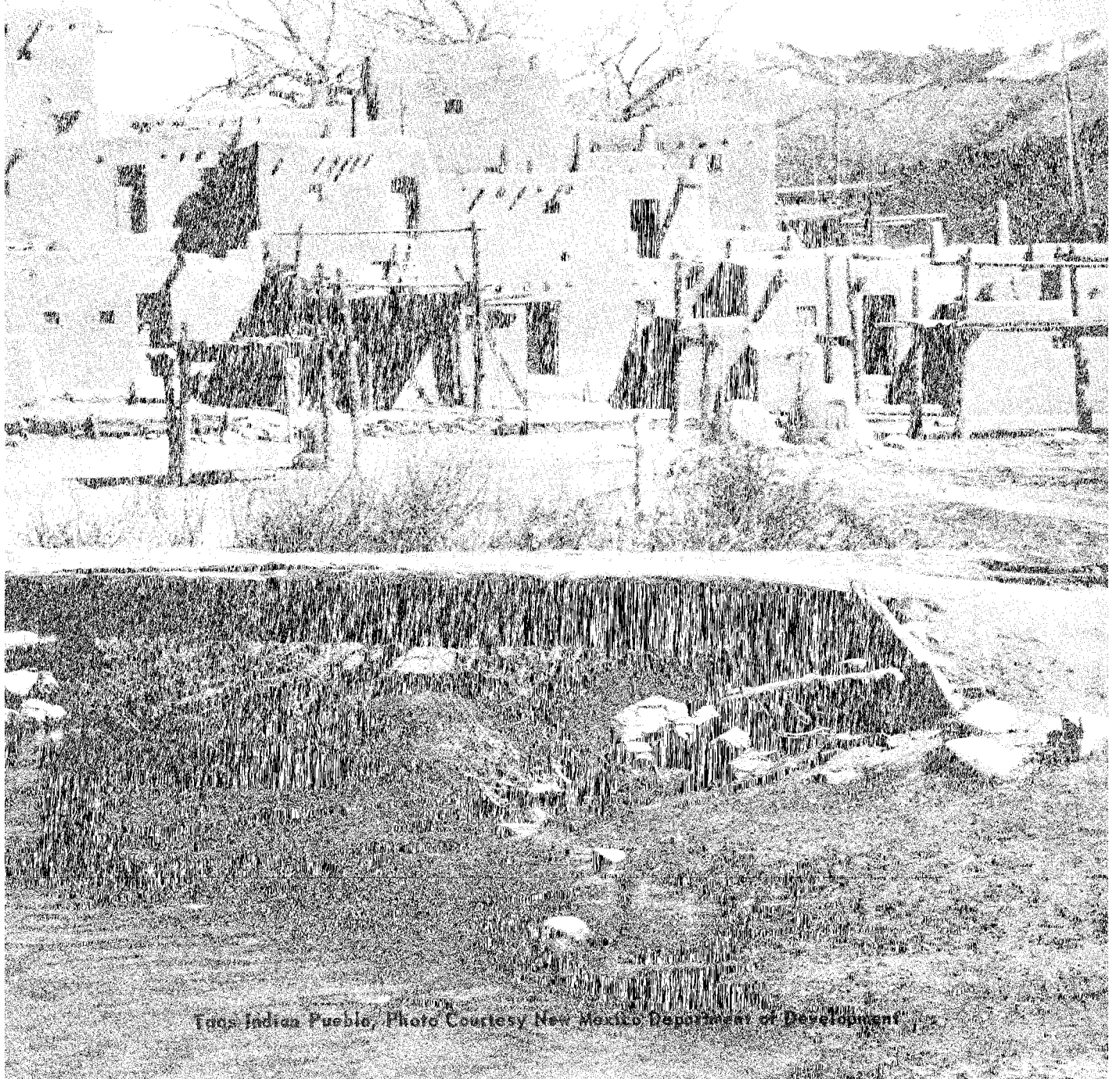


PROCEEDINGS
28th ANNUAL MEETING

Western Snow Conference

Santa Fe, New Mexico - April 1960



Taos Indian Pueblo, Photo Courtesy New Mexico Department of Development

PROCEEDINGS
of the
WESTERN SNOW CONFERENCE

Santa Fe, New Mexico

April 12-14, 1960

TWENTY-EIGHTH ANNUAL MEETING

Francis T. Mayo, General Chairman
State Engineer's Office
403 Capitol Building
Salt Lake City, Utah

