HUGHES: Good afternoon, everyone. Welcome to the Natural Resources Committee. I'm Senator Dan Hughes. I am from Venango, Nebraska and represent the 44th Legislative District. I serve as Chair of this committee. The committee will take up the bills in the order posted. Our hearing today is your public part of the legislative process. This is your opportunity to express your position on the proposed legislation before us today. The committee members may come and go during the hearing. This is just part of the process as we have bills to introduce in other committees. I ask that you abide by the following procedures to better facilitate today's proceedings. Please silence or turn off your cell phones. Introducers will make initial statements followed by proponents, opponents, then neutral testimony. Closing remarks are reserved for the introducing senator only. If you are planning to testify, please pick up a green sign-in sheet that is on the table at the back of the room. Please fill out the green sign-in sheet before you testify. Please print and it is important to complete the form in its entirety. When it is your turn to testify, give the sign-in sheet to the page or the committee clerk. This will help us make a more accurate public record. If you do not wish to testify today, but would like to record your name as being present at the hearing, there is a separate white sign-in sheet for that on the table. That will be part of the official record. If you have handouts, please make sure you have 12 copies and give them to the page when you come up to testify. They will be distributed to the committee. When you come up to testify, please speak clearly into the microphone, tell us your name and please spell your first and last name to ensure we get an accurate record. We will be using the light system for all testifiers. You will have three minutes to make your initial remarks to the committee. When you see the yellow light come on, that means you have one minute remaining and the red light indicates your time has ended. Questions from the committee may follow. No displays of support or opposition to a bill, vocal or otherwise, is allowed at a public hearing. The committee members with us today will introduce themselves starting on my left.

MOSER: Hi, I'm Mike Moser. I represent the 22nd District. That's Platte County, Stanton County and a bit of Colfax County.

GEIST: Good afternoon. I'm Suzanne Geist. I represent the east side of Lincoln and Lancaster County.

HUGHES: And on my right.

GRAGERT: Good afternoon. Tim Gragert, District 40 in northeast Nebraska.

BOSTELMAN: Bruce Bostelman, District 23, Saunders, Butler and a majority of Colfax Counties.

HUGHES: Senator Bostelman also serves as Vice Chairman of this committee. On my left is our committee legal counsel, Andrew Vinton, and on to my far right is committee clerk, Mandy Mizerski. Our page today is Kaitlin-- oh, I'm sorry, Veronica. Very good. Thank you, Veronica. With that, we will move to the first item on the agenda, the appointment of Seth Harder to the Environmental Quality Committee--Council, excuse me. Mr. Harder, if you'd like to have a chair and please tell us a little bit about yourself, a little background and why you would like to serve on the Environmental Quality Council.

SETH HARDER: Thank you. Good afternoon, Chairman Hughes, and members of the Natural Resources Committee. My name is Seth Harder, S-e-t-h H-a-r-d-e-r. I currently reside in Plainview, Nebraska, but I grew up in Laurel, Nebraska, in the northeast part of the state. Some of you may recall the wagon wheel up there back in the day. I want to start by thanking the Governor and the director for this new appointment. I am currently the general manager for Husker Ag in Plainview, Nebraska, a 110-million gallon ethanol plant and the newly appointed CEO and president of Lincolnway Energy in Nevada, Iowa, a 75-million gallon ethanol plant. I have been with Husker Ag and in the ethanol industry since 2001. I currently have an associate's degree in agri business and a bachelor's degree in business administration. I feel that I'm a good fit for this position as energy and environment have always been at the forefront of my life's mission. Recently I ran into my high school science professor, which was a long-- I was with him a long time ago, and he recalled that even as an adolescent I was looking at trying to find ways to make clean, renewable energy back in high school. As the son and brother of professional auto mechanics, I'm very aware of how vital transportation fuel is to our world, but I'm also acutely aware of the dangers of more traditional fuels and have-have on our health and on our environment. During my time at Husker Aq, I developed a program in conjunction with the Nebraska Corn Board to install higher ethanol blend dispensers at 13 retail locations across the state. And my goal there is to try to teach people that we can have clean energy and clean air and boost our economy in Nebraska. I also have had the opportunity to bring a new emissions monitoring technology to-- to the Nebraska ethanol industry. We are among the

very first plants in Nebraska to install continuous emissions monitoring on our fermentation tanks back in 2015, and that's a technology that the department is supporting today and trying to get into plants. While I do not have a discipline in chemical engineering, it's a passion of mine, and I look forward to helping grow Nebraska's chemical and energy industries, but always with a keen eye on the long-term effects that our processing industries have on the environment. Thank you.

HUGHES: Thank you, Mr. Harder. Are there questions from the committee? Senator Moser.

MOSER: Do you see the environmental committee as judging the value of the environment versus what economic activity happens in the state?

SETH HARDER: I do believe that-- at least that would be my position as to balance it. I've only been to one meeting as my appointment is brand new, but I do believe that there is a balance there on the committee.

MOSER: Do you believe that ethanol is a-- is a higher value fuel since it's renewable and-- and reduces our reliance on carbon fuels?

SETH HARDER: Well, yeah. I mean, I think the biggest piece to what you said there is we really need to look at the total carbon emissions that come off of ethanol. And I know that we could get into quite a debate over that, but I'm-- I'm here to tell you, I've ran that plant since 2003 in northeast Nebraska and from day one, we've been tabulating how much energy we put into a gallon and what we take out, and it has always been a surplus of energy that comes from a gallon of ethanol. So today, Husker Ag is a low carbon fuel producer. We are certified in Oregon and in California. And, you know, our score is 66 when the benchmark is 79, and gasoline in California is benchmarked at 95 grams of CO2 per millgell of energy, so.

MOSER: Well, the reason I ask that is kind of for the benefit of our audience today. We have a pretty large environmental group with us today to talk about the importance of the environment. And since you work in an industry that balances that, I thought it would be a good time to show that those considerations are being taken. Thank you.

HUGHES: Any other questions from the committee? Have you had a chance to attend a meeting yet?

SETH HARDER: One meeting.

HUGHES: One meeting and first impressions of the--

SETH HARDER: I think it's really exciting, and I think that it's-it's kind of-- there's new data. There's data that we haven't had for the last hundred years surfacing. So it's-- it's time to maybe take a look at a few things and rethink what we're doing.

HUGHES: OK, very good. Any other questions? Seeing none, thank you, Mr. Harder. We appreciate your willingness to serve the state. Is there anyone wishing to speak as a proponent of the appointment of Mr. Harder? Welcome.

TROY BREDENKAMP: Thank you. Chairman Hughes, members of the committee, my name is Troy Bredenkamp, T-r-o-y B-r-e-d-e-n-k-a-m-p, executive director of Renewable Fuels Nebraska. We are the trade association for Nebraska's ethanol Industry here to speak certainly in favor of Mr. Harder's appointment to the Environmental Quality Council. As Mr. Harder indicated, his plant experience in the ethanol world is probably one that is to be looked at as a shining example of -- of being a progressive operator, yet certainly always keeping a keen eye for what's best for the environment and what's best for making a-making the product that he makes. And as a representative on that Environmental Quality Council, I expect Mr. Harder to be a great voice for that for that industry and also for that manufacturers voice to talk about that balancing act between how do we keep a healthy economy, yet always keep an eye on making sure we're doing things from an environmental quality perspective. So with that, I just wanted to put Renewable Fuels Nebraska on the record. To add to Mr.-- or to add to Senator Moser's point about some of the benefits that many people may not know, ethanol actually leads to about 39 percent reduction in tailpipe emissions, greenhouse gas emissions right now. One of the greatest markets for Nebraska's ethanol because we do produce such a low carbon ethanol product is the state of California. The state of California has a low carbon fuel standard that continues to ratchet down. They sell-- this is a little-- this is also something that many people don't know. The state of California sells more E85 than any other state in the country, because that's one of the ways that they're meeting their low carbon fuel standard is with American made corn-based ethanol. So it's a great product. It's a win-win for everyone. It's renewable, better for the environment. And again, I just want to speak to our support of Mr. Harder to the EQC.

HUGHES: Thank you, Mr. Brendenkamp. Are there any questions from the committee? Senator Moser.

MOSER: Just a quick one. Define E85 for the people that are here.

TROY BREDENKAMP: So E85 is a product that is 50 percent petroleum, 85 percent-- up to 85 percent ethanol. It can be as low as 70 percent. It requires a flex fuel vehicle to utilize, so if you have a vehicle that you've bought over the last 10 to 15 years that has a yellow gas cap on it, that is a flex fuel vehicle, meaning that that is a vehicle that is certified to utilize E85, so how that yellow gas cap be looking for an E85 pump because you're going to save probably 30 to 40 cents a gallon just buying E85.

MOSER: And emit less carbon while you're at it?

TROY BREDENKAMP: A lot less carbon.

MOSER: But it's a blend between gasoline and alcohol.

TROY BREDENKAMP: Correct.

MOSER: And the ethanol that we produce in Nebraska is primarily made from-- you can answer-- fill in that sentence.

TROY BREDENKAMP: Made from our corn-based-- made from our corn. Actually four rows in ten or 40 percent of Nebraska's corn crop begins its journey at a Nebraska-based ethanol plant. So about 40 percent gets processed there to begin with. We harvest the starch, the-- to make the ethanol and then the rest of it goes back in to a feed product known as distillers grain. We do-- also take out some corn oil and are now converting that to biodiesel. So there's a lot of utilization going on there.

MOSER: OK. Thank you very much.

TROY BREDENKAMP: Thank you.

HUGHES: Thank you, Senator Moser. Any other questions? Seeing none, thank you for your testimony, Mr. Bredenkamp.

TROY BREDENKAMP: Thank you.

HUGHES: The next proponent of the appointment of Mr. Harder. Welcome, Senator.

LORAN SCHMIT: Good afternoon, Chairman Hughes, members of the committee. My name is Loran Schmit, L-o-r-a-n S-c-h-m-i-t. Pleased to see my Senator here on as member of this committee and hope you can put up with Senator Hughes. I go back a long way. I knew his father and his grandfather and so I hope you fill their shoes, Senator, and you've done a good job so far. Again, I want to just say very quickly, I stand in strong support of Seth Harder as a member of the Environmental Quality Council. It's almost 50 years since I introduced a bill that created Environmental Control Council. At that time, my legislative colleagues criticized me substantially, there's no way you can put 16 persons on a council and make them work effectively. But it's kind of like putting a load of cattle on a truck heading down the highway, as they all kind of juggle around and get settled out, they work pretty well together, and we had a -- had a very excellent operating Environmental Council and it was not easy to pass that bill at that time. Farmers, ranchers, businessmen were very apprehensive about environmental issues, and I was bantered as somewhat of an enemy in business by the business community for even considering the introduction of the bill. Thankfully, Senator-- or Governor Exon introduced a bill which was liked less than mine was, and since both bills were heard by my committee that year, I managed to put my bill out and kill Senator-- Governor Exon's bill, and the Council has operated very exceptionally ever since. It's gone through some tough times, times when they were criticized, but they've always bounced back. They've had good leadership, good membership, and I want to say that Seth Harder has been one of our better ethanol plant managers for many years. I've known him for almost 25 years and I also introduced a bill that year that created the Nebraska Ethanol Board and Nebraska Legislature passed legislation that year that took the lead out of gasoline three years before Congress outlawed lead in gasoline. The Nebraska Legislature has a long history of being active in environmental issues and I commend this committee and my many successors in the Legislature for their taking a strong position on environmental issues. I remember hauling cattle to Omaha in the early '50s, and we observed the packing houses dumping raw sewage in the Missouri River, and we knew that it had to stop and it had to stop and I looked forward to working with Seth Harder and other members of the committee to continue making the state of Nebraska a better place in which to live and work and the council will assist all of us in doing that. And I want to thank the members of the committee for having a chance to speak here today and commend you for your good work and keep in touch. Thank you very much.

HUGHES: Always a pleasure, Senator Schmit. Any questions? Senator Geist.

GEIST: Yes. Thank you, Senator, for being here. I do have a question about what your thinking was in having a 16-member board.

LORAN SCHMIT: 16 member?

GEIST: Uh-huh.

LORAN SCHMIT: The opposing bill that the Governor had drafted had a seven-member advisory council and that gave the director virtual dictator control over what happens. So my bill encompassed all aspects of business, industry, labor, environment. Everyone had a voice. And the opposition to the bill, which came principally from my farmer friends, was that you can't have these environmental people running the business. They'll put us out of business. And my objection to their comments was that you have to learn to live with your neighbors, have to be good neighbors and you have to listen to everyone. And so as you can see, the council is a broad range of interests. And I've listened in an area like this when persons were nominated to the board and might have caused me some heartburn, but once they sat on that board for a while, they all learned to work with and respect each other and listen to each other, and they have made so much progress. I'm an aerial applicator. I was an aerial applicator. I sprayed crops from the Rocky Mountains to the Mississippi, from Texas and Canada. And I can tell you that Nebraska is one of the cleaner states in this whole area. And I saw some problems that developed where [INAUDIBLE] were dumped into rivers and streambeds and that sort of thing, all sorts of abuse of the environment that had to be terminated or we would not have enjoyed the kind of state we have here today. And so again, we have had excellent administrators and participants on the board and I think they've all learned to work very successfully together.

