## WESTERN SNOW CONFERENCE APRIL 17 - 19, 1973

Ramada inn Grand Junction, Colorado



#### PROCEEDINGS

of the

WESTERN SNOW CONFERENCE

Grand Junction, Colorado
April 17 - 19, 1973

## FORTY-FIRST ANNUAL MEETING

Phillip E. Farnes (General Chairman) Box 691 Bozeman, Montana 59715 Robert T. Davis (Secretary Room 360 U. S. Courthouse Spokane, Washington 99201

Program Committee

Charles Leaf, Chairman

- W. Schuler
- J. Bryan
- R. Moreland
- J. Washichek

Editorial Committee

Jack N. Washichek, Editor Charles Leaf Robert T. Davis

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## PROCEEDINGS OF THE WESTERN SNOW CONFERENCE

### TABLE OF CONTENTS

	the series of the series of		Page
WATER RESOURCE TECHNOLOGY AND SUPPLY By James Ogilvie			1
PLANNING FOR CITY WATER SUPPLIES  By Leland K. Hill		**************************************	4
U.S. FOREST SERVICE CLAIMSBETWEEN THE SNOWPACK AND I By John R. Cooley and Robert J. Mulvaney			9
THE OMNISCIENT ENVIRONMENTAL IMPACT STATEMENT By Fred A. Strauss		* • • • • • • • • • • • • • • • • • • •	15
DEVELOPING LAND USE GOALS FOR CALIFORNIA  By William L. Horn			22
CLOUD SEEDING FOR SNOW AUGMENTATION: LAND USE RAMIFICATION TODIDE NUCLEATING AGENTS, By D. A. Klein and E			30
WATER POLLUTION POTENTIAL OF SNOWFALL ON SPENT OIL SHA		• . • • •	37
AVALANCHE STUDIES IN THE SAN JUAN MOUNTAINS OF SOUTHWE By Richard L. Armstrong			44
SNOW SAMPLING TECHNIQUES ON A SMALL SUBALPINE WATERSHE By Louis R. Bartos and Paul A. Rechard			52
A COMPARISON OF TECHNIQUES OF SAMPLING THE ARCTIC-SUBA By Arthur G. Crook and Ted G. Freeman			62
SNOW LOAD ANALYSIS AND RECREATIONAL USES OF SNOW DATA By Tommy A. George and Donald W. McAndrew		• • • •	69
EVAPORATION LOSSES OF WINDBLOWN SNOW, AND THE POTENTIAL By Ronald D. Tabler			75
MEAN PRECIPITATION AND SNOWFALL MAPS FOR A MOUNTAINOUS DEVELOPMENT, By D. G. Schaefer and S. N. Nikle			80
TYNDALL SNOW SURVEY PLANE CRASH By Benjamin D. Minter		• • • •	90

#### MINUTES OF THE EXECUTIVE COMMITTEE

#### WESTERN SNOW CONFERENCE Grand Junction, Colorado

The meeting was called to order by the General Chairman P. Farnes at 11:40 A.M., Wednesday, April 18, 1973.

The General Chairman requested a motion to approve the minutes of the Phoenix meeting as printed in the Proceedings. J. Wilson moved, B. Whaley seconded. Passed.

The General Chairman requested R. Davis to report on the Eastern Snow Conference meeting held at Amherst, Mass. in February 1973. The activities of the Eastern Snow Conference Research Committee were reported to the members with the recommendation that the Western Snow Conference not establish a similar committee, as the work is already reported in USDI abstracts as well as the National Research Council in Canada. It was suggested by J. Hannaford that the name and address where these abstracts can be obtained be reported to the membership. As directed by the General Chairman the following addresses are given.

Selected Water Resources Abstracts
Manager, Water Resources Scientific Information Center
Office of Water Resources Research
U. S. Dept. of Interior
Washington, DC 20240

Canadian Geophysical Bulletin Secretary Assoc. Committee of Geodesy & Geophysics National Research Council Ottawa, KIA OR6 Canada

(tri-annual)

(annual)

Selected Bibliograph of Hydrology Dr. I. R. Brown Chairman Subcommittee on Hydrology Environment Canada # 8 Bldg. Carling Avenue Ottawa, Ontario, Canada

The Eastern Snow Conference is actively attempting to get together a complete set of its proceedings for the Western Snow Conference and will send them to the Western Snow Conference for reference. The Eastern Snow Conference has also granted permission for the Western Snow Conference to publish their program in our Proceedings. This will keep us up to date as to what the Eastern Snow Conference is doing.