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FOREWORD

This publication reports the available papers and formal discussions presented at the Twenty-eighth Annual Meeting of the Western Snow Conference. On this occasion the Conference convened in Santa Fe, New Mexico, on April 12-14, 1960. It is hoped that the various reports and discussions presented in these Proceedings will be of value to those concerned with snow and water in their several forms and many important uses and will be an inspiration to vigorously continue research, development, and application in this field of science.

Correspondence regarding these Proceedings or other Western Snow Conference matters should be addressed to Francis T. Mayo, State Engineer's Office, 403 Capitol Building, Salt Lake City, Utah.

The publication of this report is made possible through dues and registration fees from individual members and the following organizations who hold corporate memberships or have purchased copies of former Proceedings.

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Utah State University, Logan, Utah
Washington State University, Pullman, Washington
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Water Resource Development Company, Denver, Colorado
Weather Engineering Corporation of Canada, Ltd., Montreal 25, Que.
West Kootenay Power and Light Company, Ltd., Trail, B. C., Canada
Yale University, School of Forestry, New Haven, Connecticut

PROCEEDINGS OF THE WESTERN SNOW CONFERENCE

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April 12-14, 1960

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A P P E N D I X

MINUTES OF EXECUTIVE COMMITTEE MEETING
Western Snow Conference
13 April 1960
Santa Fe, New Mexico

A meeting of the Executive Committee of the Western Snow Conference was held in Santa Fe, New Mexico, on April 13, 1960. General Chairman Francis T. Mayo called the meeting to order. Members present included:

<u>South Pacific Area</u>	<u>South Continental Area</u>	<u>North Continental Area</u>	<u>North Pacific Area</u>
F. B. Blanchard	B. C. Goodell	Ashton R. Codd	Oliver Johnson
Manes Barton	F. T. Mayo	Morlan W. Nelson	H. I. Hunter
W. A. Lang	Philip B. Mutz	Earl L. Neff	
J. van de Erve	Jack N. Washichek	Ross Williams	

1. Bill Lang nominated Jerry van de Erve for General Chairman. This nomination was seconded by Fred Strauss. Francis Blanchard moved nominations be closed. Phil Mutz seconded the motion. A unanimous vote was cast for Mr. van de Erve for General Chairman.

2. Bibliography. The Executive Committee recommended that Mr. Ashton R. Codd, with the support and cooperation of the General Chairman, be authorized to proceed with necessary arrangements for preparation of the remaining abstracts for the Bibliography through assistance by the various organizations within the Conference, working as members of Mr. Codd's committee.

3. Bill Lang moved that Gene Christian be awarded life membership in the Western Snow Conference. Seconded by Mr. van de Erve.

4. Francis Blanchard moved that the Western Snow Conference buy each member a copy of the Soil Conservation Society of America publication on snow surveying and water supply forecasts to be mailed out with the Proceedings for 1960 - approximate cost \$75.00. Ashton R. Codd seconded the motion. The Executive Committee voted unanimous approval.

5. Bill Lang moved, and was seconded by Mr. Ashton R. Codd, that Manes Barton be Chairman of a committee authorized to spend \$500.00 of Conference funds on a suitable memorial in memory of Dr. Church. Bill Lang and Fred Strauss were assigned to be members of Mr. Barton's committee and the issue was presented at the Business Meeting of all members who voted unanimously for this action.

6. Jack Hannaford accepted the position as editor of the Snow Surveyor's Forum. Gregory L. Pearson, editor for 1959, did not receive enough material for an issue.