GEIST: Thank you and thank you for your forethought and vision.

LORAN SCHMIT: Thank you.

HUGHES: Any additional questions? Seeing none, thank you, Senator Schmit. Always a pleasure to see you. Any additional proponents for Mr. Harder? Any opponents to Mr. Harder's appointment? Anyone wishing to testify in the neutral position? Seeing none, we do have a couple of letters in support of Mr. Harder's appointment to the Environmental

Quality Council, and we will close that hearing and we will begin our first bill today, LB845, Senator Groene. Welcome.

GROENE: Thank you, Senator Hughes, for letting me go first. I want to leave before the environment in this room changes. I bring again my local issue, the N-CORPE situation, where we in Lincoln County are-have put a huge burden on us because of a project there that -- and it also has done it to Dundy County because of a state's responsibility of a river compact with the state of Kansas on the Republican River. So what I did, you know, I brought a bill last year, but in consultation with the AG's Office and NDR and private legal counsels, we were going to bring amendment last year and I just said, well, no, we're gonna-- we're gonna just make the bill exactly the way it should be without any amendments, so I brought another bill this year and it's LB845. A few things to note regarding the content of this bill while LB606 create-- created a new section of statute, LB845 amends existing statute Section 46-715. LB845 is also significantly more concise than previous versions of this legislation. Finally, LB845 contains new language indicating continued pumping of groundwater after the sale of real property will be subject to the provisions of subsection (1) (a) of Section 46-739 of existing law. This subdivision allows NRDs, presently all NRDs to allocate the amount of groundwater that may be withdrawn. This language included to ensure that existing allocations are unaffected by the sale of real property. The two NRDs involved have either taking bailing out the whole state, the Lower Republican-- I mean the Middle Republican and the Twin Platte have put allocations on the project because they are the ones accountable for the water. And we wanted to protect those allocations, protect the state, and make sure nobody over pumps, because the water is a pool of water, not just under that property that they are accountable for. I want to remind the committee what -- what passage of this bill would mean for agricultural producers and tax purchases southwest Nebraska. It was clear guidance that NRD board members of the affected NRDs that they can sell the land without jeopardizing the augmentation project. It quiets -- they all inform naysayers' argument that selling land to put the argumentation project in jeopardy. It follows -- we've had three court cases. It takes what the findings were and what common law is and-- and clarifies the assumption already by most that they could sell the land, but it puts it in statute. Selling the land could bring up to 20 million in revenue, along with another 15 million in debt service costs, because the mortgage says if you sell the land, you have to pay down the debt. Presently, the total cost of the bond payment is 86 million of principal and a principal of 86 million-- of

principal is 142 million. I don't know what this means, but I think it was a-- we got 86 million plus interest is 142 million. Selling the land could drop the cost down to 107 million over time until the 2039 final payment date, which is if you're a fiscal conservative, is what we're all about, cut the cost. Keep up the taxpayer, keep their money in their pocket. Selling land would eliminate nearly-- this was an old number that I estimated from the previous year was \$1.2 million of annual operating cost. They actually had a handout to show you the actual cost of their budgets. it was over 1.3 last year and it's going to be over 3 million next year. And I understand some of that is going to happen anyway, but it could be contracted out for the pipeline service, but we eliminate pickups, salaries, office expenses, utilities and travel down here to testify. So anyway we'd eliminate that, that's more money saved by the farmers who are very-- irrigated farmers in southwest Nebraska who are already overtaxed. And if we can get their \$10 an acre down to six or seven or five by being more effective and more efficient and sell the land, that's the goal here. The groundwater versus -- the groundwater versus river flow price is far from over. The Twin Platte NRD recently was told they need to come up with another 20,000 acres of annual Platte River flows by 2027. My NRD, my biggest one isn't-- isn't even close to where they need to be. The NR-- the Republican ones, they have worked with Kansas and their future is looking better, but we got a big problem in the Platte River. If we encourage NRD to sell the land and reduce their bond debt now, now I'll make available the occupation tax for future answers. We will help not only the citizens of western Nebraska, but also the state of Nebraska. Putting land back in production would give southwest Nebraska an economic boost by lowering the tax burden on economically hurting farmers and putting 20,000 acres of farmland back into private hands. We'll buy agriculture products, pay property taxes. It won't be double taxation as it is now. It just puts in the law all of the outlying factors of what is assumed that you could sell the land, but right now N-CORPE is buying more land because they believe they have to have enough land with the old common law that they can only use enough for beneficial use on the land, but pump it into a creek instead of using it on the land. And what we're saying is, no, you don't need to do that. We're going to -- we're going to put augmentation in the same field as public purpose as domestic and rural water law is and industrial water law is that it's not tied to the land. It's not tied to the common law. And that's all we're doing. I'll tell you how confusing it is. A year ago, the Attorney General said this is all fine. Let's do it now. Now they're all worried about a new department ag person in Kansas and somebody said if they stuck a

domestic well next to it, it could shut the project down, it needs to be in law. It needs to be in law because even the lawyers we trust are confused. As far as if they sell the land and somebody puts it -- would buy the land and put his livestock well next to it, cities already around their municipal wells, they have zoning codes that you can't put a domestic well or anything within a half mile or something of the well. So that's-- that is a scarecrow tactic and a, you know, false tactic that we can't make statutes and we can't run the state by fear of the something that is-- the odds will never happen. And even if we-- they sold the land and somebody's lawsuit, there is no Supreme Court justice in the state of Nebraska that's going to ever rule to shut down 300,000 acres of irrigation. It's just not going to happen. Right now, we're at risk of lawsuits because of the confusion. Let's clear up the confusion, put it into law. And always remember, this is "may", it's not "shall". If we do this and give guidance to those, those NRDs that they can sell the land, we have a 2-2 split. We have a range war out there. We have a 2-2 split between two NRDs that are actually and the farmers, it's actually their groundwater and two NRDs who are prospering from it. You give those two NRDs firm notice that that -- what the project not to expand in their area on land ownership, that yes, statutes back them up that we don't need to sell the land. Right now, they're trying to put windmills out there. This is escalating in the areas that we never intended NRDs to do. They want to put windmills out there on public land and that's a ongoing fight. So this is not just N-CORPE, this is also in Senator Hughes' area on the Dundy County where this did take effect, cut the costs. Anyway, I didn't ask anybody to come down and testify. All of you have been on the committee before, you heard from my farmers. You know their opinion and they can't afford the gas money because they got to pay ten bucks an acre occupation tax. But they didn't come in today, because you've all heard it. You were in McCook. Thanks to Senator Hughes' hearing in McCook, you heard a lot down there too. You know the situation. I don't have to rehash it. I would appreciate if you'd vote it out of committee. It's good legislation. It's common sense legislation. It's good government. So, anyway, thank you. Any questions?

HUGHES: Thank you, Senator Groene. Are there any questions from the committee? Seeing none, will you stay to close?

GROENE: Yeah.

HUGHES: OK.

GROENE: I have to find out what somebody says, you know.

HUGHES: OK.

GROENE: But if somebody does testify, it's not because I asked them that. They have a right to come in and testify.

HUGHES: Understood. Proponents of LB845? Anyone wishing to speak as a proponent? Seeing none. Anyone wishing to testify in opposition to LB845? And if you wish to testify, if you'd please come populate the front row so we can keep things moving along, that would be great. Welcome.

DON BLANKENAU: Good afternoon, Mr. Chairman, and members of the committee. My name is Don Blankenau, D-o-n B-l-a-n-k-e-n-a-u. I'm an attorney in private practice in Lincoln with over 30-years experience in the area of water law, including service as the legal counsel for the Department of Water Resources, which is now the Nebraska Department of Natural Resources. I provide my testimony today in opposition to LB845 on behalf of the Nebraska Association of Resources Districts. The association provides support and representation to Nebraska's 23 natural resource districts, or NRDs, a number of which have developed augmentation projects. While LB845 was drafted with N-CORPE in mind, the association believes that its implications should be considered in a broader light of how it could impact other augmentation projects in Nebraska's overall water management system. If you recall, last month, Director Fassett testified in opposition to LB802 which was really just a bill to codify common law. Director Fassett at that time emphasized that Nebraska water law is working and that any change in statutes created potential problems and urged that this body not advance any bill unless all of its stakeholders could come to agreement on-- on common language. The association believes that those same concerns exist with respect to LB845, but are-- but are actually amplified because in this case, augmentation projects are specifically targeted by this legislation. And as you know, I think from talking to Director Fassett, augmentation projects are now essential to Nebraska's compliance with interstate agreements. My written testimony contains a fairly lengthy list of concerns that we believe need to be addressed in some form or another before this bill is advanced. But suffice to say that there is no compelling statewide interest for this legislation at this time, and for that reason, we would urge the committee to not advance it. And with that, I have nothing further.

HUGHES: Thank you, Mr. Blankenau. Are there any questions from the committee members? Senator Gragert.

GRAGERT: Thank you, Chairman Hughes. Thank you for your testimony. First paragraph, last sentence I'm interested in, a number of which have developed augmentation projects. How many augmentation projects do we have in Nebraska?

DON BLANKENAU: I believe there are presently three and probably another four that are in the planning stages.

GRAGERT: Okay. Thank you.

HUGHES: Any additional questions? Senator Geist.

GEIST: On those augmentation projects, is the ratio of land to water the same as what you have on N-CORPE? Is that a clear question?

DON BLANKENAU: Yeah, I know what you're saying. Is the volume pumped for the augmentation commensurate with the amount of land?

GEIST: Yes.

DON BLANKENAU: And I don't know the answer to that. I believe generally, yes, but specifically I couldn't say off the top of my head.

GEIST: I'm just curious if there is a formula that's used. And I'm--I'm sure there-- I mean, there has to be. You have to have-- know how much land given the thought process that's going on here that you would need given what you're trying to transport, but I was just curious if you knew what that was.

DON BLANKENAU: Yeah, but if you look at the Supreme Court precedent, it just speaks in beneficial use on the surface land.

GEIST: OK.

DON BLANKENAU: What that means in the world of surface water, for instance, by statute you'd have up to 3 acre-feet of water per acre per year. So I think that's probably a pretty generous yardstick, literally. It's a substantial quantity of water.

GEIST: OK. But is-- but surface water is measured differently than ground water, right?

DON BLANKENAU: Well, no.

GEIST: It's not? OK.

DON BLANKENAU: So by statute, the Department of Natural Resources may grant an appropriation for up to 3 acre-feet of water per acre of land. So the presumption has been-- and that's a very old statute. The presumption is that that's essentially the measure of what could possibly be put to beneficial use on that land.

GEIST: OK.

DON BLANKENAU: And I think that's a-- a good surrogate for groundwater.

GEIST: Still learning this stuff, so.

DON BLANKENAU: Me, too. [LAUGHTER]

GEIST: OK. Thank you.

HUGHES: Senator Gragert.

GRAGERT: Thank you, Chairman Hughes. Following up on that, do you know how many total acres are currently under augmentation projects in Nebraska?

DON BLANKENAU: I do not. N-CORPE is about 18,000 acres. And there are others who are-- follow who-- who may have that information.

GRAGERT: Thank you.

HUGHES: Any additional questions? Seeing none, thank you, Mr. Blankenau.

DON BLANKENAU: Thank you.

HUGHES: Next opponent to LB845. Welcome.

GEORGE CUNNINGHAM: Thank you. My name is George Cunningham, G-e-o-r-g-e C-u-n-n-i-n-g-h-a-m. I serve as the conservation chair for the Nebraska Chapter of the Sierra Club. I'm here today to voice opposition to LB845. This bill would fundamentally alter one of the bedrock tenants of water law in Nebraska, which grants landowners only a right to use groundwater on land from which it has been extracted. The exception until relatively, recently was only for municipal water

systems. Unfortunately, legislation allowing augmentation projects, particularly inner basin transfers of the water by augmentation projects, places cracks in the system. Our chief concern with LB845 is that it's severs the link between land ownership and water rights, potentially creating water as an assured article of commerce. Currently, Nebraska does not recognize an absolute ownership in water. It grants landowners only a right to use water through a permitted system on land from which it was extracted. Again, the exceptions being for municipal use and the regional augmentation projects. Thus, the landowner does not own the water, only a conditional right to use. This right, however, is not absolute since existing law in Nebraska allows water rights to be traded and sold, as well as allowing inner basin transfers. These allowances along with the potential passage of LB845, which again severs land rights from water right, creates the potential for a commercial open market system for water in Nebraska. Although LB845 specifically addresses augmentation projects, we see no reason that a private entity would find LB845 a special case of legislation. Challenging this in court, the Supreme Court finding in favor of the private entity. Once a water right has dissolved the land rights, the door is thrown open for the complete commodification of water in Nebraska ultimately leading to a water export market. I will remind the committee that the nation's second largest individual landowner, Ted Turner, owns more than 500,000 acres in Nebraska. Much of that overlays the deepest parts of the High Plains aquifer. What happens to those lands after his passing is anyone's guess, but let's hope it is not acquired by someone who realizes an immense opportunity to export water out of Nebraska for profit via the passage of LB845. Again, the Nebraska Chapter of Sierra Club stands in opposition to LB-- excuse me, LB845. Thank you.

