

MINUTES  
NORTH AMERICAN INTERSTATE  
WEATHER MODIFICATION COUNCIL  
Fresno, California  
April 28, 2004

The meeting was called to order by Chairman Mike Mathis, at 1:30 p.m., at the Picadilly Inn, Fresno, California. Members present were: Arlen Huggins, Nevada; Darin Langerud, North Dakota; LeNor Dollinger, North Dakota Weather Modification Association; George Bomar, Texas; Dr. Joseph Warburton, Walker River Irrigation District (NV); Maurice Roos, California; Tommy Shearer, Texas Weather Modification Association; Joe Busto, Colorado;

Others present were Conrad Keyes, Jane Lee, Ed Walker, Aaron Gilstad, Barry Lawrence, John Jackson, Dennis Gibbs, Joe Golden, Rob Johnson, and Steve Hunter.

MINUTES

Dr. Joseph Warburton moved correction of the minutes as follows:

December 15, 2003: Correct date of page one, change **2009** to **2003**.

September 18, 2003: Financial Status Report, for the period ended 9-18-03 change balance of **\$22, 592.99 to \$28,675.68** in the Council's checking account.

then approve the minutes of 9-18-03, 12-15-03, 12-18-03, 12-19-03, and 1-28-04. Second by Tommy Shearer. Motion carried.

MEMBERSHIP REPORT

Dr. Warburton reported the state of New Mexico has joined as a new member. There were no other new memberships to report at this time.

FINANCIAL STATUS REPORT

Dr. Warburton reviewed the 4-28-04 financial status report showing a balance of \$33,224.76 in the Council's checking account .

Tommy Shearer moved to accept the 4-28-04 financial status report. Second by Darin Langerud. Motion carried.

## WEB SITE RENEWAL

Darin Langerud reported the fee for the Council web site is due and will cost the Council in the area of \$75 - \$100 for the next year.

Tommy Shearer moved to authorize up to \$100 to pay the web site fees. Second by Maurice Roos, Motion carried.

## STATE REPORTS

Chairman Mathis gave the state reports for Utah, New Mexico and Kansas who were not in attendance.

Texas – George Bomar reported the estimated acreage to be seeded during the 2004 seeding season is 39 million acres. Two of the eight projects will also include hail suppression operations. He stated the 2004 project will rely heavily upon Doppler (WSR-88D) weather radar for surveillance and input on seeding operations. No new state funding is in prospect until the 2006-2007 biennium which begins August 31, 2005.

Tommy Shearer reported projects are in operations mode. He noted the lack of state funding but that their equipment is paid for, and they are looking at shared resources for radars.

Oklahoma – Mike Mathis reported Oklahoma is partnering with Texas in research. He also noted that the week prior, Oklahoma has sustained \$75-100 million dollars damage from a hail storm.

Colorado – Joe Busto reported the Colorado Water Conservation Board (CWCB) has been authorized expanded program spending authority up to \$25,000 to carry out various programmatic duties. This was up from \$7100 that had been in place since the permitting program inception in the 1970's.

Mr. Busto also reported the CWCB has funded a climatological assessment of cloud seeding opportunities between 1972-2002. The study is designed to:

1. build a 30-year database of storm systems and analyze their cloud seeding capability;
2. help water agencies determine the appropriateness and effectiveness of cloud seeding in their watersheds; and
3. further quantify the "cloud seeding window" concept and the range of time and space when cloud seeding can be effective in a storm system.

Wyoming – Barry Lawrence and John Jackson, of the Wyoming Water Development Commission (WWDC) were in attendance at the meeting and reported the WWDC is proceeding with a feasibility study to develop a cloud seeding program within the state. The proposed target areas are: 1) the Wind River Range in Fremont and Sublette Counties in west/central Wyoming, and 2) the Sierra Madre/Medicine Bow Ranges in Carbon and Albany Counties in southeastern Wyoming. Soil conservation districts in the southwest area of the state had requested the study and development of the program. The legislature funded \$100,000 for the feasibility study. At this time, RFB's have been sent, proposals received, and interviews will be conducted next week to select a consultant with final report due by November 1.