7. The Executive Committee discussed the recommendation of the General Chairman to amend the Constitution and By-Laws to provide a Secretary-Treasurer for the Conference. The Executive Committee authorized the General Chairman to form a committee consisting of the four-area chairmen to review the Constitution and By-Laws and an amendment to provide for a Secretary-Treasurer. This recommendation to be ready for the General Chairman prior to the 1961 meeting.

8. Francis Mayo presented and reviewed the financial statement for the period April 1, 1959 to March 31, 1960. The financial statement was accepted and approved.

9. The Executive Committee perused a letter presented by Mr. R. T. Davis from the Governor of the State of Washington and the Spokane Chamber of Commerce to have the 1961 meeting in Spokane, Washington. The general membership was polled on this subject and moved unanimously to hold the 1961 meeting in Spokane, Washington during April.

There being no further business, the meeting was adjourned.

Respectfully submitted,

S/ Morlan W. Nelson

Morlan W. Nelson
Member, Executive Committee

MINUTES OF BUSINESS MEETING

The annual business meeting of the Western Snow Conference was called to order Wednesday afternoon, April 13, 1960, at Santa Fe, New Mexico, by Francis Mayo, General Chairman. Items of business included:

Adoption of resolutions proposed by the Resolutions Committee (as printed in this issue).

The administrative work of the Conference has become so voluminous that it is burdensome on the General Chairman. The Executive Committee suggested that a study be made leading to submission to the next annual meeting of proposals for amendment of the constitution for addition of another officer, such as a secretary-treasurer. This suggestion was approved, and a committee was later appointed to carry on this study. The committee is comprised of the four incumbent area chairmen, under the leadership of the General Chairman.

A recommendation that \$500 be appropriated for a memorial to Dr. J. E. Church was approved. Manes Barton was appointed by the General Chairman to make the necessary determination basic to a recommendation for an appropriate memorial with Fred Strauss and W. A. Lang as fellow advisory members.

The new General Chairman, J. van de Erve, was introduced to the Conference.

A letter was received from Clark H. Gleason, Chairman of the Colman Watershed Fellowship Fund, to the effect that the first award of this fund was made to one Leonard F. DeBano. Mr. DeBano received \$1800 to enable him to take full-time studies toward his PH.D. in soil science.

As you know, the Western Snow Conference is one of the many sponsors of the Colman Watershed Fellowship Fund.

NOW THEREFORE BE IT RESOLVED, by the members of the Western Snow Conference assembled in their 28th Annual Meeting at Santa Fe, New Mexico on April 14, 1960 that a sincere expression of our appreciation be, and hereby is, extended to Bert C. Goodell, Chairman of the Program Committee, and to his able assistants, Wallace T. Miller, Robert W. Fischer and Homer J. Stockwell, and

BE IT FURTHER RESOLVED, that suitable copies of this resolution be forwarded to the designated recipients by the General Chairman of the Conference.