HUGHES: Thank you, Mr. Cunningham. Are there any questions from the committee? Seeing none, thank you for your testimony. Next opponent.

JASPER FANNING: Thank you, Chairman Hughes and senators, members of the committee. My name is Jasper Fanning, J-a-s-p-e-r F-a-n-n-i-n-g, and I'm the general manager of the Upper Republican Natural Resources District. Our districts, the district that constructed the Rock Creek Augmentation Project, and then we were also one of the four members of the N-CORPE project, so we have a little bit of experience with this, and, you know, I think Senator Groene has said he's trying to make things more clear, but to me, there's nothing more clear than the precedent set by the court that we operate under today. And in common law is-- is well-defined and we know what that is in Nebraska. And

we've had other bills that have -- have been brought forward this year that maybe thought about trying to put common law into statute. And obviously, you know, the Attorney General's Office and Director Fassett weren't too thrilled with-- with changing the law and neither are we. And with respect to unintended consequences and certainly Senator Groene's bill, LB845, as drafted this year is-- is a step backwards, I think, because it -- it's not very clear as to what your rights are with respect to augmentation water. It says that you can use water as you could before once you sell the land. Well, what you could do before was to use a commensurate amount of water as to the amount of land that you owned. So what -- what does that mean when you no longer own the land? And quite honestly, our-- our district is just not interested in selling the land. These augmentation projects, although they've been working for a few years as designed, at this time were new enough into this and these agreements with Kansas, we've heard talk. Kansas is actively trying to renegotiate our agreements. And-- and certainly the Platte River, you know, with the Twin Platte NRD, we're just now, you know, this year is likely the first year that they will operate the project for the Platte River. And in those agreements, even though they've been in place for a while, the implementation of those is very new. And our obligations are somewhat ongoing and constantly changing. And to sell land at this time, that may end up being more land and more augmentation capacity than what we need, maybe it's not enough, the N-CORPE project, the pipeline to the north was constructed in a way that it could be used as recharge to divert excess flows from the Platte. Now, there's no plan right now to actually put those pumps in, but it is designed for that. And it's-it's quite honestly just far too early in this process to start selling land and tying our hands as to what our future-- future potential and opportunities of utilizing the resources that we have for compliance in the Republican and in the Platte. And so we would encourage you not to advance LB845 at this time. Thank you.

HUGHES: Thank you, Mr. Fanning. Are there questions from the committee? I guess I have one. Senator Groene said that N-CORPE is actively buying more land, is that expanding their footprint? Is that correct?

JASPER FANNING: Well, we had eight center pivots that were east-- east of the main well field. Some, they were east-- they were east of Highway 81 or 83. So quite a ways away from the well field and the-what we did was we in part we were able to trade essentially through transactions and sell those to a neighbor and take and-- and replace

that with some of their land. And then we're also utilizing some of those funds to purchase an additional pivot that borders our main well field. And part of that is -- is due to the, you know, the desire to -to maintain enough certified irrigated acres that were retired from irrigation to -- to justify the amount of water that we've-- that the districts have allocated and pumped. The Twin Platte and Middle Republican both basically took the eight-- the number of acres that were retired from irrigation and used those in a-- in a fashion to calculate the allocation they placed on N-CORPE. So those eight pivots were originally included in that calculation. So we need to -- if -- if those eight pivots stay in irrigation, we need to retire roughly eight pivot's worth to maintain those allocations with the two districts. And we're trying to just use that for-- for balance. And part of that is tied to our-- our bond when we sell-- you know, essentially sold those eight pivots, we have a period of time to reinvest those in like property prior to or alternatively to-- to pay back that money to refee some bonds. And so that's all that's going on. We're essentially trading some land to our benefit to have the land that we retired closer to the actual pumping that's occurring into the project.

HUGHES: OK. Thank you. Any other questions?

GRAGERT: One quick.

HUGHES: Senator Gragert.

GRAGERT: Thank you, Chairman Hughes. Are you looking to put wind towers on this 18,000 acres?

JASPER FANNING: We've been approached essentially since the time that we bought the project by different entities looking at either wind or solar projects and-- and inquiring about leasing our land just as they lease land from private landowners. And so we are currently, you know, we have a proposal that we're listening to from a prospective renewable energy company at this time, but we don't have any plans at this time.

GRAGERT: Thank you.

HUGHES: Are you leasing the land for anything else currently?

JASPER FANNING: Well, we're-- we're currently leasing the land for grazing. And Senator Groene, I think, said that the land would be put back into production. Well, the land is already in the same production

it could be put into, it's being grazed. That's-- if it were sold to private landowners, that would be the primary use of the land would be to be graze. So his legislation, I don't think allows any different private use of the property than what's already occurring.

HUGHES: So you're currently leasing the land to gain income to help with operation and pay the debt?

JASPER FANNING: Absolutely. And as the grass gets established, that income is-- is going up every year because we're able to get more utilization out of the property as the grasslands get established.

HUGHES: OK. Thank you, Mr. Fanning. Are there any questions? Seeing none, thank you for your testimony.

JASPER FANNING: Thank you.

HUGHES: Any additional opponents? Welcome.

ANSLEY FELLERS: Thank you, Chairman Hughes, and members of the Natural Resources Committee. My name is Ansley Fellers, and I'm here today on behalf of the Nebraska Farm Bureau, the Nebraska Corn Growers and the Nebraska Soybean Growers, and I've also handed in a letter on behalf of the Nebraska Cattlemen testifying in opposition to LB845, which seeks to change common law as it applies to the connection between land ownership and the use of groundwater. Currently, groundwater law is based on the principle that the groundwater belongs to the public and the use of the water is attached to ownership of the overlying land. While it's the prerogative of the Legislature to change common law, great care must be done when doing so. This bill is aimed at one project, N-CORPE, but the changes proposed will apply statewide. Other existing and future augmentation projects will be touched by this change in law. Nebraska Farm Bureau members strongly oppose this idea, in part because it cracks the door for future Legislatures to look beyond NRDs and augmentation projects and allow the separation of the use of water from owning the overlying land and for other purposes. We would encourage the committee to evaluate -- evaluate whether the change proposed in LB845 is warranted. We don't believe it is. Many of our members who are irrigators in the Republican River basin have reduced their water usage, paid occupation taxes and rely on N-CORPE to assure Nebraska remains in compliance with the Republican compact. LB845 can lead to more litigation surrounding N-CORPE, put the project at risk and result in greater harm to the basin. In 2002, the Legislature created the Water Policy Task Force-- created a Water

Policy Task Force to evaluate the effectiveness of and make recommendations on any needed changes to the law governing the integrated management of surface and hydro-- hydrologically connected groundwater. Any notion of separating ground-- groundwater from the overlying land and creating a separate right was quickly dismissed. In December, Nebraska Farm Bureau members adopted policy which directly opposes the intent of LB845. Thank you for the opportunity to offer testimony. I'd be happy to answer any questions you might have.

HUGHES: Thank you, Ms. Fellers. Are there any questions from the committee? Seeing none, thank you for your testimony. Additional opponent. Seeing none, oh-- Welcome.

NELSON TRAMBLY: Thank you. My name is Nelson Trambly, N-e-l-s-o-n T-r-a-m-b-l-y. I'm here to testify and I'm opposed to LB845. I believe this legislation is nothing more than Senator Groene's continue to attempt to force the sale of the N-CORPE property. Before the N-CORPE, Nebraska failed to comply with the Republican River Compact over a two-year period. The U.S. Supreme Court ordered the state of Nebraska to pay Kansas over \$5 million. Since the N-CORPE projects started nearly six years ago, the state of Nebraska has been in compliance with the Republican River Compact. This bill only creates concerns about the future of N-CORPE and the ability to use it -- to use the project. N-CORPE benefits the farmers, the taxpayers and state of Nebraska. The project is working as it was an intended to. Senator Groene retooling -- routinely says that the bill only provides the optimum for the sale of the land. He says money could then be used to pay down N-CORPE bonds. Here's the deal. If the land were sold now, it would provide 25 cents for every dollar spent purely monetarily terms that grant a 75 percent loss for taxpayers. Selling the land as Groene advocates at a 75 percent loss is a ridiculous and robbery to the taxpayers. The bill should not be supported because -- because N-CORPE is working to keep farmers in business and the state of Nebraska in compliance. Thank you for your work and your time. I would take this opportunity if you have any questions.

HUGHES: Thank you, Mr. Trambly. Any questions from the committee? Seeing none.

NELSON TRAMBLY: Thank you.

HUGHES: Thank you. Any additional opponent? Welcome.

WALTER GRAEBER: Thank you for having this opportunity to speak in opposition to this bill. My first name is Walter, W-a-1-t-e-r, last name. Graeber, G-r-a-e-b-e-r, 1801 B Street. Apartment No. 2, Lincoln, Nebraska. I find the proposition of this bill to be very one-sided and to affect positively a small number of people. If we're wanting to keep the water access and rights of the state of Nebraska in the public interest, it should not move beyond this committee. I would love to hear from any committee members if you feel that there are positives that outweigh this negative public interest and to speak. I know not in this setting, but in other settings, because this is a single person coming forward to protect a small number of interests that, again, does not positively affect the good of this state. I came to give this testimony later on, but I will be going back to work and wanted to make sure that we're protecting the assets of the state in land and water and climate. Thank you for your time.

HUGHES: Thank you, Mr. Garber?

WALTER GRAEBER: Graeber.

HUGHES: Graeber, I'm sorry, there we go. Any questions from the committee for Mr. Graeber? Seeing none, thank you for taking-- oh, Senator Geist.

GEIST: No, I would just make a comment. I don't always agree with Senator Groene on all issues, however, I will say in his defense, he is-- there are-- he did not ask his proponents to come today. And last time we heard this bill, the room looked like this and most of the people testifying were on his side.

WALTER GRAEBER: That's great.

GEIST: So I, just in his defense, he is-- he is speaking for many people who are in his district. So he is doing his-- his duty as a-- as a senator. So, but I can appreciate how you can see that it would look differently today, but-- but just so you know.

WALTER GRAEBER: Thank you. Am I able to reply to that?

HUGHES: Sure.

WALTER GRAEBER: I do understand that there are individuals that Mr. Groene is representing, and I appreciate him coming forward on their behalf. I again feel that is a small number of individuals compared to

the water that all of us have the right to protect. And those small interests should not go above the water of our state.

GEIST: Understood.

WALTER GRAEBER: Thank you so much.

HUGHES: Any additional questions for Mr. Graeber? Seeing none, thank you for your testimony. Any additional opponents to LB845? Seeing none, anyone wishing to testify in the neutral capacity? Welcome, professor.

ANTHONY SCHUTZ: Hello. My name is Anthony Schutz. I teach at the University of Nebraska Law School. I'm an associate professor. Anthony, that's A-n-t-h-o-n-y S-c-h-u-t-z. I specialize in water and agricultural law issues. The reason I came down here is to renew my third plea for a permit mechanism that would securely define the rights associated with augmentation projects. There is nothing that is clear about the legal rights that are being utilized on the N-CORPE project or Rock Creek or any of the other augmentation projects. At best, we have a planning provision in the Integrated Management Act when combined with a provision that allows for burying pipe and building projects that has been utilized as the basis for this, this particular right. When people draw this link between land ownership and the volume of water that can be pumped that link is-- is tenuous at best. I actually don't see anything in the case law that would require that sort of land ownership, but at the end of the day, it's just not clear. And that's a strong argument in favor for legislation that would clearly define or create a process for clearly defining the rights that could be utilized in an augmentation project. It's important, maybe perhaps not for N-CORPE or Rock Creek, but I think it's important for further drought mitigation planning in the eastern part of the state as we move forward with climate change, which is the subject of the next-- next bit of time that you guys are going to spend. We're trying to come up with strategies for dealing with significantly changing flows in the Platte River. Some of that may involve pumping water and dumping it in the Platte. It, at least it's currently envisioned by a lot of the folks that come up here in order to do that, whoever wants to run those augmentation projects needs to buy a very large chunk of land. That stands as a barrier for augmentation projects and drought mitigation planning. I would encourage -- I don't know if that's necessarily a barrier, but I would encourage you to remove that barrier through some sort of a permitting process that could be utilized for augmentation projects. That's

basically all I have. If you have questions about the water law or anything along those lines, I'd be happy to offer them.

HUGHES: Thank you, Professor Schutz. Senator Bostelman.

BOSTELMAN: Thank you, Chairman Hughes. Thanks for being here today. Curiosity question-- do you have very much-- do you communicate much or worked very much with your counterparts? I'll say other universities in Colorado, Kansas, at K State, K-U, Colorado State, Colorado. Do you all-- in this issue specifically, do you collaborate, intermarriage, or have a debate in some areas on this-- on this specific topic?

ANTHONY SCHUTZ: Water law tends to be somewhat unique to each state, I do-- I am a part of a foundation called the Rocky Mountain Mineral Law Foundation, of which law professors from all across the country are involved. Augmentation projects like what we are seeing in Nebraska are unique just because of the resource base that we have, these deep, very set-- very, very-- these large volumes of water that we have underground, given the geographic distribution of them in relation to the rivers and the compacts that we have really allow for fairly unique kinds of project. Rock Island-- or Rock Creek and-- and N-CORPE are just really some amazing projects just that-- it's like lightning struck in those places that allows us to do those sort of things. So a collaboration with other folks really doesn't get us very far because their resource bases are so different. They find themselves in such different situations, but I do speak with them from time to time, yes.

