

# NORTH AMERICAN INTERSTATE WEATHER MODIFICATION COUNCIL

## Minutes

Spring Business Meeting: Anaheim, CA  
April 21, 2009

The meeting of the North American Interstate Weather Modification Council was called to order by Joe Busto, Chair, on April 21, 2009, at 1:15 pm in a meeting room of the Marriott Suites in Anaheim, California.

A roll call confirmed the following members present: Arlen Huggins, State of Nevada; Joe Busto, State of Colorado; Tom Ryan, Metropolitan Water District of Southern California; Darin Langerud, State of North Dakota; Dave Cole, State of Utah; Barry Lawrence, State of Wyoming; John Andrew, State of California; Mark Schneider representing the North Dakota Weather Modification Association, George Bomar, West Texas Weather Modification Association; and Chuck Collum, Central Arizona Project. This represented a quorum of 10 of 13 voting members of the Council.

### MINUTES

The minutes of the fall 2008 meeting of the Council in Flagstaff, Arizona were distributed and reviewed. Several minor wording changes were suggested.

Darin Langerud moved to approve the minutes of the September 29, 2008 meeting, as amended. Second by Dave Cole. Motion carried.

### FINANCIAL STATUS REPORT

Arlen Huggins, Secretary-Treasurer, presented and reviewed the financial status report as of 4/21/09. The report showed a balance of \$18,459.04. The report noted the main account activity since the prior meeting consisted of five payments to McClintock Associates and one dues payment from the Colorado Water Conservation Board. The contract with Mr. McClintock was ended by mutual consent effective April 2009.

Barry Lawrence moved to accept the 4/21/09 financial status report. Second by John Andrew. Motion carried.

A discussion took place regarding the Council's status as a non-profit organization, and how best to proceed with determining its future legal status.

Darin Langerud moved to have Tom Ryan meet with the legal staff at Metropolitan Water to find out if they could assist in determining the Council's future legal status, and report back to the Council by June 1, 2009. If the Metropolitan Water legal staff cannot assist, then the Council will approach Sheppard Strong, an attorney in Austin, Texas, to accomplish the same task.

Langerud motion was seconded by John Andrew. Motion carried.

It was decided that a conference call would be arranged for the morning of June 3, 2009 to act on Tom Ryan's findings.

## STATE REPORTS

State reports were given by each member present at the meeting. Copies were made available to members present, so only brief highlights are included in these minutes.

John Andrew with California Department of Water Resources noted that California was in a third consecutive year of drought, but that the dry conditions did not represent a disaster. John presented various snowpack, precipitation and water storage statistics and noted that the spring runoff was expected to be about 65% of average.

Dave Cole of Utah distributed a report summarizing the 2008-09 seeding programs in Utah and noted that operations had been similar to the previous year. Utah had four main project areas that used a total of 148 ground-based seeding generators. The summary report indicated that total expenditures were \$462,800, up from the prior year's total of \$421,039. Project costs were split equally between the state and local sponsors. Dave also noted that the cloud seeding season in two regions was extended using \$82,100 in funds from the Lower Colorado Basin States. This funding was also used to install several icing rate meters. The Division of Water Resources web site includes a link to Utah's cloud seeding program: <http://water.utah.gov/cloudseeding/>.

Darin Langerud submitted his state report and noted that spring was late coming to North Dakota where planting was delayed about two weeks due to the prolonged winter. The NDARB project radars will be upgraded this year in time for the start of Cloud Modification Project on 1 June. A new economic study by NDSU is quite favorable to the project, with a modest 5% increase in rainfall leading to increased crop production with an estimated value of \$8.4 million. The hail suppression analysis showed the average annual value of crops saved by the project to be \$3.7 million. The combined rain enhancement (at 5%) and hail suppression benefits yield a benefit-to-cost ratio of 16 to 1 based on 2009 costs. The North Dakota report contains other details of the secondary economic benefits.

Joe Busto noted the overall budget deficit in Colorado was at \$1 billion and this was having a direct (negative) impact on unallocated funds in the CWCB, including a possible decrease in funds available to weather modification activities. Joe gave an overview of his CWCB activities related to cloud seeding that included attending the NSAA Western Ski Areas Conference in Keystone, Colorado. He and Tom Ryan made several good contacts with ski area representatives, some of whom expressed interest in cloud seeding. Joe noted that the CWCB collaboration with Lower Basin state agencies has now led to \$365,000 in funds for new equipment and extended operations in the Upper Basin. Details of the wintertime cloud seeding projects in Colorado in 2008-09 are in the Colorado state report.

Tom Ryan presented additional details on the meeting with ski industry people at the NSAA Conference, and noted that he and Joe got some good leads on possible cloud seeding activities at specific resorts. Tom also noted that 78% of the total of \$300K in Lower Basin funding had been spent to date on operations versus 22% on studies.

