | | | | |
| Ida. | 3,500 | 3,500 | 3,500 | | | | | | | | | |
| Mont. | | | | | | | 3,500 | 5.700 | 6.050 | 4,350 | | |
| Nev. | | | | | | · | 2,700 | 2,700 | 2,700 | | Œ | <u>G</u> 3 |
| N. M. | | | | | | | 1,500 | | | 4,475 | ann. | ΄. |
| Ore. | 3,400 | 3,400 | 3,400 | 8.800 | 7,500 | 7,500 | | | | 3,450 | LON | TOT |
| Utah | | | | | | | 3,400 | 3,900 | 3,900 | 3,100 | | |
| Wash. | 3.500 | 3,500 | 3.500 | 2,500 | | | 3,100 | 6,000 | 6,000 | | | |
| Wyo. | | | | | | | | | | 4,275 | | |
| P&C | 1,000 | 1,000 | 1,000 | 700 | 300 | 400 | 1,000 | 800 | 1,000 | 1,900 | | |
| Trust | | | | | | | | | | | | |
| TOTAL | \$18,000 | \$ 18,000 | \$ 18,000 | \$25,500 | \$17,300 | \$17,900 | \$20,700 | \$23,500 | \$24,150 | \$25,000 \$ | Ş | S |

4/ \$500 Trust Fund for New Mexico to record data of all cooperating stations.

| | :WM-26, Consumer | | ses | | ed Mar | | WM-37, Lvs | tk Transp | ortation: | :WM-37, Lvstk Transportation:WM-38, Mgmt.& Organ, Coops | t.& Organ | : Coops |
|-----------------|------------------|--------------------|-----------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|-------------------|-----------|---------------------------------------------------------|-------------------|----------|
| STATE | 1961-62 | | 1962-63 | 1961-62: | The second secon | 1962-63 | 1961-62: | | 1962-63 | 1961-62: | - 1 | 1902-03 |
| | | S. | 1.0 m: | : Allot- : | No : | 1.0 m : | Allot-: | No : | 1.0 m : | | No | 1.0 m : |
| • | | :increase:increase | increase: | ment : | :increase:increase | increase: | ment | increase:increase | increase: | ment | increase:increase | increase |
| Ario | 1 | \$ | ş | s | \$ 3,000 | \$ 3,200 | \$ 4,000 | \$ 3,500 | \$ 3,500 | \$ | \$ | s |
| Colif | 6 400 | | | 3,200 | | 3,200 | 3,000 | | 3,450 | | 6.400 | 7,000 |
| 0.00 | | 6 500 | 6 500 | 2,900 | | | | | | 5,300 | | |
| n de la company | | 200 | | | | | | | | 2,200 | 2,000 | 2,000 |
| 1 40 | | 2,500 | 2,500 | | | | 4,100 | 3,000 | 3,000 | | | |
| No. | | | | | | | 2,050 | 2.750 | 2.750 | 4,200 | | |
| Nev | | | | | | | 1,900 | 2,300 | 2,300 | 1,600 | | |
| × | | | | | | | 3,600 | 4,100 | 4,100 | 2,700 | 4,000 | 4,000 |
| Ore | 2,900 | | | 3,200 | | | | | | 3,000 | 5,000 | 5.850 |
| litah | | | | | | | 2,400 | 3,400 | 3,400 | 3,650 | 3,700 | 4,000 |
| Wash. | 5,100 | 2.500 | 2,500 | | 3,000 | 3,000 | 4,600 | 5,400 | 5,400 | 9,400 | 6,500 | 7,000 |
| WVO. | | | | | 3,000 | 3,200 | 1,600 | 3,700 | 3,700 | | | |
| P&C | 1,600 | 1,500 | 1,500 | 700 | $\frac{1}{1.420}$ | $\frac{1}{1.420}$ | 1 | 2,232 | 2,257 | 1,632 | 1,200 | 1.300 |
| Trust | | 3,000 | 3,000 | | | | 3,000 | 3,000 | 3,000 | | | |
| TOTAL | \$16,000 | \$16,000 \$16,000 | \$16,000 | \$10,000 \$13,420 | \$13,420 | \$ 14,020 \$31,750 | \$31,750 | \$36,532 | \$36,957 | \$30,682 | \$28,800 | \$31,150 |