HUGHES: Thank you. Any additional questions? Seeing none, thank you for your time today.

ANTHONY SCHUTZ: You're welcome.

HUGHES: Any additional neutral testifiers? We do have one letter of support and several letters in opposition. Senator Groene, you're welcome to close.

GROENE: Thank you. I'll counter some of what you heard. Mr. Blankenau said there was multiple projects. Thank you, Senator Geist, there's three, two of them own land, one does not. Tri-Basin has one where they went out to a farmer and put a well in and made it a lease agreement that they could-- and they pump. In that area, they don't have any limitation on pumping like in our area, so they just pump. And they're using that quarter of land from that farmer's rights to

pump and it's like 2,500 acre-feet. But that's way above normal of what would be beneficial use on that guarter of ground. So there is no rules. There is no tie to beneficial use and augmentation projects. That was the Tri-- I believe it's the Tri-Basin. I'm pretty sure that was the name of it, but by Holdrege. The Sierra Club-- Sierra Club should have done their research. Right now, if some-- if they and somebody interpreted that said well, look at here, in Nebraska you can buy some land and you can start pumping water and you can hide behind the beneficial use of that land and pump as much as you want and you can transfer it off the land. It's open. What my legislation does is closes Pandora's box. This is only augmentation. It closes it. For that instance, of two projects that have gone about the way of buying-- the reason they bought the land, folks, is because we're limited as senators. Why we're out there, were limited to how much water can be pumped because the whole basin is under-- you've got to account for every drop. So they thought the best way to do was buy the land, retire the irrigation off it, offset it, the augmentation by retiring the irrigation. That land will never be in irrigated again. Both of my NRDs said it. Remember, the other two NRDs have no say in what happens to that land. It's-- it's the Middle Republican and the Twin Platte. And they've said there's no way that'll be irrigated again. So the individuals that came up here and said we're losing money if we sell it, it's a loss leader, folks. It will never be-- if you sit on the asset and hope that someday you could sell it for irrigation, it will never happen. It is what it is. Cut your losses, sell it, pay down the debt. That's what a businessman would do. Sometimes I wish government would act that way. So the Sierra Club should be supporting this because it closes Pandora's box. And the other one was Mr. Graeber, I don't know why he came here, but slavery -- slavery would be in existence if we ignored the minorities' rights. This country has always taken care of the minority, always. To say that is just un-American, I've got to say it. Anyway, Judge Cassel, I'll always bring this back as to what I just spoke of it. When Judge Cassel gave his concurring Opinion on the Upper Republican's Rock Creek project, he ended by this: But only the Legislature is empowered to determine whether current law is adequate or whether the law should be changed to balance the competing public interests differently. We have a competing public interest here. We have the state's interest. We have the NRDs' interest, and we have the citizens' interest of Lincoln County and southwest Nebraska. We have got to empower them to take on the bureaucracy. And I can see at least everybody on here has taken on the bureaucracy of public education in our LB874-- LB974. So when you get all the barrak-- bureaucrats coming

up here and their hired guns telling us what to do, you know, we don't represent them. We represent the people. And the people want the water rights protected. LB874 protects the water rights for the future of southwest Nebraska so it doesn't get abused for the state's interest. The state looks at this as a compact that -- that the burden is on one county, Lincoln County, two NRDs, that we're bailing out the state. And the state needs to step forward and say, let's ease the burden on Lincoln County with the tax cost of operating this project and the land use. As to Mr. Fanning's comment about it's already being used for-- for personal purpose-- practices by-- because they're leasing the land, let me tell the difference. That lease money is then used to fix the fences, to hire employees, to buy pickups. The farmer owns the land, the rancher owns the land, he hires the employees. He fixes the fence and he buys the pickup. There's the difference. It's called tax relief. This is a no brainer. This is good, solid government, it's been vetted. You heard the professor. I didn't ask him to come, but you heard him, all this talk about the common law, it is so vague. It protects nobody. Statute protects the citizens and the state of Nebraska. This statute needs to be passed. Mr. Fanning said they did not plan to sell the land. That's fine. This is may, this is may. This gives the ability for two conflicts in the United States, two set groups of citizens to say, we want to do this, we don't want to do this, to be on the even keel on the same playing field and it will stop the windmills. Passing this law will stop the windmills because it will empower my two NRDs to say no. In the future, our plan is to downsize. Now listen, they don't have to even sell all of it. They could start piecemealing it off as the market changes on the outerbarry-- out of fringe because people want to buy the land. They sold eight quarters. They're hustling over-- over-- overbidding for land because a lot by location make it unbelievable bids to farmers around there to sell them their land that no common sense free market farmer would ever bid that kind of prices. But it's not their money, it's your tax dollars that they're using. So anyway, I'm not going to push it. I want it -- I would like it out of committee. So if you guys could come up to me and tell me how you plan to vote, I might even consider to do a priority motion or at least get it on the floor. It's a debate that needs to be heard by the people in Nebraska because this is serious business. This is our ground water. It is the most precious thing we have in the state of Nebraska. And all these kids back here in environmental, Nebraska has the purest water in the world and it sits under western Nebraska. And we're pumping it in a creek and sending it to Kansas. This is an environmental issue. It's not-- water isn't forever. We will find better-- better management skills. The

university and everybody is working on irrigation skills so we can use less water, but we should not be using a crutch where we take precious groundwater and pump it into the creek. Now, don't get me wrong, this bill does nothing to harm the augmentation project. It protects it. It protects it. But let's take those ten dollars an acre that those farmers are paying and do it for-- use it for research, not for paying somebody's wages and buying pickups and going to Lincoln to testify against bills. This needs to pass. It's good legislation. It's been vetted, been vetted for three years. I even ran it by the professor here a year or so ago in a version. And private law-- law attorneys have vetted it. AG's Office has looked at it. This is not Mike Groene's ideal. This is vetted. Thank you. Any questions?

HUGHES: Thank you, Senator Groene. Are there any questions? Seeing none, thank you for coming.

GROENE: Thanks, Senator Hughes, again for putting me first. I really appreciate it.

HUGHES: Sure. That will close our hearing on LB845 and we will open on LR294. Senator Kolowski. Welcome.

KOLOWSKI: Thank you. Senator Hughes, members of the committee, good afternoon. I am Rick Kolowski, R-i-c-k K-o-l-o-w-s-k-i, and I represent District 31 in southwest Omaha. Today, I, myself and 15 cosigners of this resolution are supporting our children's view on climate change. I am here on their behalf to voice concern, concern for the world we are leaving our children to deal with, the economy, the disruption of food production, the flooding, the climate change that is causing devastating events worldwide. In our agricultural state, our farmers or ranchers depend on the land. Being a farmer or rancher is often thought to be synonymous with being stewards of the land and water. Land and water stewardship includes the two factors that have the most impact on that land and water we depend on, the climate and the actions of humans. Agriculture and climate are inextricably intertwined. Whether you believe that people are adding to the climate change or not, you have to be able to see what is already happening with our climate. In Nebraska, we-- we most recently saw this change in the flooding last year, \$3.4 billion worth of damage in the state of Nebraska. We are still rebuilding and already face the distinct possibility of more flooding this year. Floods are not 100-year events anymore. They happen so frequently we barely have time to recover in-between each one. The intensity of all kinds of storms, drought and wildfires is happening worldwide. As the climate

worsens there will be a heavier and heavier toll on our economy and therefore on our children. We must, and need to acknowledge this. We can no longer afford to ignore what is right before our eyes. In Nebraska, we pride ourselves on common sense and not being reactionary. How much sense does it make to overlook the mountains of scientific evidence pointing to climate change and ignoring our citizens of all ages who are concerned and demanding action? The time is now to strongly react in order to save our state's economy and our children's future. The climate change report by the University of Nebraska in 2014 was a step in the right direction. Now we need to update and use the recommendations of that report to create official state action steps to combat the climate change affecting our agricultural sectors. Could it be that part of our future economic development package needs to have climate goals as one of the cornerstones? The students who wrote the language of LR294 are middle school students from Prairie Hill Learning Center. You will hear from students from Prairie Hill today, as well as university students that are in attendance. These young people give me hope. They are so smart. They are so engaging. They see that Nebraska can be a leader in climate change in a positive direction. They are here to help you see that vision as well. At this point, none of us can escape the reality -- the reality show of climate change, Australia -- Australia is burning. Antarctica is melting. Deserts are expanding. There is no corner of the globe that is not suffering severe and devastating climate change. In this issue, the children are leading. It's time the adults get out of the way or become part of their solution. I urge you to advance LR294. Thank you very much.

HUGHES: Thank you, Senator Kolowski. Are there questions from committee members? Seeing none, you'll stay to close?

KOLOWSKI: I'll be here, sir. Thank you.

HUGHES: Before we get started, I want to thank everybody for attending the hearing on LR294 this afternoon. I just wanted to address some issues that I understand have been going around on social media. My office has received numerous calls and emails. So, first of all, don't believe everything you read on social media. So with that we don't take proponents or opponents. People come up and just give us their opinion because it is an LR, legislative resolution versus the LB, legislative bill that you heard previous. So with that whoever would like to come up first. Don't be afraid, we're relatively harmless. Welcome.

CLIO BAIRD: Hi. My name is Clio Baird, C-l-i-o B-a-i-r-d. I am representing the people that wrote this resolution. I think that all the senators on this committee should support this resolution and pass it to the full Senate. Our resolution is not a big step, but it is a step. We need to pass LR294 because it will let everyone know that this crisis is happening and faster than we thought. If we can't pass a resolution that's acknowledging something and saying we should do something about a crisis, how are we supposed to get anything done or anything changed? I know that some you think that climate change isn't real and that people are overreacting, but we aren't. There is a report published on November 5 of 2019 that was supported by over 11,000 scientists. It said that parts of the Earth will become uninhabitable and that we will face, quote, untold suffering, close quote, because of climate change. The fires in Australia are because of climate change. The floods we had last year were because of climate change. Polar bears are going extinct because of climate change. People are dying because of climate change. I don't want to have to tell future generations that things could have been different, but some people in power didn't want to take a step that probably could have changed things at least a little bit. I, like many of my classmates, don't want to wait around for the people who are making the decisions to realize their mistakes. Also, if anybody on this committee has children or grandchildren, think of what you're doing to their future by not passing this resolution, by not taking action. Think of the 29 people in Australia who have died because of the fires that are caused by the climate crisis. Think of the United States on fire because we didn't take action because we didn't take a small step. This is me and my class taking action against climate change. Everyone needs to take action. Our future depends on it. The climate is changing, so why aren't we? That is why we should pass this resolution about the climate crisis.

HUGHES: Thank you, Ms. Baird. Are there any questions from the committee? What grade are you in?

CLIO BAIRD: Sixth grade.

HUGHES: Very good. Your teacher would be very proud of you and your parents too, you did a very nice job.

CLIO BAIRD: Thanks.

HUGHES: Very good. Thank you for coming to testify today. Next testifier. Welcome.

ADAH WISNICKI: Hello. My name is Adah Wisnicki, A-d-a-h W-i-s-n-i-c-k-i. I am representing the adolescent community that wrote this resolution and I am eleven years old. My class wrote this resolution, LR294, because we had been doing research on climate change and realized that we needed to do something about it. Before this school year, I had known that climate change was a problem, but I didn't realize how bad it was until we started our research. Raising awareness is part of the reason that my class is doing what we are. If more people better understand what is happening, they will be more likely to act. And it is a very pressing issue. According to the Intergovernmental Panel on climate change, we only have about 10 years until the effects of climate change become irreversible. People like me in my class don't have time to wait around until we're adults to act. There are some ways that we could actually gain from taking steps to combat climate change, for example, from the use of wind turbines. According to the Grand Island Independent, quote, Nebraska farmers were paid more than \$5 million in wind lease payments, closed quote, in 2018. There are some people who accept that climate change exists, but they don't think that it's caused by humans. According to the Environmental Defense Fund, there are nine ways that we know that climate change is caused by humans. For example, one of them is that, quote, when we burn carbon-based materials, carbon dioxide is emitted, closed quote. Another one is that when scientists measure CO2 and other greenhouse gas levels in the atmosphere and in ice, they find that the greenhouse gas levels are increasing and chemical analysis of the atmospheric CO2 reveals that the increase is coming from the burning of fossil fuels. A third way that we know that is caused by humans is by, quote, ruling out natural factors that can influence climate like the sun and ocean cycles. Closed quote. I understand that some people may not want to make the changes that are necessary, but they are going to regret that they didn't act now when the worst effects of climate change happen, I think that everyone should be panicking and doing whatever they can to stop this crisis. In LR294 my class is asking for the bare minimum for the senators to acknowledge that climate change is real and caused by humans and that they need to do something about it. It is not making any drastic changes, requests or proposals, although those will be necessary in the near future. So please support LR294 through the committee and hopefully through the Senate too.

HUGHES: Thank you, Miss Wisnicki, correct? Any questions from the committee members? Seeing none, very good job. Thank you.

ADAH WISNICKI: Thanks.