Barry Lawrence summarized the status of Wyoming's 5-year cloud seeding project at the end of its fourth season and distributed research summaries for several of the ongoing projects including one on the impacts of weather modification on streamflow and one on the detection of cloud seeding signatures using the Wyoming Cloud Radar. He noted that the 2008-09 season yielded 39 more randomized seeding events in the Medicine Bow/Sierra Madre target areas, and 13 nonrandomized seeding events in the Wind River target area. A critical item related to the eventual success of the WWDC randomized project was their request to the legislature for a 3-year extension of the project. The WWDC feels this extension is needed in order to obtain enough data from the randomized events to reach statistical significance. The legislature postponed action on the funding request until the 2010 session.

George Bomar reported on weather modification activities in Texas. He mentioned that for operations and evaluations all Texas projects now use National Weather Service WSR-88D radar data. His report stressed the need for research funding and mentioned how previous projects had yielded significant benefits to the operational projects in the way of new equipment and evaluations of new seeding methodologies. He also noted that funding for TDLR's weather modification project was included in the preliminary legislative appropriation for 2010-11, but final action would not occur until May 2009.

Arlen Huggins reported on the status of the Nevada cloud seeding program. Although winter activities in WY2009 were relatively normal, the winter ended up being the third consecutive with below normal snowfall in most areas of the state. Some areas of the state network were still plagued with communications problems (for seeding generator control) which will likely not be resolved until 2009-10. The main issue in Nevada is the budget crisis which will lead to cuts in all state agencies. The university system cuts have not been decided, but a significant cut to DRI's budget could lead to elimination of the cloud seeding program since it is one of the few projects that DRI has that is entirely state funded. This will likely not be resolved until May or June 2009.

### BYLAWS

There was some discussion regarding membership categories, which if changed would require an amendment to the Council Bylaws. However, due to the uncertainty in Council organizational status, it was decided to defer further discussion on membership until the status was resolved.

### MEMBERSHIP REPORT

Arlen Huggins reported that for calendar year 2008 11 of 15 memberships had paid their dues, with four members also paying all or part of the special research assessment. There was a brief discussion of activities in Arizona and Chuck Collum noted that Arizona was moving forward with a weather modification proposal, and that the Legislature was dealing with the various funding options, but these had not been resolved to date. Tom Ryan said he would continue to work on the partnership with ski organizations, possibly as Affiliate members. Other member possibilities included irrigation districts, the Arizona Salt River Project and the continuing effort to get a member from New Mexico. It was noted that one means of attracting new members would be to have a Council booth at meetings like the Western Ski Conference, the Western Snow Conference, the Colorado River Water Users Meeting, and others.

The members then discussed the dues structure and, despite the fact that there were few Council expenses currently, decided it would be best not to eliminate dues since most states had these in their budgets, and could lose the funds if they were not used. However, it was decided that the special research assessment was not currently needed.

Darin Langerud moved that the special assessment be eliminated, including the assessment for CY2009. Motion seconded by Barry Lawrence. Motion carried.

### CONGRESSIONAL ACTIVITIES

George Bomar led the discussion related to the weather modification bills in the current Congress. He encouraged letters of support from the states be sent to Texas Senator Hutchison's

office. A brief discussion occurred regarding potential sponsors for a companion bill in the House. Based on Science Committee membership, two likely candidates are Texas and Arizona, although it would be preferable to not have both bills coming from the same state. Chuck Collum indicated that he would ask CAP to make contact with the appropriate Arizona representative.

### ELECTIONS

The Nominating Committee Chair, Darin Langerud, proposed the following slate of candidates:

Tom Ryan – Chair  
Barry Lawrence – Vice Chair  
Arlen Huggins – Secretary/Treasurer

John Andrew moved to accept the nominating committee recommendations. Motion seconded by Chuck Collum. Motion carried.

### COMMITTEE ACTIVITIES

Travel Committee - No requests were received – nothing to report.

By-Laws Committee – No proposed changes – nothing to report.

Scholarship Committee – Nothing new was reported.

### PUBLIC RELATIONS & OTHER

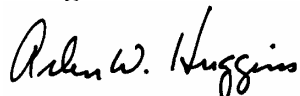
Some discussion occurred regarding the Council logo, web design, and a name change. Several new names were suggested, but any decision was postponed for further discussion and possible vote during the June conference call.

With a variety of business issues coming up between Council meetings the idea of employing an executive director was brought up by Darin Langerud. His thought was that this person might deal directly with public relations, be active in membership development, and help with Council financial issues. Joe Busto and Darin indicated that they would look into this further and bring it up again at a future meeting.

### NEXT MEETING

Barry Lawrence agreed to look into costs and arrangements for having the fall 2009 Council meeting in Jackson Hole, Wyoming.

Being no further business the meeting was adjourned by the Chair at about 6 pm local time.



Arlen W. Huggins, Secretary-Treasurer