0

| STATE | : 1961-62: 1962-63 | rect Buyin | | :WM-40, Re 1961-62 | Retail Proc | urement | Procurement: WM-41, Cotton Marketing 1962-63 1961-67. | otton Mari | | WM-42, Ti | mber P | rocessors: |
|--------|--------------------|------------|----------|-----------------------|-------------|----------|-------------------------------------------------------|--------------|---------------------|-----------|----------|------------|
| | Allot- ment | No | | Allot- | No | | Allot- | No | | Allot- | No | |
| Ariz. | | \$ 4.600 | \$ 4.600 | Ş | ళ | တ | | \$ 2,500 | \$ 2,950 | Ş | \$ | S |
| Calif. | | | | 3,000 | | | | · | - | 4,500 | 4,500 | 4,500 |
| Colo. | 6,300 | 7,700 | 7,850 | 5,500 | 7,700 | 7,700 | | | | 9,000 | 7,000 | 7,500 |
| Haw. | | | | 3,000 | 2.000 | 2,000 | | | | | 1 | |
| Ida. | 4,100 | 2,750 | 3,300 | 4,500 | 4.200 | 4,200 | | | | 4,200 | 5,000 | 5,000 |
| Mont. | 2,600 | 3,200 | 3,400 | · | | | | | | | | |
| Nev. | 1,900 | 2,300 | 2,300 | | | | | | | | | |
| N. M. | 2,500 | 3,900 | 4,350 | | | | 2,500 | 1,000 | 1,000 | 3,100 | 4.500 | 4.500 |
| Ore. | | | | 3,200 | 4.100 | 4.100 | | | | 5,000 | 5,000 | 5.000 |
| Utah | | | | | | | | | | 1,800 | 1,800 | 1,800 |
| Wash. | 2,900 | 3,650 | 3,650 | 7,000 | 8,600 | 9,100 | | | | 4,000 | 4,000 | 4,000 |
| Wyo. | 3,500 | 2,900 | 2,900 | 2,200 | 4,000 | 4,300 | | | | | | |
| P&C | 1,600 | 1,500 | 1,600 | 1,400 | 1,200 | 1,300 | 200 | 620 <u>1</u> | $620^{\frac{1}{2}}$ | 1,800 | 1,400 | 1,500 |
| Trust | 3,000 | 3,000 | 3,000 | | | | | | | | | |
| TOTAL | \$32,900 | \$35,500 | \$36,950 | \$29,800 | \$31,800 | \$32,700 | \$ 5,200 | \$\$4.120 | \$ 4.570 | \$30,400 | \$33,200 | \$33,800 |

| 6 | | | | | | | | | | | | |
|--------|------------|---------------|-------------------|------------------|-----------|-----------------------------------------|------------|-----------|----------|------------------------------|-----------|------------|
| | :WM-43, B1 | Bulk Handling | | WM-44, Promotion | | & Urilization: WM-46, Milk Market Orgn. | WM-46, M | 11k Marke | ١ | :WM-, Integration & Coordina | gration & | Coordina |
| STATE | : 1961-62 | | 1962-63 | : 196162 | _ | 962-63 | : 1961-62: | | 1962-63 | : 1961-62: | | 1962-63 |
| | : Allot- | : No | •• | : Allot- | : No | | : Allot- : | No | | | No | |
| | : ment | :increase: | | ment | increase: | | ment | increase: | | ment | increase: | |
| Ariz, | Ş | \$ | \$ | Ş | Ş | \$ | \$ | \$ 2 300 | \$ 2,300 | \$ | \$ | s |
| Calif. | 9,000 | 8,200 | 8,200 | | | | 5,000 | | 8,200 | , | | |
| | | | | | | | | 0 | 000 | | | |
| Co10. | | | | | | | | 8,400 | 8,600 | | | |
| Haw. | | | | 4,100 | 5.200 | 5.500 | 2,000 | 2.500 | 2.500 | | | |
| Ida. | 3,500 | 6.900 | 6.900 | | | | | | | | | |
| Mont. | | | | 3,000 | 4.500 | 4.500 | 4,400 | 5,700 | 5,700 | ā | Œ | <u>G</u> 3 |
| Nev. | | | | | | | 1,700 | 2,700 | 2,700 | IOND. | OND: | OND: |
| M. M. | | | | | | | | | | I Tol | TOI | 1OI |
| Ore. | 6,000 | 6.500 | 6.500 | 3,000 | 3,500 | 3,500 | | | | | | |
| Utah | | | | | | | | | | | | |
| Wash. | | | | 3,600 | 1.500 | 1,500 | 4,000 | 4.000 | 4,000 | | | |
| Wyo. | | | | | | | | | | | | |
| P&C | 400 | 7201 | 7707 | 1,000 | 800 | 800 | 1,100 | 1,500 | 1,500 | | | |
| Trust | | | | | | | | | | | | |
| TOTAL | \$18,900 | \$22,320 | \$22,370 \$14,700 | \$14,700 | \$15,500 | \$15,800 | \$18,200 | \$35,300 | \$35,500 | | | |

| 1 | WM-33 Mea | :WM-33 Meat Quality & Mktg. | & Mktg. | | | | | | | | |
|--------|-----------|-----------------------------|--------------------|-----------|---------|---------|------------|------------|------------|-----------|---------|
| STATE: | : 1961-62 | 19 | 62-63 | : 1961-62 | | 1962-63 | : 1961-62: | 1962-63 | : 1961-62: | | 1962-63 |
| •• | | : No | : 1.0 m : | Allot- | : No | | | No : | : Allot- | No | |
| | ment | increase | increase: increase | ment | ncrease | | ment | :increase: | ment | increase: | |
| Ariz. | \$ 3,300 | \$ 3,300 | \$ 5.000 | \$ | \$ | \$ | s | S | & | \$ | δ. |
| Calif. | 5,000 | 5,000 | 5,200 | | | | | | | | |
| Colo. | | 3,300 | 5,000 | | | | | | | | |
| Haw. | | | | | | | | | | | |
| Ida. | | | | | | | | | | | |
| Mont. | | | | | | | | | | | |
| Nev. | | | | | | | | | | | |
| N. M. | | | | | | | | | | | |
| Ore. | 5,000 | 5,000 | 5,000 | | | | | | | | |
| Utah | | | | | | | | | | | |
| Wash. | | | · | | | | | | | | |
| Wyo. | | | | | | | | | | | |
| P&C | 800 | 800 | 800 | | | | | | | | |
| Trust | | | | | | | | | | | |
| TOTAL | \$14,100 | \$17,400 | \$21,000 | | | | | | | | |