

# **MINUTES - NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD**

**APRIL 7, 2020**

Chairman Tom Tupa called a telephone conference call meeting of the Atmospheric Resource Board to order at 10:00 a.m. CDT, April 7, 2020.

## **ROLL CALL**

Roll call was taken. Members present were Tom Tupa, Monte Hininger, Hank Bodmer, David Monson, Casey Veil, Kyle Wanner and Angela Seligman.

Others present were Darin Langerud, Director; Kelli Schroeder, Business Manager; Mark Schneider, Chief Meteorologist; Daniel Brothers, Meteorologist; Jody Fischer, Weather Modification International (WMI); Lance Gaebe, ND Weather Modification Association; and Jonathan Rosencrans, Western Dakota Energy Association.

## **MINUTES**

**IT WAS MOVED BY MR. HININGER AND SECONDED BY MR. BODMER TO APPROVE THE MINUTES OF THE NOVEMBER 5, 2019 MEETING AS DISTRIBUTED. ALL MEMBERS VOTED YEA. THERE WERE NO NAY OR ABSTAIN VOTES. MOTION CARRIED 5-0.**

## **FINANCIAL STATUS REPORT**

Ms. Schroeder reviewed the financial status report for the period ending February 29, 2020.

In response to a question from Mr. Tupa, Ms. Schroeder indicated that all county payments from 2019 have been made.

In response to a question from Mr. Tupa, Mr. Langerud indicated that he learned at the SWC Directors Meeting yesterday that there is discussion starting on budget cuts for the current biennium. He expects new information from OMB in the next week or so in relation to the expected revenues and potential future cuts. However, there is no concrete information yet.

In response to a question from Mr. Tupa, Mr. Langerud indicated that there are no additional costs in relation to staff working from home due to the COVID-19 pandemic. State Water Commission (SWC) information technology staff were able to get around 80% of SWC staff working remotely in about 1 week. Some staff were able to use their

home computer equipment after getting required security applications installed. Other staff were sent home with their work computers.

## **2020 NDCMP PERMIT APPLICATIONS**

### **Public Comment**

Mr. Langerud informed the Board that the legal notice was published as required by statute for two consecutive weeks in the county newspapers in the target and adjacent counties in March with regard to the permit applications received from WMI. There was a 20-day period for the public to comment following the publication. The comment period ended at midnight April 2, 2020. There were no public comments.

### **Weather Modification LLC – NDCMP District 1 & 2**

Mr. Langerud reviewed the permit applications for NDCMP Districts 1 and 2 from Weather Modification LLC. He recommended the board approve the permit applications for both Districts 1 and 2 operational areas for the 2020 season.

**MR. MONSON MOVED TO ACCEPT THE DIRECTOR'S RECOMMENDATION AND APPROVE THE WEATHER MODIFICATION PERMITS FOR WEATHER MODIFICATION, LLC, OF FARGO, ND. SECONDED BY MR. WANNER. ALL MEMBERS VOTED AYE. THERE WERE NO NAY OR ABSTAIN VOTES AND NO ABSENCES. MOTION CARRIED 6-0.**

## **NORTH DAKOTA CLOUD MODIFICATION PROJECT**

### **Budget**

Mr. Langerud reported on meetings with the district weather modification authorities in January. District 1 will have virtually the same program as 2019 - 2 cloud base aircraft and share 35% of the Dickinson Cessna 340 lease costs.

In response to a question from Mr. Tupa, Mr. Langerud indicated that the increase in county revenue is part of the budgeting process we do with the county weather modification authorities in January. This year, it amounts to a 5% increase in local revenue as compared to 2019. This is an allocation from the county general fund as requested by the local weather modification authority.

Budget details were reviewed at the District 2 meeting with options to deal with the question of Ward County participation in the project. Ward County will be putting continuation of their participation to a vote of their constituents in the June primary election.

There were 3 budget options presented to the District 2 weather modification authorities in January. The third option, which was not included in the information packets for this meeting, was detailing Ward County starting participation in the program before the vote. However, this option was contingent on the Ward County Commission renewing their weather modification authority contingent on the vote. They chose to let their authority lapse; therefore, they cannot start the project on June 1.

Mr. Langerud reviewed the remaining two budget options. One is a pro-rated version assuming Ward County voters approve the ballot measure and we can get them running by mid-July. They would not be able to enter the program immediately on June 10<sup>th</sup> because there would need to be a permitting process followed to add them to the program after the vote. This budget option brings in additional revenue from Ward County, adds an aircraft in Kenmare and also adds a bit more of chemical and supplies. As in District 1, it also assumes an increase of 5% revenue from all counties.

In response to a question from Mr. Tupa, Mr. Bodmer indicated that there has been a rumor of discussion of moving Ward County ballot measures to the general election due to the pandemic. However, he doubts they will move them. From what he understands, it will be a mail-in ballot for the primary election. He does not have a feeling about the direction of the ballot measure results.

Mr. Langerud continued reviewing the District 2 budget options. The next budget option is with no Ward County participation for the season. In this scenario, there would not be an airplane based in Kenmare, nor the associated aircraft and pilot crew.

In response to a question from Mr. Hininger, Mr. Langerud indicated that we have been working with WMI to make sure that they are prepared to have an airplane and crew member join the program should the Ward County voters approve the ballot measure.

Mr. Fischer indicated that it is helpful to this project that the airlines are laying off a lot of pilots. He has already been contacted by several former pilots looking for additional work for a few months until they return to airline work. So, it doesn't appear to be as big of a challenge finding additional personnel as he thought it would be a few months ago. However, there are no guarantees that those pilots will still be available.