HUGHES: Next testifier. Welcome.

HATHAWAY HUTCHINGS: Hello. I'm Hathaway Hutchings, H-a-t-h-a-w-a-y H-u-t-c-h-i-n-g-s, and I'm twelve years old representing the adolescent class here at this year's resolution. Climate change isn't just about the climate. Climate change isn't just about the environment and wildlife. Climate change is also about you. Climate change is also about me. It is about our family, and I know that I want to leave a sustainable planet for them. I don't want to leave them constantly in fear of devastating natural disasters, air pollution, contaminated water and so much more. Our children, grandchildren and great-grandchildren matter. Climate change has hurt our planet and a large amount of animal species already threatening thousands of different types of animals, including half of all mammals. Seven hundred species are facing extinction and we need to act. Like I said, climate change doesn't just affect them. In our interconnected ecological system it affects us too. A report released by Oxfam found that more than 20 million people flee their homes each year because of climate change field disasters, and the poorest are suffering the most even though they are creating a lot less of the damage. The facts are there, yet some people deny that climate change is real. The International Institute for Environment and Development says a lot is, quote, a lot is made of the uncertainty of climate models by those wishing to promote doubt, but a robust approach to validating climate analysis is in place, and there's a great deal we can be certain of. Closed quote. Climate change is a fact. And the fact of climate change is 150 years of ongoing increasing the industrial output of greenhouse gases by the growing world system that's heating up our planet's atmosphere and changing its climate method. You might be wondering if climate change will affect Nebraska. The answer is yes. Not only will it impact coastal areas and deserts, but other places will have problems too. For example, the floods in Nebraska this past summer were worsened by climate change and they hurt so many people. Later it will be worse than that. So it will affect us, even if you don't think so, and we will need to be ready for it. This is a crisis and we need to do something. We need to responsibly manage the natural world. It will affect you. It will affect your children, grandchildren and great-grandchildren. Just

think about what kind of a world do you want to leave for your family? I encourage you to help and to support our resolution, not just to save the planet, but to save ourselves and our grandchildren from destructive and inconvenient weather disasters and from our dying planet. It will be too late to save it soon. So do it while you can. Be part of the solution-- help. Thank you.

HUGHES: Thank you very much. Are there questions from the committee members? Seeing none, very good job. Thank you. Welcome.

ARCHER NOORDHOEK: My name is Archer Noordhoek, A-r-c-h-e-r N-o-o-r-d-h-o-e-k. For decades we have polluted our atmosphere with little care. Richer countries that contribute the most to climate change are affected the least, but poor countries that contribute the least to climate change are affected the most. The United States produces 30.3 percent of all the world's greenhouse gases. China only produces 12.2 percent of all the world's greenhouse gases. But in some parts of China, the air is so toxic that you can't breathe without a mask to help you. Keep in mind that China makes up 20 percent of the human population in the world. Australia, which only outputs 1.1 percent of the world's greenhouse gases, it was literally on fire, which would have never gotten as bad as it did without climate change. To those of you that disagree with climate change, and with us and with this resolution, please help my generation. My generation's future is in danger. You won't listen to the people. You won't listen to the evidence, but you listen to the lies. And I want you to tell me that I can't have an equal opportunity for a future as you did. If you still won't listen to me or us, listen to the evidence, to the facts. NASA is saying that sea levels are expected to rise 1 to 4 feet before 2100. That will put cities and countries under water. There was a paper published on November 5, 2019, that was supported by over 11,000 scientists. In the paper they state that humanity will face untold suffering. If we do not act and if we do not act now, there will be serious consequences for all of us. So please help my future, help all of our futures. Please pass this resolution.

HUGHES: Thank you very much. Any questions from the committee members? Very good. Very good job. Next testifier. Welcome.

CONOR WILLEKE: Hi. My name is Conor Willeke, spelled C-o-n-o-r W-i-l-l-e-k-e. I am 14 and speaking on behalf of myself. I'm here because this issue is serious, it is threatening our future. A study by the National Oceanic and Atmospheric Administration, also known as NOAA, showing the 41 costliest storms accounting for inflation in the

U.S. from 1900 to 2017 shows that these storms are doing more damage. Of the top 41 storms, there was an average number of one storm that made the list per decade for the first 50 years. That number continued to increase throughout the years as more greenhouse gases were released. That number increased to five in the 1990s. Then in the 2000s, there were seventeen. That's an average of one deadly, catastrophic and costly storm a year. NOAA also shows that nine out of 10 of the costly storms were in the 2000s. We are not only hurting the human race, but all life on Earth. These storms are disrupting and destroying our ecosystems and this will not stop until we fix this. A study by Yale Climate Con-- Connections says that as, quote, Humans continue to release planet warming greenhouse gases, the likelihood of tropical cyclones increases, closed quote. Climate change affects people all around the world. Nebraska's flooding last year has affected us a lot. According to agri land, an estimated \$440 million worth of cattle and \$400 million worth of crops were lost in Nebraska due to the flooding. A reason these floods will become more common is the increasing quick changes from cold to warm due to climate change. These faster changes do not allow time for the ground to thaw in the spring. Thus, rain stays on the ground for longer. Nebraska is an agriculture state, agricultural state. And I want you to think that how this flooding cost our farmers of Nebraska \$880 million and that a vote for LR294 is a step acknowledging these devastating effects our farmers are facing. Although passing this resolution does not change any laws, it is a crucial step in solving this crisis. So I urge you, please vote LR294 through. Thank you.

HUGHES: Thank you very much. Very good job. Are there questions from the committee members? Seeing none, thank you. Welcome.

SHARON CLAWSON: Hi. My name is-- Senator Hughes, members of the Natural Resources Committee, my name is Sharon Clawson, spelled S-h-a-r-o-n C-l-a-w-s-o-n. I'm the chapter chairperson of the Nebraska Sierra Club and I live in Omaha, Nebraska. I'm in favor of LR294 because all of the facts presented in this resolution are true and backed by thousands of scientists. We are in the midst of a climate crisis with predictions of species extinction, sea level rise, extreme weather events, drought, famine, wildfires burning out of control, agriculture yields decreasing, including here in Nebraska. Humans are causing the increase in greenhouse gases, which is the mechanism behind all of the extreme events that are occurring. It would behoove the Legislature to acknowledge that climate change does exist, that

humans are the cause of this ecological crisis, and that we have a moral obligation to take steps to combat this phenomenon.

HUGHES: Thank you, Ms. Clawson. Are there questions from the committee? Seeing none, thank you for your testimony. Next testifier. Welcome.

KAIDAN SMITH: Thank you. Good afternoon, Senators. My name is Kaidan Smith. That is K-a-i-d-a-n S-m-i-t-h, and I am here today to talk to you about speaking in favor-- I'm here to speak in favor of LR294. My bad. I am a high school student at Lincoln High in arts and humanities, and I am an alumni of the school that brought this resolution to you. I firmly believe that the resolution we are discussing is incredibly important to the future well-being of our society. The climate crisis is often portrayed as some far off threat that's going to be a problem down the line, but it's not. It is currently a problem. It's going to be an issue that we will have to face now. It was 60 degrees out recently. It is the middle of February. Where I live, we have not had a white Christmas in several years. Eight of the 10 hottest years on record have been recorded after 1998. This past January was recorded as the hottest January on record. Every summer seems to be the hottest summer on record. My generation is often made fun of for a connection of--connectivity to the Internet. However, it's that same connectivity that gives so many of us such keen awareness of the development of the climate crisis. When an environmental disaster occurs, we know about it. This is a topic that bleeds through the fabric of our lives constantly. This is something that affects every part of our existence. We talk about it in class. We see an article about another species becoming endangered or going extinct, and we mention it to our friends. Or we'll hear about another flood or drought or wildfire and all of these things, they'll get an amen. That sucks, and nothing more because that's just the way things are we think. It's closely sewn into our daily lives and it is hard to care, but we can change this. That's not the way things have to be. Change starts from the bottom up and change can start with us. That-- that can start with us so that when we hear about tragedies, they feel like tragedies and not unfortunate footnotes in the day's events. I know many of you senators probably have children. They might be older or younger than me, but the point is many of you have brought new human being into the world. With how modern medicine is continually improving -- if fate is on our side, we are likely going to live to see 2100, if we are going to see the effects being talked about today. I am currently a junior in high

school. I'm going to go to college soon. I want to have a future. I want to see the world. But I'm worried that the world won't be there when I try and stop by. I'm worried that if I am able to see the world that my children won't and their children won't, and that those grandchildren will hear of coral reefs and feel as though they are a fairytale. I'm worried that those grandchildren will hear about the Amazon rainforest and the Australian bush and the California redwoods and the hundreds and thousands of other examples of the real natural world and hear it as though I-- as I hear the lands of Middle-Earth of Tolkien and the fantastical alien worlds of Star Wars because they'll think no planet could really be that green. Right? And I'm worried that my grandchildren will see pictures of pandas and polar bears and tigers and see them the way I see pictures of Velociraptors and Tyrannosaurus Rex's and saber tooth tigers. I'm worried that the natural beauties of the world will be mere myths in history by the time I am old enough to be sitting in one of the chairs before me. So please, Senators, we aren't asking for a lot. We aren't proposing any grand new ideas or ways to solve this crisis. I'm only 16. I don't know enough yet to proposing solutions. We're just asking that you start-- start listening to those that do.

HUGHES: Thank you, Mr. Smith. That was very fast there at the end. Very good job. [LAUGHTER] You saw the light. Any questions for Mr. Smith? Seeing none, thank you for coming today. Next testifier. Welcome.

TEDDY PIERSON: Hello. I'm Teddy Pierson spelled T-e-d-d-y P-i-e-r-s-o-n, and I'm speaking for myself. I'm 13 years old and I'm an eighth grader at Prairie Hill Learning Center. Climate change is obviously happening and some people are refusing to acknowledge it. It has been affecting people in Nebraska, the United States and the rest of the world. A big example are the fires in Australia that happened in January. I have eight relatives that live in Australia. And luckily, none of them were harmed by the fires. Several people were, though. Twenty-nine people died, along with a billion animals. Two thousand people's homes were destroyed as well. Our class decided to make a resolution because we've seen the effects of climate change and we wanted to do something about it. We made the resolution and got it signed by 15 senators. I'd also like to say thank you to Senator Quick for cosigning our resolution. We never met with him, but he was still willing to sign on to it. None of that will matter, though, if LR294 can't pass through the subcommittee. Our classes put so much work and effort into this and it would be horrible if it can't even reach the

full Senate. We've been learning about climate change for a while. Some of us, including me, have been learning about it for a year and a half. We've all known about it for longer than that, though. We've read books, done research, and listened to inspiring speeches by 17-year-old activist, Greta Thunberg. We know what we're talking about and you should be listening to us. There are several things Nebraska can do to help stop climate change. The biggest thing we can do is use our pit-- our wind power. We're third in the nation wind potential, but we're not using it very much at all. Our neighbors, Iowa, have roughly the same amount of potential, but they have lots of wind turbines across their state. Our class has been doing work with this resolution for more than three months. We've had to balance this work with our other school work and we've been very busy at times. If it can pass this committee and pass the full Senate, however, all this work will definitely be worth it. This is our future and we've taken a step to save it.

HUGHES: Thank you, Mr. Pierson. Any questions from the committee? Seeing none, very good job. Welcome.

CRAIG WILLEKE: My name is Craig Willeke and I'm here speaking on behalf of myself. January 15, 2020--

HUGHES: Excuse me. Spell your name, please. Thank you.

CRAIG WILLEKE: C-r-a-i-g W-i-l-l-e-k-e.

HUGHES: Go ahead.

CRAIG WILLEKE: January 15, 2020, Larry Fink, the CEO of BlackRock Investments, in his annual letter to CEOs wrote, quote, We are on the edge of a fundamental reshaping of finance. The evidence on climate risk is compelling investors to reassess core assumptions about modern finance. End quote. Those of you that don't know, BlackRock Investments is the world's largest money manager. They oversee about \$7.4 trillion and have offices in over 100 countries. They have stated that they are limiting their exposure to companies that are not responsive to climate change risk. Fast forward to February 17th, that's three days ago, Jeff Bezos, Amazon CEO, pledged \$10 billion of his own money to fight climate change. Members of the Natural Resources Committee, these are the first dominoes to fall. The world is changing not only the climate, but economically as well. The question is, is how is Nebraska going to respond to these changes? A vote for LR294 is a first step in letting the world know that Nebraska

is-- is worthy of investment dollars from companies like BlackRock and Amazon. It is the step in letting the world know that Nebraska isn't just a flyover state. It is a vote of confidence for business expansion in Nebraska. A vote against LR294 lets the world know that Nebraska does not want out-- out-of-state companies to expand the workforces in Nebraska and does not want outside investment dollars. I'm sure this committee agrees that Nebraska benefits from increased worse-- workforce investments in our state. LR294 should advance to the floor for a vote in front of the full Unicameral so that we can protect Nebraska's economic future. Let the companies of the world know that we are worthy of their investments here in Nebraska. Thank you.

HUGHES: Thank you, Mr. Willeke. Are there questions from the committee members? Seeing none, thank you for your testimony. Welcome.