The General Chairman requested the Secretary to present the financial report for the past year. The financial report was presented. Several questions were asked and answered. R. Davis moved the acceptance of the financial report as submitted and audited by R. Benker and D. Felgenhauer. Seconded by F. Limpert. Passed.

The General Chairman requested a report from the publications committee chaired by J. Washichek, J. Washichek had no report at this time.

The General Chairman requested a report from the archives committee. D. McAndrew reported that two boxes of material have been deposited. D. McAndrew requested that any member that has anything dealing with the WSC that they wish to file in the Archives, to send it to him and he will see that it is placed. If anyone has a set of the Forums they would like to donate, they could be placed together with the set of Proceedings that J. van de Erve has donated. Programs of past meetings are also welcome.

The General Chairman requested that F. Strauss give the awards report for T. Henderson. F. Strauss requested the Area Chairman give him any names of retirees and any names of members that have passed away. Any names of F1 Farsante candidates should be given

to F. Strauss. F. Strauss presented the following names to be considered for award of Life Membership: Robert Dahl, San Francisco, CA; Anthony Polos, Portland, OR; Spencer Munson, Madison, WI; Robert Scott, Independence, MO; and Ray Johnson, Kansas City, MO. F. Strauss moved the award of Life Membership to the five above named members. L. Peterson seconded, carried.

The General Chairman suggested that each Area Chairman select one man to work with F. Struass on the awards program for the banquet.

The General Chairman requested the Dr. Church award report from D. McAndrew. He announced that last years award was presented and this years recipient is to be Brian McCormick, the outstanding science student at Reno High School.

The General Chairman requested the Bibliography report from W. Simons. W. Simons explained that the report was not yet ready as reported last year, but would be sent soon to R. Davis. There are 580 numbered items in the Bibliography for 145 pages, 12 pages of authors index, 14 pages of subject index, and 3 pages introduction. W. Simons said that the report is now ready to go to the typist. The General Chairman brought out the price arrangement stating that it was decided at previous meetings that the cost would be \$3.00 to members and \$4.00 to others. W. Simons suggested that the cost be revised. F. Strauss suggested that the price should remain at \$3.00 for members and the price to non-members should be cost plus \$1.00 rounded to next highest dollar. J. Wilson moved that this be so. B. Whaley seconded. It was suggested that 3 ring binders be purchased with printed backs, etc. for this report. Discussion followed by J. Washichek, F. Limpert. F. Strauss, D. Kuehl, and J. Wilson. L. Peterson amended the motion to indicate that appropriate 3 ring binders be made available, at cost, to the purchasers of the Bibliography. W. Simons seconded, carried.

The General Chairman reported that B. Miller, Forum Editor, had contacted him that the Forum was in the hands of the printer and would possibly be out in three to four weeks. J. Hannaford discussed the future of the Forum. T. Henderson has offered to be the editor of the Forum if the Conference wishes to continue its publication. Discussion followed by J. Washichek, J. Hannaford, J. Wilson, F. Limpert, F. Strauss, P. Farnes, A. Kahan, H. Hunter and M. Barton. F. Strauss moved that the constitution be amended to remove the word "annually" from the Forum Publication section and insert the word "periodically". J. Wilson seconded. Motion carried. This will be put before the General Membership for final action. The Publication Committee consisting of J. Washichek, M. Hoover, D. Kuehl, and F. Strauss will appoint a new editor for the Forum.

The General Chairman requested that L. Ambrose give the Wilderness Committee report. This committee, appointed after the Phoenix meeting for 2 year terms, is composed of B. Leake, F. Limpert, C. Bowman, G. Castle, M. Hoover and L. Ambrose, Chairman. (The Wilderness report is published following these minutes.) L. Ambrose proposed that the General Chairman of the Western Snow Conference write a letter to the Chairman Western Systems Coordinating Council informing them of our resolution passed by the WSC at Phoenix. This was moved by L. Peterson and seconded by W. Simons. Motion carried.

The General Chairman reported on the oversnow machine film by M. Nelson and requested that J. Wilson give a more complete report. J. Wilson reported that he thought there should be more added to the existing film to include more of the older machines, such as adding the slides to moving film. W. Simons thought a sound track should be added. L. Crow suggested the chronological sequencing of the film should be done with labeling of film by superimposition of titles. The General Chairman requested that J. Wilson continue with this activity. D. McAndrew is responsible for seeing that the existing film is properly stored at the Reno Library.