WESTERN SNOW CONFERENCE - ROSTER OF ATTENDANCE

ALDON, Earl F., Flagstaff, Arizona
ANDERSON, Henry W., Lafayette, California
BARRON, E. G., Columbus, Ohio
BARTON, Manes, Reno, Nevada
BEAUMONT, R. T., Portland, Oregon
BELL, F. M., Denver, Colorado
BERNDT, Herbert W., Laramie, Wyoming
BLANCHARD, Francis B., Oakland, California
BORLAND, Whit M., Denver, Colorado
BROWN, F. J., Albuquerque, New Mexico
BURSIEL, Robert, Girdwood, Alaska
CANFIELD, David H., Santa Fe, New Mexico
CARLSON, Warren C., Sacramento, California
CLUFF, C. Brent, Tucson, Arizona
CODD, Ashton R., Bozeman, Montana
CURTIS, William F., Albuquerque, New Mexico
DAVIS, Robert A., San Francisco, California
DAVIS, Robert T., Spokane, Washington
DAHL, Robert B., Oakdale, California
DEGERING, A., Salt Lake City, Utah
DEIN, William K., Carlsbad, New Mexico
DILS, Robert E., Ft. Collins, Colorado
DUNFORD, E. G., Portland, Oregon
ELLIS, J. D., Portland, Oregon
ENZ, Richard W., Prescott, Arizona
FIFI, Rowland W., Albuquerque, New Mexico
FISCHER, Robert W., Denver, Colorado
FROST, W. T., Portland, Oregon
GARSTKA, Walter U., Denver, Colorado
GOODELL, Bert, Ft. Collins, Colorado
GRANT, Lewis O., Brighton, Colorado
HANNAFORD, Jack F., Sacramento, California
HARRIS, Dave, Albuquerque, New Mexico
HECKLER, Wilbur L., Santa Fe, New Mexico
HOOVER, Marvin D., Fort Collins, Colorado
HUNSAKER, Leon M., San Rafael, California
HUNTER, H. I., Victoria, B. C.
INGERSON, Irvin M., Sacramento, California
JACKSON, S. J., Lakewood, Colorado
JENKINS, T. A., Denver, Colorado
JOHNSON, Berkeley, Santa Fe, New Mexico
JOHNSON, Lynn, Bozeman, Montana
JOHNSON, Walter E., Spokane, Washington
KUEHL, Don, Portland, Oregon
LANG, William A., Los Angeles, California
LEWIS, Douglas D., Tucson, Arizona
NORBERT, Leopold & Mrs.
LEWIS, G. A. & Mrs., Los Angeles, California
LINDGREN, Richard, Boise, Idaho
LLOYD, Grenville B., Jr., Ft. Collins, Colorado
LULL, Howard W., Lima, Pennsylvania
MARTIN, John T., Albuquerque, New Mexico
MARTINELLI, M., Jr., Ft. Collins, Colorado
MATHIAS, Dave, Monte Vista, Colorado
MAXWELL, Lee M., Moscow, Idaho
MAYO, Francis T., Bountiful, Utah
McANDREW, Donald W., Ft. Collins, Colorado
McGLELLAND, Denver, Colorado
McDANIEL, Denver, Colorado
McDONOUGH, Elven S., Salt Lake City, Utah
MUMAW, John P., Los Angeles, California
MUTZ, Philip B., Santa Fe, New Mexico
NEFF, Earl L., Moscow, Idaho
NELSON, Morlan W., Boise, Idaho
PARKER, Paul E., Missoula, Montana
PEAK, George W., Casper, Wyoming
PEARSON, Gregory L., Salt Lake City, Utah
PECK, Eugene L., Salt Lake City, Utah
RANTZ, S. E., Palo Alto, California
RECHARD, Paul A., Salt Lake City, Utah
RICH, Lowell R., Tempe, Arizona
ROCKWOOD, Davis M., Portland, Oregon
ROSENBERG, Sidney, Sunnyvale, California
SANBORN, Dean A., Santa Fe, New Mexico
SMITH, D. H., Edmonton, Alberta
SMITH, Geo. H., San Francisco, California
STAFFORD, Harlowe M., Sacramento, California
STEINBERG, Morris, Denver, Colorado
SOUTHARD, W. P., Santa Fe, New Mexico
STEPHENSON, John E., Santa Fe, New Mexico
STOW, Jay M., Albuquerque, New Mexico
STRAUSS, Fred A., Porterville, California
TAYLOR, Elmer J., Salt Lake City, Utah
THOMPSON, Roy D., Jr., Los Angeles, California
van de Erve, Jerry, Sacramento, California
WARREN, Leslie A., Albuquerque, New Mexico
WASHICHEK, Jack N., Ft. Collins, Colorado
WEST, J. A., Phoenix, Arizona
WHALEY, Bob L., Portland, Oregon
WIARD, Leon A., Santa Fe, New Mexico
WILLIAMS, A. H., Washington, D. C.
WILLIAMS, Ross, Missoula, Montana
WORK, R. A., Portland, Oregon
WRIGHT, Milton M., Denver, Colorado
YOUNG, Robert A., Albuquerque, New Mexico