Chairman Thomas and members of the committee I would like to thank you for being given the opportunity to testify in support of HB 1166 today.

My name is Roger Neshem and I farm with my wife mear Berthold as we raise our two young daughters. I helped lead the fight to end the longest continuously operated hail suppression program in the world that existed in Ward County. Our grassroots campaign won with a 9-1 margin in a 2020 vote.

Prior to the termination of the weather modification program in Ward County I had been appointed to the county weather modification authority. I tried to implement changes there such as suspending hail suppression operations during times of drought, spending more time seeding for rain enhancement (80-90% of seeding operations are hail suppression typically no matter how bad of a drought we are in), passing by laws and asking questions about results and how operations and decisions are conducted. We would fill buildings for meetings that use to take up a single small table at a restaurant. In 2017 after listening to concerns of area farmers the Ward County Commission voted 5-0 to suspend all operations until the drought was over, but the seeding continued to take place because the county commission had no power over the weather authority board, and they ignored the vote and kept on seeding. Our weather authority board chairman broke open meeting laws, lied to our county commission about having by laws and took zero input from constituents who asked for changes. This proved to everyone these weather authority boards have too much power and no accountability.

My experience with the Atmospheric Resource Board has been much of the same. No one ever addresses questions about, abusing buffer zones, excess flights, doing hail suppression while in a

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its cut. Taxpayers deserve much better than to be abused in such a fraudulent way and an ethics investigation is badly needed.

These are some of the bureaucratic issues with the program that makes HB1166 such a necessity. The program was intended to be open and take input from farmers about needs. The arrogance and lack of accountability with which weather boards and the ARB conduct themselves is wrong and they do not hold to the values the original program was intended to have.

Proponents of the program talk about how cheap it is and its high returns. The latest review of the program shows that it costs 40 cents per planted acre and in return it adds \$3.00 for hail suppression, \$9.19 per acre for a 5% rainfall increase and \$18.15 for a 10% rainfall increase. Over 40% of crop losses in the state are due to drought while less than 12% are due to hail and the numbers show rain enhancement is far more valuable to the state. Inexplicably weather authorities choose hail suppression 80-90% of the time over rain enhancement. 2016 marked the end of Kansas's hail suppression program after 12 of its 14 program members voted it out or had it terminated by county commissions. Today there are only 4 counties left conducting hail suppression in the US. All 4 of those counties are in drought plagued ND. It is worth noting that

no county has ever returned to the hail suppression program after it has left in ND.

We must remember all of this started based on rain enhancement that it could increase rain 20-30%. A new study was published in the Atmospheric Research Journal in 2022 attempting to measure the effect of hail suppression on rainfall. It compared precipitation rates from pre weather modification in the state to the 42-year modified period from 1977-2018. The paper showed a small precipitation increase in McKenzie County when compared to 3 control areas to its west and no change with another control area to its NW.



county farmers over \$141 million dollars. The numbers all double if hail is not suppressed to the degree which is claimed.

Ward County sits on the far eastern end of over 140 miles of cloud seeding. No storm system can hit ward county from the west or southwest without being seeded even though we overwhelmingly voted out of the program. The seeding buffer zone still extends into Ward County 6 miles where planes still seed.

The current weather modification program is unworkable due to conflicting needs of farmers, unaccountable weather authorities and its negative economic impact. The program brings useless conflict to areas it operates in. We non seeding counties deserve to have say over what goes on in neighboring counties that affect our way of life as men and women of agriculture. There are no fences or walls to contain weather modification. The effects travel far outside permitted counties. No one with the power to alter seeding programs will change them so we must thru a statute that gives surrounding counties the ability to protect their interests and rights against these all powerful weather authorities. House Bill 1166 gives us that ability we desperately need. The time has come for the super majority of counties who do not want weather modification to be allowed to protect their skies from weather modification. Please vote yes on House Bill 1166