The General Chairman requested D. Kuehl to give the silver snowflake tie report. D. Kuehl reported that he was unable to check out the proper sources when he was in Thailand. There will be a further report at the Anchorage meeting. F. Strauss suggested that there was a possibility of contacting the Southwest Indians as a source. J. Wilson suggested checking with other locations such as Peru, where he has a contact.

The General Chairman requested M. Barton to give the report on the April 16-19, 1974 meeting in Anchorage, Alaska. M. Barton said that B. Thomas is Program Chairman and

A. Crook Local Arrangements Chairman. The schedule is for a mailing to the entire member-ship with a call for papers and airline information, etc., about May 31.

The General Chairman requested J. Hannaford to report on the plans for the 1975 meeting. J. Hannaford and B. Brown discussed the meeting plans recommending San Diego as the location, Hotel Del Coronado as the meeting hotel. The hotel has openings on April 23 - 25, 1975. The cost will be high, singles approximately \$20.00 and doubles \$25.00 and up. B. Brown suggested the three days be changed to Wednesday, Thursday and Friday. J. Hannaford moved that the 1975 meeting be held in San Diego, April 23 - 25, 1975, at the Del Coronado Hotel. L. Peterson seconded. Motion carried.

The General Chairman requested J. Wilson to report on the plans for the 1976 meeting. J. Wilson stated that the North Continental area committee was unanimous in recommending Calgary, Alberta as the location for the 1976 meeting.

The General Chairman appointed L. Crow to replace M. Meier on the executive committee for the South Continental area and asked for confirmation from the committee. Passed unanimously.

The General Chairman appointed R. Davis to another two year term as Secretary of the Western Snow Conference, and requested confirmation from the committee. Passed.

The General Chairman reported on a letter from Dib Carpenter about the Hospitality Hour. Discussion followed on the handling of the Hospitality Hour.

The General Chairman reported that the Constitution will be published again this year, the publications policy will be published and the exhibitors policy will be published.

J. Wilson moved that the Conference pick up the tab for the Executive Committee lunch. W. Simons seconded. Carried.

The General Chairman stated who would be expected to report at the General Business meeting on Thursday morning.

B. Horn discussed the problem in getting more young men into the Conference, and suggested forming a membership committee. Discussion followed by the General Chairman, L. Ambrose, F. Strauss, R. Davis, D. Kuehl, H. Hunter, J. Hannaford, F. Limpert and A. Kahan. The General Chairman charged the executive committee with this responsibility.

The General Chairman asked that all area chairman and others associated with awards remain to meet with F. Strauss.

There being no further business the General Chairman adjourned the meeting at  $2:10\,$  P. M.

Respectfully submitted,

Robert T. Davis, Secretary

#### MINUTES OF THE BUSINESS MEETING

#### WESTERN SNOW CONFERENCE Grand Junction, Colorado

The meeting was called to order by General Chairman P. E. Farnes at 10:30 A.M. April 19, 1973.

The General Chairman asked for a motion to approve the minutes of the 1972 meeting as printed in the Proceedings. A. Kahan moved, seconded by F. Limpert. Carried.

The General Chairman requested the Secretary to present the financial report. R. Davis summarized the report for the membership and moved its acceptance. Seconded by W. Simons. Carried.

The General Chairman asked D. McAndrew to give the archives report. (See executive committee minutes).

The General Chairman asked D. McAndrew to give the Dr. Church Memorial Award report. (See executive committee minutes).

The General Chairman asked W. Simons for the Bibliography report. (See executive committee minutes).

The General Chairman gave the Forum report. (See executive committee minutes).

F. Strauss moved that the constitution be amended, Article XII states that the Forum will be published annually. It is moved that this be changed to read "periodically". J. van de Erve seconded. Carried.

The General Chairman reported that there was a suggestion at the Executive Committee meeting to form a membership committee. The General Chairman charged each and every member of the Conference to do whatever they can to encourage new members to join and take an active part in the Conference affairs.

The General Chairman requested L. Ambrose to give the Wilderness Committee report. (See executive committee minutes and report following). L. Ambrose charged every member to keep abreast of legislative development in this Wilderness problem and to make input at the hearings when possible. F. Limpert stated that the National Park Service is putting out a listing of all bills that are concerned with Wilderness areas, Wild River and Scenic areas.

The General Chairman gave the oversnow machine film report and requested J. Wilson to elaborate. (See executive committee minutes). J. Wilson will work with M. Nelson and film still photographs of snow machines that can be added to the present oversnow machine film.

