

GOOD MORNING CHAIRMAN LUICK AND MEMBERS OF THE SENATE
AGRICULTURE AND VETERANS AFFAIRS COMMITTEE

**FOR THE RECORD, MY NAME JAYE SANDSTROM. I AM FROM NEW
TOWN, ND, MOUNTRAIL COUNTY.**

I thank you, our forefathers and My God for the opportunity to testify in opposition to HB1166.

In my younger days I served on the ND weather Modification Board back in the 1990's and early 2000's. Prior, during and after, I served on the Mountrail County weather board.

First off, I just have to disclose the fact that I very much dislike the title of "weather modification" because the program never has nor was intended to modified the weather. Except in the minds of conspiracy theorists. How and why that name was able to stick baffles me immensely because it sends up an unwarranted red flag for some. It doesn't modify the weather any more than a farmer modifies the township by putting fertilizer or Round-up on his north 40. The program seeds thunderstorm cells that have the potential to produce hail-rain.

Though I've heard the denial from sponsors of HB1166 of the intent to destroy, it is quite well known that it was intended in fact, to destroy, by giving jurisdiction to adjacent non-participating counties which, coincidentally(not) happens to be the very county from which many of the proponents and sponsors reside. I don't believe that is the way a representative government should work. After the first go around of testimony, it was obvious of the tactics, so it was amended in a way that gave the impression to some that it was collaborated between the disagreeing parties. I for one, did not come away with that sense of cooperation much less an effort and that too leaves a disappointing impression on the people and the process. As it stands in its present form, the law change would not only give a minority an unfair upper hand, but it indiscriminately strips other citizens from an opportunity to participate in a cloud seeding program by removing them from the chance of accessing their tax money that they in fact paid in.

I am not sure what drives the proponents of HB1166 except for the hatred of somethings not understood. I do know however, that some of it stems from the thought that the program comes from the dark side commonly known as “the establishment”. This is not the case and I will elaborate in a bit. It certainly is not that the science doesn’t work because even the opposition has voiced concern that the target counties upwind are stealing all the rain and some in the target area claim we seed here and they, the downwind, get the benefit!! So goes the saying, “you can’t please most people ever!” My personal opinion, 10 percent rain enhancement is not that significant and it is somewhat difficult to document but the target effort to reduce hail is a risk management tool that I cannot for the life of me understand why anyone would resist. But here we are!! There is no credible evidence that can remotely be directed to such findings that seeding will reduce rainfall downwind and there is **no way** that anyone, from the comfort of a John Deere tractor, can determine what is happening in any thunderstorm cell without linking into a very elaborate radar system, **for starters**. On the other hand, it is fairly easy to see through the wonders of modern radar of the positive effects regarding mitigation of hail. To insist that they have seen a cloud disappear after seeding is just not factual and surprising to most, it could likely be proven now days, one way or the other, using radar. Point is, there is nothing to be hidden here. Such stories of opinion do not carry any documentable facts and therefore I would hope that people can see through such talk. After the fiascos we have lived through and experiencing now with Covid and such, I hesitate to use a specific phrase, but I do not know how else to convey my thoughts with any other words than to say it straight out, “we need to trust the science!” Rest assured that in this case you **can trust** the science **and** the people behind the science that occupies the ARB office. Cloud seeding does work for the most part but often times, nature throws a fastball when we plan for a slider and we end up missing the ball so to speak. Such is life.

Most, if not all of us, are far enough away from the beginnings of the program’s inception that I think, I’m justified in providing a very scaled down review of the North Dakota Cloud seeding project in hopes of settling the fear that it comes to us from the dark side.

One of the first attempts to seed clouds for effect of reducing hail, if not thee first, was started by World War II veterans who having survived in one piece, returned home to western North Dakota to farm. One man, returned to Bowman County and was hailed out several years in a row. Wilbur Brewer had in his travels, come

across the efforts and effects of using silver iodide for dissipating fog over airfields during the war and from that, further experimentation led to the better understanding of what happens. He accumulated contacts and further study led him to manufacturing equipment to dispense silver iodide into the feeding updrafts of the cells with surplus military airplanes. The details are many and so it is that numerous locals contributed money to continue the effort. As with all ventures man indulges into, there rose the need for more technology and organization. Radar and meteorologists were brought on board to direct operations. Numerous proactive people in the 1950's and 60's (from mostly western counties) inquired and soon the efforts outgrew itself in many ways. Just like all projects such as with water development today, there came a need for fair and efficient organization, regulation, and funding. Eventually Wilbur Brewer built a business and his efforts spread worldwide while many others here at home worked on the establishment of law that eventually made North Dakota statutes dealing with cloud seeding. It has taken many years and thousands of hours of wrangling to get things established. Keep in mind, all done by grassroots, not someone from boogymenville! Initially, oversight was under the umbrella of the ND Aeronautics Commission but was later moved to the halls with other water projects of the Water Commission in the late 80's and 1990's. (if memory hasn't failed me)

Briefly, the law stipulates that ND be divided into districts, (7 if I recall correctly) and a governor's appointee serves each district on an ARB board. County interests must establish a board by one of two ways, 1. Petition to put on county wide ballot or 2. Gather a large number of county citizen signatures(I believe 20 percent of last gubernatorial election) and thereby petition commissioners for authority to participate in a program. The law provides that a program must die by the same process it was created. Very fair, straight forward.

Once established, County authorities, with the oversight of the ARB then plan and participate in a developmental process to establish the summer months project. The law works well. It has been tested over the course of several decades. It is fair and simple. Ward county opted out couple years ago by ballot (just as it was created) giving proof that the existing statutes works. It is fair because it grants equal footing unlike the proposal in HB1166 where it makes it easier for the noisy minority to simply stomp their foot and get their demands.

Pardon me for repeating, but current law works well and has worked well for the past 60 plus years. I see absolutely no reason why it should be changed.

The program works. The science works as it should but now, we have doubters demanding changes in the long established law that places power into the hands of those that can cry the loudest.

In closing, proponents have amended HB1166 out of the idea of allowing one subdivision of government to infringe on another's jurisdiction into a bill that attempts to destroy by taking away another's equal access to tax money that they actually contributed when paying an array of different taxes. Take a look at the latest county participation and tell me they haven't paid in a crazy amount of tax into the ND coffers especially in the last 15 years and are now not entitled to any of it without an extra fight.

Numerous economic studies, over the years, back its value but the only complaint I have about the project is that too often, we can't attack some thunderstorms with adequate treatment. It's no different than fertilizing a crop that needs 100 pounds of nitrogen and you can only afford 40 pounds. We are going to have some disappointing results.

Thank you for the opportunity to testify. I leave you with this; Western North Dakota is native to several species of sage brush and cactus. What would you all rather live downwind from, a desert or an oasis? I would appreciate a **do not pass** HB 1166. Maybe consider increasing the ARB appropriation and expand the oasis would make more sense! 😊

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