LANE ALBRECHT: Thank you. I'm Lane Albrecht, spelled L-a-n-e A-l-b-r-e-c-h-t, a 13-year old, and you need to listen to me. [LAUGHTER] I'm going to tell you exactly why LR294 needs to pass through the Natural Resources Committee. LR294 is about the anthropogenic climate and ecological crisis that we are currently living through. We are seeing the direct effects of climate change, killing people, animals and destroying our planet. From the flood here in Nebraska last March, we lost \$440 million worth of cattle. If we continue to do little to nothing, we will see more of those floods and they will become much more severe. They will wipe out more land, we will lose more money and it will ruin more lives. Although a lot of people in this building won't be affected by climate change, all the kids here, all of the kids, you know, the kids that you love will have their lives devastated by climate change. I'm sure that all of you either have children of your own or kids that you know. I challenge you, try to look them in the eyes and say, I have the power and authority to help improve your future, but I couldn't care less. I do not care about your future. You better not be able to honestly say that. Not only is climate change going to have a huge impact on children growing up now, but it will affect every generation after us. Don't think of climate justice as just saving my generation. Think of it as intergenerational justice because that's what it is. Everybody after us will be affected, and you have the choice. Are they affected in a negative life-threatening way or are they not bothered at all? Your choice. Even if you do not agree with the content of LR294, we need you to at least pass it through this committee. An issue affecting everybody on the Earth should at least be acknowledged by

the full Senate of Nebraska. Our resolution is simply making a statement. Nothing at all will be changed in the law. We need you to pass this resolution so that more people are aware of this issue. We need to start making changes. We need large changes. And we only have around 8 years before this will become unstoppable and all future lives are ruined. This resolution is just one small step to get the justice that we, everybody else and the Earth deserves. Intergenerational justice. That's what it is.

HUGHES: Thank you, Mr. Albrecht. Are there questions from the committee? Seeing none, very good job. Next testifier. Welcome back, Reverend.

HELEN GREER: Thank you, Senator Hughes, and all the other Senators. Thank you for having me again. My name is Reverend Helen Greer, H-e-l-e-n G-r-e-e-r. I'm generally known as Penny. That's my nickname, P-e-n-n-y. I'm here to support LR294 representing Nebraska Interfaith Power and Light, and I thank you, Senator Quick, for signing on to this resolution. We are a statewide interfaith, nonpartisan, nondenominational organization providing moral and faith-based messages related to the climate change and the care of creation. I'm a retired United Church of Christ pastor, and early in the 2000s I went back to school and got a geology degree, which has helped me a lot in my current studies of the warming climate at the University where I have been at for a number of years. I think more than anything else, what I want to do is make sure that all of you are very clear as to why claims are being made that this is human cost. I think there's a lot of people-- there are a lot of people out there who certainly know that the climate is warming. They know the statistics. That 2019, for example, was the second warmest year in the last decade with all the weather stations and satellite data giving us that information. But what's often hard for people to accept is that we're really causing this. The second speaker very well outlined some of the basic research that supports this, but I wanted to really slow it down and make sure that you heard. Throughout Earth's history until recently, there have been many natural forces changing and warming the climate. In fact, much of Earth's history has involved the fact that there were-- there was no ice at the poles at all. We've had three major glacial times over the 4.5, 5 billion years of our Earth's history. And much-- much of the time, natural forces were involved in creating those changes. Volcanoes would first provide a cooling effect in the climate and then a warming effect as carbon dioxide increased. Sun activity would have an 11-year cycle, and that goes on and off throughout the history of

our planet. We have forcing that takes place because of the way the Earth revolves around the sun with 23-year thousand period, the city's 45,000 and 100,000 years. What's with the exception of one time in the last 400 thou-- 400 million years, we have never seen this rapid a change. The last 150 years there has been such a rapid increase in the amount of carbon dioxide and increasingly methane, nitrous oxide and other greenhouse gases other than water. We have not seen that but once. That one time was 55 million years before the present, and it lasted about 200,000 years.

HUGHES: Reverend Greer, your time is up.

HELEN GREER: Thank you.

HUGHES: Thank you very much. Any questions from the committee members? Seeing none, thank you for your testimony.

HELEN GREER: OK.

HUGHES: Welcome.

KAT WOERNER: Thank you. Good afternoon. My name is Kat Woerner, K-a-t W-o-e-r-n-e-r, and I'm a sophomore at UNL majoring in economics, environmental studies and natural resource economics. It's great to see you all again. As you know, I was here last week and I was missing one of my classes and I was really late to another one and I was testifying on behalf of LB1205. Well, today, I'm back missing the same classes, asking you all to support LR294. And I'm here today and I was here last week because what is the point in sitting in a room a mile away when there are people in sitting this room who aren't doing anything with the information I am learning. And the students in this room can agree with me because it's hard to focus knowing that. So to bridge the gap, I brought you all a piece I had to read from my climate in crisis class. It is Nebraska climate assessment that UNL published in 2014, it is now-- I had to read all 65 pages, but I'm only giving you nine from the chapter that focuses on the impact of climate change in Nebraska and the areas of water resources, energy use and supply and agriculture. It's a portion of what Senator Kolowski was talking about during the introduction. Now, as much as I like you all listening to me, I would like you all to read this and to listen to the scientists and take action behind the science. The professor I had for my climate in crisis class, Dr. Martha Shulski actually helped write and produce this report. Now, I took this the spring of like last year and I was in class when the devastating

floods and cyclone ripped through our communities. I was in class while watching a video of the house my best friend and I played at when we were in middle school, six feet under water. I was in class while the damages from these extreme weather events made our farmers lose \$440 million in livestock, which, by the way, is enough for all 90,000 people in Memorial Stadium to walk after-- walk out after a Husker win with about \$4,500. I was in class realizing that here is-hearing about the levees breaking, listening to stories about cows under water and watching people define-- struggle to find a home because the one that was theirs, they lost. Watching all of that I learned was not a movie. And today, watching as students and adults alike fighting for change is not a movie. It is reality. It is reality to many of our farmers have been in the red for quite a while now. It is reality that we are seeing an economic downturn created by the continuation of extreme weather patterns such as the one we saw last year, is reality that climate change impacts on agriculture will decrease crop yields and livestock productivity and bleed over to impact food security. If that -- this sounds extreme or alarmist to you, this is what I am learning every day a mile away from here. And this is why my professors support me skipping class to be here to tell you this. And this is why I want you to support LR294 in taking the first steps to solving the problem by admitting that it needs to be solved. Thank you.

HUGHES: Thank you, Ms. Woerner. Welcome-- welcome back. Any questions from the committee? Seeing none, thank you. Come see us again.

KAT WOERNER: I've got two and a half more years. [LAUGHTER]

HUGHES: No-- hey, there's no-- no clapping or outbursts of any kind or I'll have the room cleared. Those are our rules-- come on.

WILLA HAMRIC: Hello. My name is Willa Hamric, W-i-l-l-a H-a-m-r-i-c. I'm here representing myself as a citizen of Nebraska and I am twelve years old. I'm not here because I'm forced to or because it's a field trip to learn how the legislator works, I'm here because I'm scared of my future and I'm scared that the people who are more in charge of my future aren't worried about it because they won't be around to witness it. I want a future that will be safe for me and my generation, but that seems like too much to ask. Assuring the youth that they will be able to be safe is apparently too drastic and we need to take smaller steps, so that's what this resolution aims to do. This resolution is one small step in possibly making the future better for your children. Time and time again, I have seen people attempting to silence us, to

silence the people who are yelling, fighting, begging them to listen. They tell us to sit down because they don't think it's a problem, but it is a problem. It is such a big problem that we can't afford to sit in silence. We have to stand up for what we think is right. The youth will have to deal with the consequences of other people's actions, and I obviously don't think that's fair. Yes, we are young, but our ages shouldn't matter. You should see us not as children, but as citizens of this state because that's what we are. We are people who are asking you to pay attention to an important issue, yet you're ignoring us. So I beg of you, please discuss and pass this resolution so that we can have a chance of a good future. Thank you.

HUGHES: Very good. Very nice job. Any questions from the committee members? Seeing none, very good. Welcome.

TYLER ANDERSON: Hello. Thank you for being here today and for allowing us to speak. My name is Tyler Anderson, T-y-l-e-r A-n-d-e-r-s-o-n, and I'm a junior accounting major at the University of Nebraska-Lincoln. I'm here today to ask you to support the Climate Ecological Crisis Resolution known as LR294, written by Prairie Hill sixth grade students and graciously proposed by Senator Kolowski and 14 others, including Senator Quick. As a part of Sustain UNL, which is a recognized organization on the campus of University Nebraska-Lincoln, I worked with these middle schoolers directly during many different events, including the Nebraska climate strikes. And wow, I, along with countless others, am extremely impressed by their diligence and perseverance. It is clear to me that they realize and understand the reality of human induced climate change. Simply put, these sixth graders, along with us and many others, truly care about the state of the environment. Now it is up to society as a whole to do the same. I could go on and on about the scientifically proven impacts of the climate crisis on the world, but I'll keep it simple. Wildfires, sea level rise, mass extinction, other extreme weather events and flooding, which happened right here in our back yard just last year, are all scientifically connected to the climate -- to climate change based on research by the Fourth National Climate Assessment, the International Intergovernmental Panel on Climate Change, the National Oceanic and Atmospheric Administration, the United States Environmental Protection Agency and numerous other reputable sources, the research is there. And guess what? It isn't political. It's science, which is based on objective research and thorough analysis. And if you aren't informed or don't know the facts, please do your own personal research. In supporting this bill in future climate

legislation, I'm asking you to let go of your preconceived biases to do what is best for Nebraska, the United States and the world. The sooner we act, the better. You represent us, and that means it's your job to take care of us and listen to us. Acknowledging the climate crisis and realizing that we as human beings have a moral right to combat it is a wonderful step to creating a more sustainable world, which I believe is something everyone can get behind. And when it comes down to it, there isn't another planet. Thank you.

HUGHES: Thank you, Mr. Anderson. Are there any questions? Seeing none, very good job. Welcome.

MARY PIPHER: Welcome. Hello, committee members. I wish my Senator, Susan Geist, were still here. My name is Mary Pipher, P-i-p-h-e-r. Mary is M-a-r-y. My great-grandparents homesteaded near Creighton, Nebraska. And as a child, I grew up in Dorchester and Beaver City, Nebraska. I was a nature loving girl and I remember what it was like outside in southeast Nebraska in the mid-50s, almost 70 years ago. My fine-- family often came to Lincoln to the State Fair or to eat at the one Chinese restaurant in town at a hotel out on Highway 6. When we drove home to Dorchester after dark, we could see in the headlights, rabbits jumping off the highway. There were so many rabbits that the road was never empty of cottontails. When there was rain in a ditch or a big puddle, the water was filled with pollywogs or tadpoles At night in the spring or summer, we could lie on the grass and listen to frogs croaking nonstop from all directions. We heard many songbirds we rarely hear now, including Bluebirds, Grosbeaks, Redstarts, and warbling Berrios. I've lived long enough to see the weather and the ecosystem of this state change. I've witnessed the rise of corporate agriculture and giant, confined animal feedlots. I remember when this summer air in Nebraska smelled like flowers and grain. The children of today and those of the future live in a degraded environment. We adults are responsible for that, especially those of us who have endlessly promoted big business at the expense of the natural world, and especially for those of us who have ignored-- ignored warnings about water and soil quality and the need for alternative fuels. All of us have a responsibility to protect our state. These students are doing their part, it's time for this committee to do yours. Of course, I support this rel-- resolution, but I support much more than this. I want the state to support wind energy. I want our carbon-- I want our state to be carbon neutral by nine-- by 2030, and I want more regulations of feeding operations, pesticide and fertilizer use in corporate agriculture. We need to pass laws that improve our water,

soil and air quality and preserve all life. I implore you to work to support a future for all of our grandchildren. Thank you.

HUGHES: Thank you, Ms. Pipher. Are there any questions? Seeing none, thank you for your testimony. Welcome.

JAKE DUFFY: Thank you. My name is Jake Duffy, J-a-k-e D-u-f-f-y, and I'm a environmental studies and political science freshman at UNL. I came here to advocate for the world that I love. As a boy from Georgia, some of the happiest moments that I've had were with the Chattahoochee River or climbing the fig tree in my neighbor's yard, so I hope you got some reality with. Now, being in Nebraska, I care deeply for the sweeping plains and the remarkable sunset that I see behind the Neihardt Building at UNL. In 30 years and beyond, I wish for my friends and family to enjoy nature in the same way I enjoy it now. I ask you to think about the days you have spent in the woods and the nights you have spent listening to insects. Think about the cicadas in summer, all that good stuff. To continue to drag our world through the dirt of the fossil fuel industry and ignore the means of creating a sustainable future is to take away those peaceful days and nights we've all grown up with. The young students who wrote this resolution are pursuing a world in which these pleasures are not taken for granted as -- as we have done for many years now. I implore that you do more than just hear them, but understand them and understand that they are calling for a positive change in their own future. Thank you for listening to us. Thank you for listening to me, and I really do hope you guys have a great day.

HUGHES: Thank you. Mr. Duffy. Are there any questions from the committee? Seeing none, thank you very much. Next testifier, please. Good afternoon.