The General Chairman requested M. Barton to give the 1974 meeting information. (See executive committee minutes). The meeting will be April 16-19, 1974.

The General Chairman requested J. Hannaford to give the invitation for the 1975 meeting. (See executive committee minutes).

The General Chairman reported that D. Kuehl has been appointed to check on the possibility of getting the snowflake ties cast in silver.

The General Chairman reported that L. Crow has been appointed to fill the position of M. Meier, who has been transferred.

The General Chairman reported that he has reappointed R. Davis to another two year term as Secretary.

The General Chairman asked F. Strauss to give the awards committee report. (See executive committee minutes). F. Strauss reported that there have been some members that

have passed away. These men were honored at the banquet and their names are included for the record: Gene Christensen, Theron Littlefield and Aubrey Sharp.

It was announced from the floor that Mr. C. S. Smith, USBR, Boulder City, NV has retired and has been a member for the last 15 years. F. Strauss suggested that in the meeting announcements, a request for nominees for Life Membership and El Farsante be included.

The General Chairman requested the resolution committee, composed of G. Clagett and R. Moreland, to give their report. G. Clagett read the list of names of individuals proposed to receive Conference resolutions (see resolutions following) and moved their acceptance. B. Culp seconded. Carried.

R. Ericsen requested to address the Conference about a proposed name change for the Western Snow Conference. His thoughts as to the reason for this change were enumerated, a suggested name was "Western Snow and Hydrology Conference". R. Ericsen asked the members to consider this change and for a mail ballot at a later time to vote on this proposal. He requested that any comments be sent to him at Modesto Irrigation District.

Richard G. Ericsen Modesto Irrigation District Box 4060 Modesto, CA 95352

F. Strauss commented that this proposal should have full discussion at a meeting before the mail ballot, and that pro and con statements go out with the ballot.

The General Chairman thanked all the members for their participation and the committee members for their efforts in putting on a fine conference.

There being no further business the General Chairman entertained a motion for adjournment. A. Kahan so moved and the meeting was adjourned.

Respectfully submitted,

Robert T. Davis, Secretary

Awards presented at the Annual Banquet, Wednesday, April 18, 1973.

Life Membership: Robert Dahl

Ray Johnson Spencer Munson Anthony Polos Robert Scott

El Farsante:

Harry Hunter

# ATTENDANCE ROSTER WESTERN SNOW CONFERENCE GRAND JUNCTION, COLORADO April 17 - 19, 1973

Alford, George C. Ambrose, Lewis K. Armstrong, Mr. & Mrs. Richard Ballard, Wes Barber, Mark Barton, Manes Bartos, Louis Benoit, Mr. & Mrs. Clif Berling, Robert L. Birchim, James L. Blevins, Zenas C. Blincow, Don Brown, Bob Caine, Nel Carpenter, Mr. & Mrs. Dib Christner, Mr. & Mrs. Jere Clagett, Mr. & Mrs. George Clayton, Jim Cooley, John R. Coulson, C. H. Cox, Lloyd M. Crook, Arthur G. Crow, Loren W. Culp, William H. Dahl, Mr. & Mrs. Bob Davis, Mr. & Mrs. Robert T. Deets, Neil A. Derr, William M. Dirks, Richard A. Donnelly, Dick Edwards, C. Pen Eikelman, J. A., Jr. Elliott, Mr. & Mrs. Robert D. Erickson, Ernest H. Ericsen, Mr. & Mrs. Richard G. Evans, Thomas C. Ewald, George E., Jr. Farnes, Mr. & Mrs. Phillip Felgenhauer, Don Fellows, James C. Fetty, Carl Ffolliott, Peter F. Gale, Robert D. Giffen, Craig A. Goslin, Ival V. Hall, Rod Hannaford, Mr. & Mrs. Jack Hanson, Thomas L. Harder, Orrin H. Hellman, Mr. & Mrs. Robert H. Hill, Lee K. Hjermstad, Larry Hoover, Marvin D. Horn, William L. Huggins, Larry E. Hunter, H. I. Isely, James T. Jr., James, Jay M.

Johnson, William N.

