

My name is Tanner Vix and I raise Corn, Soybeans and Spring Wheat in SE Ward County and also SW McHenry County. I am respectfully writing you today in support of ND HB1166. Although I support this bill it does not go far enough. This bill should ban all hail suppression and end all state funding. In addition, funds should be allocated to those harmed by weather modification in the state of ND. The ND Cloud Modification Project's purpose or claim is to seed clouds for hail suppression and rain enhancement. In addition to my skepticism to the effectiveness of the program in regards to its claims, MILLIONS of dollars have been spent on a program that cannot be scientifically proven. I do not have a PHD in meteorology nor do I have a degree in anything weather related to officially disprove or challenge the weather modification project. However, with many years of my own research on the program it is my humble opinion that the program cannot be proven effective, and ironically the program may have possibly had the opposite effect to its claim. I became aware of the cloud seeding project in Ward county about 10 years ago as I noticed planes flying clouds west of our farm, and since then I have researched the program on my own in hopes of making my own conclusions in regards to the program. For nearly a decade I have watched storms generate with great power to the west, break apart, and dissipate within minutes of Weather Modification airplanes seeding these \$million dollar storms. In addition, in October of 2017 I was appointed by the Ward County Commission to fill an open position on the Ward County Weather Modification board and I was shocked, to say the least, of the lack of accountability of budget spending, the lack of concrete evidence supporting the program, and the disregard to authority in regards to parliamentary procedure and violations of open meeting laws of the board chairman. Here are some points and observations I ask you to review and consider in regards to the weather modification program:

- 1) As a producer I can insure myself for hail, but I cannot insure myself for lack of rain besides federal crop insurance. If cloud seeding does dissipate rain clouds instead of increasing rainfall like I've seen, I'd rather have the rain AND the hail. Genetics and hybrids have improved such that even if there is minimal rainfall, typically we get some sort of crop. Unfortunately, sometimes these levels are below break evens and fall right at our crop insurance guarantees. My point is, let's let God decide when it's going to rain and hail, and I will take the rain as it comes and insure myself against hail. The state should not be funding this program blue sky program.
- 2) The weather mod program in Ward County, for example, ceased operations August 1 of each year because proponents say they don't want to cause MORE rainfall during small grains harvest. Small grains make up only 25% of my farm now and small grain acres in general have been reduced on many other Ward County farms as soybean and corn acres have increased. The other 75% of my acres are corn and soybeans. The last half of July thru the first half of August is absolutely critical to the filling of soybeans and corn to increase yield. If the program indeed increases rainfall, then why aren't we continuing to seed clouds through the 15th of August when corn and soybeans need the rain? What state or county authority should be able to make the call whether my soybeans and corn GET rain, or my wheat DOESN'T get rain?
- 3) Analogy in regards to buffer zones, downwind acres and neighboring county approval: As a farmer, I have the freedom to spray herbicides on my fields and can continue doing such as long as the herbicide doesn't drift onto my neighbor's field on the other side of the township road. As a producer in both Ward and neighboring McHenry county to the east, weather mod will not and cannot PROVE to me that what they are doing in Ward county does not affect negatively what is going on downwind in McHenry county to the east. WHAT IF seeding the eastern edge of Ward county results in cloud dissipation and less rainfall in western McHenry county? Why should a McHenry county producer be affected by the governance of a non-proven program in Ward county? Neighboring county approval of this program is a must.
- 4) Observation: I don't think I have ever seen as many people so passionate about a program that cannot be proven. Just because it's been a 45-year old program doesn't warrant the continuation of a program. It also appears from doing my own investigating that pro weather mod individuals and organizations typically have a financial interest in the administering of the program. My findings on my own result in showing that there could be a major conflict of interest between the program and who administers the program. I.E.: A county weather mod board chair with a local airport authority and the UND meteorology and flight programs. UND meteorology needs something to study, flight students need to fly and small muni airports need federal funding. There are other instances in regards to fuel supply and airplane maintenance.
- 5) ARB budget: In recent years ARB budgets, millions of dollars have been line itemed in regards to grants, benefits and claims. Who is the accountability of millions of dollars with that vague of budget item? This is an insult to tax payers and their hard earned tax dollars. Pro weather mod response is this allocation is partly for "studies". I'd like to see some results of these "studies" as I have not been made aware of any recent new findings.
- 6) Weather mod says there is a 43% decrease in hail reduction. How can one possibly quantify this? No two clouds are the same, they are individually unique. And because no two clouds are the same it is impossible to replicate trials to do a factual study. Is this 43% reduction in hail of ALL storm clouds or is it a reduction of just 43% of the clouds that are seeded? Are their results even scientifically relevant?
- 7) If this program is truly effective, why are only 6 counties in ND participating? Why aren't more

states participating? Why did Kansas drop the program? Why aren't Cass, Burleigh and Grand Forks counties participating in the program as they have the highest populations with the most homes and automobiles to protect, in addition to their high value crops? If the program has such a high rate of return, it's my opinion the counties should be left to fund the program on its own. Let the state use its money elsewhere.8) If the program is truly effective why aren't insurance companies funding this program? Insurance companies have a lot of answers, and they collect a lot of data. They know where it rains and they know where it hails. 9) As mentioned earlier, I have witnessed time and time again storms generating to the west and once seeded by this project these storms have dissipated soon after. As an example, producers west of the seeded clouds receive 10" of rain and by the time it gets to my farm in SE Ward county I receive .10", or nothing. This program needs to cease immediately and this bill should extend to the elimination of the project. As a producer who depends on rainfall for financial sustainability, there should be no one more pro weather modification than myself, if it actually worked. If the program could be proven to suppress hail and increase rainfall as they claim, and if the budget dollars can be utilized efficiently, I could justify supporting this program. However, this is not true and has NOT been proven up to present. I offer support of this bill that funding should be ceased, the program eliminated and a fund set up for producers harmed by this program. I challenge you that this program is not the best use of taxpayer funds, and cannot be proven that it actually works. Respectfully, Tanner Vix 701-720-3960 tanner@vixfarms.com