MARILYN MCNABB: Good afternoon. Members of the committee, my name is Marilyn McNabb, M-a-r-i-l-y-n M-c-N-a-b-b. I live in Lincoln. The young people who brought you the warning in LR294 recording scientists, but because they are young, you may view-- may be viewed skeptically as being alarmist. I would like to quote you a bit from a very recent publication by a profession known for caution, moderation and steadiness under pressure-- bankers. The document I'm quoting from was issued in January by the Bank for International Settlements in Basel, Switzerland. They are a bank which serves other central banks in their pursuit of monetary and financial stability.The title of the small book they issued is The Green Swan:Central Banking and Financial Stability, in an age of climate change. The abstract explains

traditional backward looking risk assessment and existing climate economic models cannot anticipate accurately enough the form-- the form that climate-related risks will take. These include what we call green swan risks, potentially extremely financially disruptive events that could be behind the next system-- systemic financial crisis. As the Bank of France Governor writes in the forward, the increase in the frequency and intensity of extreme weather events could trigger nonlinear and irreversible financial losses. He called for cooperation among major institutions, starting with governments. The subjects analyzed are too broad to summarize here, but I can list them. Climate change as a severe threat to ecosystems, societies, economies as a source of monetary and financial instability and stranded assets, meaning fossil fuel reserves that must remain unused to keep global warming below 2 degrees centigrade. Quote, As the risk related to stranded assets is not reflected in the value of the companies that extract, distribute and rely on these fossil fuels, these assets may suffer from unanticipated and sudden breakdowns, devaluations or conversion to liabilities. A banker's sense of impending climate crisis may be different from that experienced by a biologist or a climatologist or a schoolchild, but I hear in it the same intensity and urgency. Thank you for thinking about my views.

HUGHES: Thank you, Ms. McNabb. Are there any questions from the committee? Seeing none, thank you very much. Next testifier, please. Good afternoon.

EVAN HUTCHISON: Good afternoon. My name is Evan Hutchison, E-v-a-n H-u-t-c-h-i-s-on. I am currently a senior in the Science Focus Program and I would like to take a moment and speak about the movement of climate change and climate justice in and of itself. For whatever reason, this has been branded somewhat of a partisan issue, which I think is very incorrect. I think that this is something-- perhaps the best thing that every person should be able to unite against because it threatens all of us equally. These floods, these fires, the diseases that are being caused by air pollution do not discriminate against anyone. They will-- they will affect you regardless of your money, of your status, your politics and your religion. It doesn't matter. I would-- I could sit here and quote sources and facts about microplastics, ocean acidification and other things correlated with global warming, but I honestly do not really feel like that would surprise anyone. We constantly see headlines and articles and media about impending doom, and I believe we've kind of become desensitized to it. Furthermore, I'd also like to take a moment to note how the

Supreme Court recently made a decision to increase the legal age of tobacco products to 21. However, no actions have been made to recognize air pollution in the way it should be and climate change in the way it should be, which are carcinogens that affect everyone regardless of choice, unlike tobacco products. I would also really, really like you guys to think about some of the suffering that has happened recently. I know we were all affected by the floods this past spring, but I'd like people to think about some of the fires and some of the other things. Really think about it. Don't pacify it. Don't let it-- don't just dismiss it. Really think about the suffering these people have gone through. I think that recognizing the -- the state of the climate should not be a noteworthy thing or an act of character. If someone assaulted you to the brink of death but stopped before-just before delivering the lethal blow, I do not think you would regard them as a person of integrity. Acting on the climate is necessary and expected, and anything less is a neglectful and abusive action. I would like you all to know that we together will not stand for this to continue. Thank you.

HUGHES: Thank you, Mr. Hutchison. Any questions from the committee? Seeing none, very good job. Thank you for coming. Next testifier. Welcome.

TELA HAMRIC: Hi. My name is Tela Hamric, spelled T-e-l-a H-a-m-r-i-c, and I am representing myself as a citizen of Lincoln, Nebraska. Dear child, I'm sorry I failed you. I'm sorry you have to live in a world where floods and droughts, hurricanes and wildfires happen on a weekly basis. The world, you know, you couldn't change, couldn't fix. We could have given you a future, but I, we, took that away from you. I'm sorry we didn't listen to the scientists begging for us to. They put out study after study saying climate change is real and is worse than we could possibly imagine, but we ignored them. We ignored the youth pleading for future generations. The youth had to step up because some adults could not even look us in the eye and explain why they were destroying our future. We had 11 years, yet people insisted activists were being too drastic when they asked for the bare minimum. The climate crisis was destroying cities and economies, yet people were too scared of change to do anything about it. So we sat by while the death count got higher. I'm sorry you may never know what a polar bear is or what Venice is like. I'm sorry you won't be able to remember when the Amazon was a rainforest or when the North Pole had ice. I'm sorry I left you with an economy that is in ruins, a world ravaged by poverty, natural disasters, and the knowledge that things didn't have

to end like this. I'm sorry you couldn't fix this. I'm sorry we didn't while we could. And I'm sorry this is the reason you will never exist. Thank you.

HUGHES: Very good. Thank you for coming today. Any questions from the committee? Very good job. Next testifier. Welcome.

STACEY SKOLD: Thank you. My name is Stacey Skold, S-t-a-c-e-y S-k-o-l-d, and I have an illustration here.

HUGHES: We don't allow props.

STACEY SKOLD: Oh, well, I have copies of it.

HUGHES: Pass them out.

STACEY SKOLD: OK. OK. Your carp-- copies aren't quite as good as the prop-- but I will share them. OK. My name is Stacey Skold. I'm a student at UNL working on my dissertation. When I began research, I was not focused on climate change, but it became clear that not only did climate change closely relate to my topic, but there was an immediate need to address climate change. One of the most compelling resources I came across was an article in Popular Science from 2016, which you are receiving, is a timeline of changing temperatures, which changed my perspective. It spanned twenty two thousand years from the Pleistocene age to the Anthropocene, which is our current age. I was also surprised to learn scientists and other academics have adopted a new geologic time period, which is our current one, the Anthropocene, which-- in which Anthropo stands for human. It began around the Industrial Revolution and distinguishes itself from the Holocene period, which lasted over 11,000 years. This is-- this change is based upon changes in the Earth's biophysical conditions and the fact that humans have become the primary determinants of these systems. The climate is one byproduct of these changes. Many say the climate has always been changing and that concern about global warming is not -- is not warranted. The temperature has been changing over the past twenty two thousand years, but the change over the past 100 years has been sudden and dramatic and thus far does not seem to show signs of slowing down. Four degrees warming over twenty two thousand years due to natural variations such as the Earth's orbit or the circulation of the oceans is one thing, but warming by two degrees and counting over one hundred years because of excessive greenhouse gas emissions is another. I am here to ask you to embrace the Anthropocene. Given humans are now a dominant ecological force on the planet, that means

we must ever more actively manage our environment for its sake and for ours. It is both a responsibility and an opportunity, and it demands we make important choices. It is up to us to decide what kind of planet we would like to live on. We can all become better consumers and make thoughtful individual choices, but as lawmakers your actions can have a more transformative impact. Help us to minimize inconvenient and costly weather disasters in Nebraska, including heatwaves, droughts and floods, and to keep the farm belt from moving further north.

HUGHES: Ms. Skold, your time has ended.

STACEY SKOLD: Nebraskans need to embrace the Anthropocene, and your responsibility as lawmakers, please support this bill and send a message that you are taking your responsibilities seriously and care about Nebraska and future Nebraskans.

HUGHES: Thank you very much.

STACEY SKOLD: Thank you.

HUGHES: Thank you for your testimony. Any questions? Seeing none, thank you for coming in today.

STACEY SKOLD: Thank you.

HUGHES: Welcome.

MORGAN MADSEN: Thank you. Hello, my name is Morgan Madsen, M-o-r-g-a-n M-a-d-s-e-n, and I am currently a junior at the Science Focus Program. For the last semester, I have been working on a scientific research project involving Arctic sea ice and how it is affected by atmospheric carbon dioxide. I used satellite data from NASA made public on their website at Climate.NASA.gov. This state and mapped the area of Arctic sea ice during the month of September dating back to 1979. I found that for every part per million of carbon dioxide that was added to the atmosphere, nearly forty seven thousand square kilometers of Arctic sea ice would melt. Based off of my background research using scientific peer reviewed articles, this would mean that there would be devastating effects on our environment such as major flooding due to increased precipitation, extinction of keystone species and frequent massive storms. Also, I would like to explain that these articles that I used in my studies aren't just reviewed by friends or colleagues of the researcher, that isn't what peer review means. They are reviewed

by rivals who are doing their best to find all of the faults in the work. The fact that so many of these articles being published with similar findings on climate change isn't the result of a rigged system spreading fake news. Climate change is taught in our classrooms. It is stated by our government. For example, the Environmental Protection Agency, or EPA, states that, quote, the Earth's climate is changing. Temperatures are rising. Snowfall -- snow and rainfall patterns are shifting, and more extreme climate events are already happening. Many of these observed changes are linked to the rising levels of carbon dioxide and other greenhouse gases in our atmosphere caused by human activities and growth. The National Aeronautics and Space Administration or NASA states that, quote, the current warming trend is of particular significance because most of it is extremely likely to be the result of human activity, end quote. Even the Environmental Protection-- or the Environ-- Energy Information Administration, or EIA, states that, quote, greenhouse gases absorb infrared radiation and trap its heat in the atmosphere, creating a greenhouse effect that results in global warming and climate change, end quote. It is common knowledge that climate change is happening and it is human caused, but quite frankly, I don't think that it matters who or what is causing it. These huge storms and major floods and wildfires that can't be contained are killing people and ruining infrastructure and economy. I think that is our responsibility to at least try to stop these in any way that we can. This semester, the results of my research have greatly -- greatly saddened me. It inspired me to make this analogy. Climate change is like watching as the fire surrounds you and you have nowhere to run, but there is a well next to you. There is only a certain amount of time for you to collect the water in the well and use it to escape before the flames consume you. But we do not know how deep the well is, so we cannot tell how long it will take to pull up the bucket of water to save us, and we do not know how long it will take-- be until we are completely swallowed by the fire.

HUGHES: Ms. Madsen, your time is up.

MORGAN MADSEN: OK. We won't even know that if that bucket of water will save us completely, or if it will allow us to barely scrape by, or if we will end up in ashes. What we do know is that the fire is there with flames creeping towards us. We will not know how terrible the pain of the fire is until it is too late and we are already burning. So I ask you, do you want to be remembered as the people who

helped save us or those who stood by because of the hedges-hesitation to act? Thank you.

HUGHES: Thank you. Very good job. Any questions? Seeing none, thank you. Welcome.

ANICA BROWN: Welcome. Thank you very much. My name is Anica Brown. It's A-n-i-c-a, Brown, B-r-o-w-n. I'm a Lincoln Public School middle level science teacher. But today, I'm not here on behalf of my school district. I'm here for our students of our city, state and country that are asking us as adults to implement climate action plans and get to work supporting ways to fight climate change. I am here speaking for my two grandchildren, 6-month old Simon, and 16-year-old Anna Lee, who deserve to have a future that is sustainable with renewable energy alternatives so they can live out their li-- years better and improve their lives and for the next generations. I am here in support of the Prairie Hill Learning Center and their resolution LR294. They deserve our respect and our unwavering backing in their -- in their quest to mitigate the climate crisis. Young people all over America are being proactive about climate crisis. They see the extreme storms that are ongoing. Their challenge-- they challenge us to make sure that they have clean air and enough water to drink and be able to grow food. Students in schools and universities are learning about innovative, sustainable initiatives and ways to build a green economy. Why aren't we on board with all these students to plan and support dynamic alternatives to adapt to the accelerated climate existence we are currently experiencing? Three years ago, I sat here and I spoke at my very first hearing to support LB646, requesting the committee to move forward with the Climate Action Plan for Nebraska. We asked senators then to be proactive in their response to climate change fighting for a better future for our children. We have watched the devastation across the country as climate-related catastrophes have occurred, then hits Nebraska with the flooding last spring and we finally wake up. Why does it take a catastrophe to make us realize we need to be mitigating climate change? These young people are impressive and we should listen to their call. They've researched the authentic science behind climate change and have stepped up in the citizenship role. They speak like the adults that we should be. This climate crisis does not wait for anyone. These young voices tell us we need urgent action that can-- that has been delayed for too long. They need us to step up and act on climate for their future. They will inherit what we leave them. Let it be sustainable and renewable. LR294 is a well-researched and written document. It should be supported and adopted by the

Legislature this session. I applaud the research, the dedication and the citizenship of the students of Prairie Hill to bring this resolution forward because it is urgent that we all act on climate. Thank you very much,.

HUGHES: Thank you, Ms. Brown. Any questions? Senator Gragert.

GRAGERT: No-- much of a question, it's going to be a statement. Are you familiar with LB243 passed last year?

ANICA BROWN: I can't remember the--

GRAGERT: Healthy Soils Task Force.

ANICA BROWN: Yes, I heard. I guess I'm not--

GRAGERT: I would just suggest maybe you check it out. The Legislature happened to pass that last year.

ANICA BROWN: Thank you.