Ogden, Utah Seattle, Washington Silverton, Colorado San Mateo, California Denver, Colorado Gresham, Oregon Orem, Utah Missoula, Montana Loveland, Colorado Bishop, Californía Pueblo, Colorado Pomona, California San Marino, California Boulder, Colorado Fremont, California Delta, Colorado Casper, Wyoming Idaho Falls, Idaho Denver, Colorado Victoria, B. C., Canada Boise, Idaho Anchorage, Alaska Denver, Colorado Fairfax, Virginia Oakdale, California Spokane, Washington Vernal, Utah Albuquerque, New Mexico Laramie, Wyoming Sylmar, California Boulder, Colorado Menlo Park, California Goleta, California Sierra Madre, California Modesto, California Glenwood Springs, Colorado El Monte, California Bozeman, Montana Spokane, Washington College Place, Washington Beaverton, Oregon Tucson, Arizona Phoenix, Arizona Evergreen, Colorado Salt Lake City, Utah Placerville, California Placerville, California Bozeman, Montana Walnut Creek, California North Bend, Washington Los Angeles, California Durango, Colorado Fort Collins, Colorado Sacramento, California Oxnard, California Victoria, B. C., Canada Auburn, Washington Gunnison, Colorado Glenwood Springs, Colorado

Jones, Gerald W. Jordan, Paul W. Kahan, Mr. & Mrs. Archie M. Kepner, Mr. & Mrs. Paul Keyes, Conrad, Jr. King, John Kuehl, Don Leaf, Chuck Leake, Robert E. Jr., Leith, R. M. Leupold, Mr. & Mrs. Norbert Limpert, Fritz Lindgren, Richard MacKenzie, Thomas H. McAndrew, Don McDevitt, Earl McFadden, Mr. & Mrs. John McKay, David. J. Mahoney, John J. Miller, Mr. & Mrs. Francis H. Minter, Mr. & Mrs. Benjamin D. Moreland, Ronald Morrison, Rod Mulvaney, Robert J. Nikolaus, Gordon G. Palmer, James T. Paulin, Mr. & Mrs. George Peterson, Lee R. Phetteplace, Dennis Phipps, E. F. Proctor, Kenneth E. Purcell, Mr. & Mrs. Ralph Rechard, Paul A. Reed, Kenneth R. Reischel, Michael T. Riley, Mr. & Mrs. John W. Rosgen, Dave Rovey, Mr. & Mrs. Edward Russell, Ronald L. Schaefer, D. Garry Schnell, R. Schuler, Bill Schulz, Mr. & Mrs. Ed Shreve, David C. Simons, W. D. Singer, Donald C. Smith, Winchell Sporns, Ulrich Strauss, Mr. & Mrs. Fred & Rosemary Strahm, Jim Tabler, Ronald D. Tarno, Larry Thomas, Billy J. Van Decar, Ted van de Erve, Mr. & Mrs. Jerry Veal, Donald L. Ward, John C. Warner, Mr. & Mrs. Lyman A. Warskow, William L. Washichek, Mr. & Mrs. Jack Weinstein, Byron Whaley, Bob L. White, R. J. Whitsel, Jerry Wilson, Mr. & Mrs. Jack

Young, Gordon J.

Fort Collins, Colorado Bozeman, Montana Lakewood, Colorado Washington, D. C. Las Cruces, New Mexico Moscow, Idaho Portland, Oregon Fort Collins, Colorado Fresno, California Vancouver, B. C., Canada Beaverton, Oregon Portland, Oregon Boise, Idaho Grand Junction, Colorado Reno, Nevada Azusa, California Cle Elum, Washington Downsview, Ontario, Canada Pomona, California Salt Lake City, Utah Sacramento, California Broomfield, Colorado Idaho Falls, Idaho Denver, Colorado Milwaukie, Oregon La Jolla, California Riverside, California Menlo Park, California Idaho Falls, Idaho Loveland, Colorado Seattle, Washington Vancouver, B. C., Canada Laramie, Wyoming Portland, Oregon Laramie, Wyoming El Paso, Texas Sandpoint, Idaho Fort Collins, Colorado Lakewood, Colorado Vancouver, B. C., Canada Laramie, Wyoming Denver, Colorado Fort Collins, Colorado La Jolla, California Menlo Park, California San Francisco, California Menlo Park, California Vancouver B. C., Canada Porterville, California Ogden, Utah Laramie, Wyoming Laramie, Wyoming Portland, Oregon Bellevue, Washington Sacramento, California Laramie, Wyoming Fort Collins, Colorado Calgary, Alberta, Canada Phoenix, Arizona Fort Collins, Colorado Los Angeles, California Salt Lake City, Utah Vancouver, B. C., Canada Loveland, Colorado Boise, Idaho Ottawa, Ontario, Canada