### **Ward County status**

Since a lot of this issue was discussed in the budget section, Mr. Langerud added that McKenzie County and Bowman County renewed their weather modification authorities for another 5 years, each by unanimous votes. Mountrail County renewed their authority in 2018 unanimously as well. They recently made a slight change to their resolution removing a clause they didn't want included. Williams County's authority is up for renewal in early November.

In response to a question from Mr. Tupa, Mr. Langerud noted that Mountrail County had an old clause in their resolution that related their participation in the program to the participation of other counties in the region. They determined that they no longer want that clause.

In response to a question from Mr. Tupa, Mr. Langerud indicated that he was invited and participated in a couple of public forums to talk about cloud seeding. He did a presentation before the Minot Kiwanis Club a few weeks ago. The Minot Chamber reached out to him a few months ago and asked him to do a presentation for them which will be April 16<sup>th</sup>. That will be a remote presentation.

Mr. Gaebe reported that the ND Weather Modification Association has switched to an all-mail education operation. He purchased the voter lists from the Secretary of State's office and whittled it down to likely voters in the last two primary elections. There are about 42,000 Ward County voters in the voter database, which they reduced to 18,500 households.

### **County contracts**

Ms. Schroeder noted that a draft county contract has been sent to our attorney for review. The only change expected would include language dealing with the COVID-19 pandemic.

### **Staffing**

Ms. Schroeder reported on having a much better year with regard to student pilot applications. There were 13 applicants for the 7 intern co-pilot positions. Three of those students do not yet have their multi-engine rating and were on track to achieve that by the April 30<sup>th</sup> deadline. UND shut down flight operations, however, due to the pandemic and they will not be able to meet the deadline, leaving us with 10 good candidates.

Also due to the pandemic, there is a possibility that we might need to do a virtual Ground School this year. We are beginning planning for that. We are also planning to get some staff into the state two weeks prior to Ground School or project start for the required quarantine period.

In response to a question from Mr. Tupa, Mr. Langerud noted that we hire an additional student co-pilot every year for vacation rotations. That person could fill in for another co-pilot who tests positive for the virus and is quarantined during project.

Mr. Schneider noted that if any of the meteorologist staff would become sick while on project, he or Mr. Brothers would fill in for the individual that is ill, out in the field.

Mr. Schneider also reported that he and Mr. Brothers completed meteorologist interviews for field staff. There will be one returning radar meteorologist. Two others who are being considered have weather modification experience on other projects.

One intern meteorologist from last year wanted to return for an intern position. He was our forecaster in Bismarck last year. He really enjoyed his field rotation last year and will be returning for a field position. Mr. Schneider and Mr. Brothers will hire two additional intern meteorologists from a batch of well-qualified individuals.

In response to a question from Mr. Tupa, Mr. Schneider indicated that housing in the oil patch has opened up significantly.

Mr. Langerud noted that depending on where we are in two months in relation to social distancing and other regulations, there is a question of not only how but if the program is allowed to go forward. We are planning for as many contingencies as we can think of, but we really don't know right now where we are going to be on June 1<sup>st</sup>. We are moving ahead as if we will start the program on June 1<sup>st</sup> with all of our typical staffing and such in place. There are a lot of contingencies out there that could cause changes in this area. We've already discussed some of this with WMI. They are on the same page as us. We're just going to try to make our way through this as best we can.

### **Seeding agent and supplies procurement**

Mr. Schneider reported on chemical and supply procurement considering the questionable participation of Ward County. Fortunately, we have plenty of flares from last season and didn't have to purchase any this year. For dry chemical, bidding came in at approximately the same cost as last year. Dry ice costs dropped significantly with oil prices being low and a new manufacturing facility closer to ND coming online. Acetone purchases will reflect that as well.

In response to a question from Mr. Tupa, Mr. Schneider indicated that there were no problems in procurement or shipping in relation to the pandemic.

### **COOPERATIVE OBSERVER NETWORK UPDATE**

Mr. Brothers reported that there are currently 481 rain observers (some also report snow), up slightly from the fall. Of those, 168 are reporting online.

### **WILLIAMS COUNTY RADAR**

Mr. Langerud reported that Williams County put together a project through their sales tax funds that are set aside for public safety projects. They purchased a new c-band dual

polarization radar from Enterprise Electronics Corporation, out of Alabama. It has been installed at the new Williston Basin International Airport.

Mr. Langerud and Mr. Schneider have been involved in the process since the beginning giving guidance. They, along with Mr. Moen, participated in training in March for the radar. Our office is receiving the data from the Williston radar in real-time. While we are not displaying the data for the public yet, we will be providing the data publicly on our website year-round once a software update has been installed that fixes a small display issue. We expect to go live at the end of April.

We also will be doing a conversion of the data format from the Enterprise proprietary format to NEXRAD Level 2 format, which is the National Weather Service (NWS) radar format. Then the data is sent off to the NWS for their use. We have been doing that with our Bowman and Stanley radar data for several years. Currently, there is a software issue in making that conversion from the Enterprise software. We have not been able to find a solution yet. However, there is a major software update coming from Enterprise in September which would provide a direct conversion of the data from their format to NEXRAD Level 2.

On the bright side, we are showing more than just composite reflectivity from the Williston radar. We are also showing base reflectivity, vertically integrated liquid, and doppler wind velocity. All of this data will be available on our web site as well as being available to the NWS.

We will also have access to the radar data for our operations in District 2 this summer. And since it is a dual polarization radar, it should also hopefully help us with some evaluation we would like to do on hail suppression seeding in the future.

In response to a question from Mr. Tupa, Mr. Langerud indicated that if issues arise due to this pandemic that need the board's attention, we could call a meeting on short notice.

Being no further business, the meeting adjourned at approximately 10:57 a.m.



TOM TUPA  
CHAIRMAN



MONTE HININGER  
SECRETARY