Nevada – Arlen Huggins reported the 2003-2004 winter cloud seeding program for snowpack augmentation began in November 2003 and continued through April 2004. The program conducted ground seeding in five separate mountain target areas in the Sierra Nevada of California (Tahoe, Truckee, Carson and Walker watersheds), the Ruby Mountains and Tuscarora Mountains of northeast Nevada, and the Toiyabe Mountains of central Nevada. Aircraft seeding was conducted for the Sierra Nevada target areas.

Mr. Huggins reported ground seeding hours were about 30% fewer and aircraft seeding hour 12% fewer than the 2002-2003 season. He noted there were numerous seeding opportunities in December, January and February, but almost none in March or April, 2004.

California – Maurice Roos reported California is in the process of updating their Water Plan and distributed a copy of the draft plan regarding precipitation enhancement.

Santa Barbara County Water Agency – Dennis Gibbs reported a very slow activity year with the contractor only seeding 8 events during the project. Snowpack was at 65% of normal.

Monterey County Water Resources Agency – Rob Johnson reported they are interested in getting back into water augmentation programs again. From 1990-1995 the five-year project showed a 25% increase with 41% being the highest increase in precipitation. Mr. Johnson stated a March, 2003 county election received an 85% approval for a water project based on land assessment.

North Dakota – Darin Langerud reported the 2004 North Dakota Cloud Modification Project (NDCMP) is set to begin June 1 and continue through August 31 covering a target area of 6.7 million acres. Eight aircraft will be used on the project (6 cloud-base and 2 cloud-top). The project utilizes wing-tip generators burning an acetone/silver iodide solution, burn-in-place and ejectable flares, and dry ice pellets.

Mr. Langerud also reported discussions are on-going with two counties expressing interest in joining the NDCMP.

Mr. Langerud also commented on the North Dakota Intern Pilot Training Program which has been on-going since 1976 and has trained over 300 weather modification pilots.

#### WEATHER DAMAGE MODIFICATION PROGRAM (WDMP)

Discussion was held regarding the NAIWMC position on moving the WDMP to the National Oceanic & Atmospheric Administration (NOAA). It has been indicated there is interest and support within NOAA for doing this.

It was suggested by Mr. Conrad Keyes that NAIWMC seek support and assistance from the American Society of Civil Engineers in their legislative efforts as it relates to WDMP and S.2170 the Weather Modification Research & Technology Transfer Authorization Act.

The proposed letter of support for WDMP from the member states was reviewed and suggested revisions were made.

Darin Langerud moved Joe Busto make the revisions and circulate the letter for signatures. Second by Arlen Huggins.

An amendment to the motion was offered by George Bomar to include, "by June 1".

Arlen Huggins seconded the amendment. Motion as amended carried.

#### NAIWMC RESPONSE TO NATIONAL RESEARCH COUNCIL REPORT

Revisions to the NAIWMC response to the NRC report *on Critical Issues in Weather Modification Research* were suggested and discussed.

Dr. Joe Warburton moved to adopt the NAIWMC response to the NRC report with the changes agreed to by the NAIWMC members present. Second by Tommy Shearer. Motion carried.

#### ELECTION OF OFFICERS

The Nominating Committee consisting of George Bomar and Darin Langerud reported that after consulting with the present officers the committee recommends the current officers serve another one-year term.

Chairman Mathis called for nominations from the floor. There were none.

Tommy Shearer moved acceptance of the Nominating Committees report by acclamation. Second by Darin Langerud. Motion carried.

OTHER BUSINESS

Mr. Conrad Keyes stated he would like to have the NAIWMC consider joining the Weather Modification Association (WMA) and Environmental Water Resource Institute in providing educational opportunities for workshops and documents. In the past the NAIWMC voted not to join and Mr. Keyes would like to hear from the members in the future to bring more to the table.

Chairman Mathis inquired if the proposal is the same as the previous proposal presented to the NAIWMC. Mr. Keyes responded that it is the same.

Dr. Warburton suggested this item be on the agenda for the fall meeting.

The next meeting of the Council will be held September 22 & 23, 2004 in Reno, Nevada.

Being no further business the meeting adjourned.

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MIKE MATHIS, CHAIRMAN`

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DR. JOSEPH WARBURTON  
SECRETARY-TREASURER

Transcribed by LeNor Dollinger