GRAGERT: And which-- not in the name of climate change but going towards that. Check it out and I'd be welcome your-- your input into that task force.

ANICA BROWN: Thank you very much. I appreciate that.

HUGHES: Any additional questions? Seeing none, thank you, Ms. Brown.

ANICA BROWN: Thank you.

HUGHES: Next testifier. Welcome.

JULIA RAMSAY: Thank you. My name is Julia Ramsay, J-u-l-i-a R-a-m-s-a-y. I'm a sophomore at Lincoln High in the Science Focus Program. Why does this resolution matter? 1977 was the last year that the Earth's average temperature hasn't increased. A statistic that is nearly impossible without the influence of humans. This isn't an abstract problem. A study in 20-- 2015 showed that most of Nebraska's counties are economically dependent on farming, but the burning of fossil fuels causes hotter temperatures, leading to widespread crop failures. Why does this resolution matter? Other extreme weather conditions also rise due to the increase of carbon dioxide in Earth's atmosphere. The flooding in 2019 led to the distress of many Nebraskans as they watched their homes being destroyed and ultimately

cost us over \$1.3 billion in flood losses. A 100-year-old tunnel carrying irrigation water throughout Nebraska and Wyoming collapsed as a result of the flooding, leaving crops without water and farmers without income. Why does this resolution matter? According to the Nebraska Game and Parks Commission, 98 percent of tall grass prairies and 35 percent of wetlands have been destroyed in Nebraska due to-due to human actions. Why does this resolution matter? In the pre-industrial era, the concentration of carbon dioxide was 280 parts per million and today it has risen to 400. The result of not taking drastic measures to mitigate climate change by the year 2050 would be catastrophic. So why does this resolution matter? In 2050, how old will your kids, your nieces, nephews, cousins or any other loved ones be? This resolution matters because we are in a climate crisis and Nebraskans just need to know that this is not normal.Thank you.

HUGHES: Thank you, Ms. Ramsay. Very good job. Any questions? Seeing none, thank you for coming. Welcome.

AMANDA CALLAWAY: Hi. My name is Amanda Callaway, A-m-a-n-d-a C-a-l-l-a-w-a-y, and I'm a program manager for Nebraska Conservation Voters. We represent nearly 12,000 members across the state and we urge the committee to support LR294. According to studies completed by the University of Nebraska in 2014 and 2015, Nebraska will face significant challenges due to the impacts of climate change. The authors of the report, Understanding and Assessing Climate Change Implications for Nebraska, note that with this knowledge about climate change in hand, we can identify actions that need to be implemented to avoid or reduce the negative effects of climate change in Nebraska. Action now is preferrable and more cost effective than reaction later. It is time for Nebraska, for the Nebraska Legislature to heed this call to action and recognize the threats that challenge-- that climate change possesses -- poses to our state. Excuse me. Not only is it the responsible thing to do, it is the popular thing to do. According to the most recent rural poll conducted by UNL on energy and the environment, more than 60 percent of rural Nebraskans think that our state should develop a climate action plan. In 2019, disastrous weather uprooted the lives of Nebraskans, including the large flooding last spring. It caused \$3.4 billion in damages. Right now, we are experiencing flooding again. Nebraska's climatologists expect this could be the new normal. The climate is changing and it will have significant impacts. The University of Nebraska has already examined the impacts of climate change will have on the state, and passing this

resolution would demonstrate that the Legislature takes this challenge seriously. Thank you.

HUGHES: Thank you very much, Ms. Halladay?

AMANDA CALLAWAY: Callaway.

HUGHES: Callaway. Very good, sorry. Any questions? Seeing none, thank you for coming today. Welcome.

CHRIS EIGBRETT: Thank you. Good afternoon, Sir Chairman and members of the committee. Oh, my name is Chris Eigbrett, C-h-r-i-s E-i-g-b-r-e-t-t. Every day all across this great state in schools, daycares, churches, scout groups, sports teams, camps and clubs of all kinds, children and youth are held to moral and ethical codes of conduct created by well-educated adults, often incorporating evidence-based information. It governs their behaviors and benefits all involved. It helps them make tough decisions, holds them accountable for their actions, and is taken seriously by everyone involved because it's vital to the well-being of our society. Today, well-educated children and youth incorporating evidence based information have created a moral and ethical code of conduct in support of our planet and are asking us adults to adhere to it because it benefits all involved. It can help us make tough decisions. Hold us accountable for our actions and should be taken seriously by everyone involved because it is vital to the well-being of our entire planet. Will the children and youth learn that their hard work, their life experiences, the values of their families, their knowledge and their actions on this issue are not enough to be acknowledged by those who represent them? Well, they learned that they are held to moral and ethical codes of conduct, but as adults who can make more choices about them are not. The consequences of this lesson learned go deeper than even climate change, because we know that these children and youth, their families, their friends, their schools will faithfully continue to work hard, make tough decisions, and will hold themselves accountable for their actions on behalf of this planet. But what will be the long-reaching effect of losing faith in us adults who are tasked with aiding the well-being of their society and their planet? Our moral and ethical responsibility is not merely for the future, but for the very important present teachable moment. As an educator and fellow caretaker of this planet, I sincerely ask you to embrace this teachable moment and vote the serious and important resolution out of committee. Thank you very much for your time.

HUGHES: Thank you for your time. Any questions? Seeing none, thank you for coming today. Welcome.

BRITTNI McGUIRE: Thank you. Brittni McGuire, B-r-i-t-t-n-i M-c-G-u-i-r-e. I'm a junior at UNL studying wildlife conservation and urban forestry. I'm also president of Sustain UNL, a student organization on campus. I'm here today to urge you all to support LR294 and vote it out of committee today. I was here at the Capitol on Tuesday for youth lobby day to talk to my representatives about climate change and why I want them to champion policy that protects my future. In a conversation with Senator Hughes, he told us that the reason LR294 has a hearing today is to serve solely as a, quote, learning opportunity for the kids, unquote, and he went on to ask us to limit the testimony to only three people as to not waste the committee's time. Senator, your-- your words broke my heart, but they also prompted me to reflect on the meaning of leadership. It surely isn't just having the title of senator, and I think it has more to do with how you lift people up. You say today is a learning opportunity for the kids, but I see it the other way around. I think we all have a lot more to learn from them, like how to act with deep empathy, fight through adversity, work as a strong united team despite differences, digest negative words and turn them into passion, and empower others like they have instead of tearing them down like Senator Hughes did. These kids are the real leaders in this room. You asked us to limit the testimony to three people as if we're pulling people off the streets and paying them to come testify, but everyone is here today because climate change isn't just graphs and far-out predictions of the future anymore. We have a much closer relationship with it now. We just have to look at the front page of the Lincoln Journal Star or even worse, just out our front doors. No one is here doing this today to hear you all say good job. We're here today because this is serious and you cannot silence us. This resolution isn't just a school project and climate change is not a hoax or a joke, this resolution is a plea from the younger generations asking the policymakers of this state to do their jobs to protect Nebraskans and ensure a decent future for them. I sit and I look at the future as a nightmare lately. I want to go back to dreaming about what I want to accomplish in the future instead of looking at it with extreme anxiety and worry about what kind of world I'll be living in. I'm asking you all to take this issue seriously. Our future is literally in your hands. The decision you make in the next few years are going to decide whether our state is proactive in addressing climate change or forced to be reactive when it's too late. We stand here today at an inflection point. You will

have an opportunity to change the course of Nebraska's future. So I want to end my statements by asking you, which side of history do you want to be on? Do you want to be on the side where this resolution gets killed in committee and the status quo within the Legislature continues to linger while people of Nebraska get ravished by the impacts of an unstable climate? Or do you want to be part of the side where this resolution is passed and our state begins to address the climate crisis and protect the future of all Nebraskans? So I'll say that again. Which side are you on? Thank you.

HUGHES: Thank you, Ms. McGuire. Are there any questions? Thank you for your testimony. Welcome,.

ED HUBBS: Chairman Hughes, Senators of the committee, my name is Ed Hubbs, E-d H-u-b-b-s. I am the habitat manager at Spring Creek Prairie Audubon Center, located just southwest of Lincoln. I'm also a lifelong Nebraskan with a passion for our natural resources and the benefits that they provide to us and to our state. On a daily basis I'm lucky enough, like many of you, to get to meet these people who have a strong passion for our natural resources and the future leaders of Prairie Hill Learning Center were here today and brought that passion to share with us too. So today, I'm representing-- I'm here on behalf of Audubon Nebraska. We have over 12,000 members and we have a national -- or we have an office in Omaha, Nebraska, and we would like to voice our support for moving on with LR294. The Audubon Society is a conservation organization that focuses on birds and the habitat they need to survive. But we also fok -- work to bring awareness to the condition of our environment, how it changes will impact birds and our natural resources and our communities that we all live in. So today, we've heard from other people. I'm not going to rehash the same things that they all hashed. You've heard a lot of the numbers, the facts, the details. I am going to bring forward a couple points that haven't been brought up today. One is that a recent report by Audubon has stated that 389 bird species are threatened with extinction if something-- if steps are not taken to mitigate climate change. Now not all 389 of those birds happen in Nebraska, but many of them do. And many other wildlife do live here and they are going to be affected from it. Any changes in climate change as well as a state, we are going to face economic effects of climate change. One example is Audubon works closely with the city of Kearney and other people in the area for the annual crane migration in the spring migration. That migration is the largest concentration of Sandhill cranes in the world, and it brings over \$15 million to Nebraska annually. That -- not

only are the birds at risk, but that economic benefit to Nebraska is at risk if steps are not taken to combat climate change. Closer to home, a recent report from University of Nebraska titled Understanding and Assessing Climate Change Implications in Nebraska pointed out many other perils, one of which that we all experienced in 2019 was flooding. Like many other places in the state, our land, Audubon's properties are still recovering from the flooding. We will bear the scars for many years that have happened, that are caused and that we continue to try to recover from. And the report from UNL states that these events, especially these high intensity rainfall events, will continue to happen and happen more frequently. So these are some of the negative steps or some of the negative examples of things that could happen if we don't address climate change. So I stand here before you to move forward with LR294, move it out of this committee on behalf of Audubon and its more than 12,000 members in Nebraska. Thank you.

HUGHES: Thank you, Mr. Hubbs. Are there any questions? Seeing none, thank you for coming in today.

ED HUBBS: Thank you.

HUGHES: Next testifier. Welcome.

SCOTT WILLIAMS: Good afternoon. My name is Scott Williams. I live in Omaha and I'm a lifelong learning student in the 32nd grade. It's a pleasure and a privilege to be here this afternoon to encourage the passage of LR294 by this committee on to the discussion in front of the full Legislature.

HUGHES: Spell your name, please.

SCOTT WILLIAMS: All right. Scott Williams, as it sounds, S-c-o-t-t W-i-l-l-i-a-m-s.

HUGHES: Thank you.

SCOTT WILLIAMS: Thank you. First and foremost, I want to recognize the effort, the courage that these young people have shown by working to draft this resolution to engage 15 cosigning senators, by traveling to our state's Capitol be here today, and by speaking to this committee. Without doubt, and fortunately for us, the young people in this room today and their classmates and peers will extend their courage by continuing to talk with their families, their friends, their neighbors

and our elected representatives. All of our futures are brighter and the salvation of our state is because their futures will be of watchful citizens. It is visible from the language of this resolution that these students have dedicated their time to researching the issues and the effects of climate change. Their efforts are clearly evident in the thoroughness, the breadth and the depth of the language of the resolution. Climate change is the defining issue, not of our time, our time is nearly spent. Climate change is the issue pre-defining their time. I'm proud of them for being here today, and I want them to know that you are not alone. I acknowledge that we are in the midst of an anthropocentric climate, an ecological crisis. This Legislature does have a moral obligation to take steps to combat the climate and ecological crisis. To echo wiser words than my own, the climate is changing, so why aren't we? Thank you, Clio. I encourage you to affirm this resolution and to pass LR294 on to the floor of the Legislature. Thank you for your time today. And thank you, students, for advocating to protect your time tomorrow.

HUGHES: Thank you, Mr. Williams. Are there any questions? Seeing none, thank you for coming in today.

SCOTT WILLIAMS: Thank you.

HUGHES: Welcome.

MOLLY PHEMISTER: Thank you. My name is Molly Phemister, M-o-l-l-y P-h-e-m-i-s-t-e-r. I'm here today as a mom. I have a 4-year, almost 5-year-old and who has deep plans for her birthday party and plans for the future. She says she's going to live in my house forever and she's going to have 20 children, and I get worried about my grandchildren already. But it was happening a little bit faster than I thought it was-- would happen. I'm worried about my children and my grandchildren because of what is happening with the planet, because of the speed, not just the speed, the acceleration. The sea level rise is accelerating. The warming is accelerating. I come today bearing good news, two pieces. One is that climate change is manmade because if this was happening without us doing it, we wouldn't have anything we could change about it, but because it's manmade, we can make changes. We made it, we can unmake it. We're very, very creative species. That's how we got to be in buildings with rooms, with lights, with heat, with, you know, like we do all kinds of creative things. More specifically, Nebraskans are incredibly creative people. We know how to do things in this state. We invented the NRD system, which does water allocation by watershed boundaries. The only places where the

Ogallala Aquifer is being recharged is when somebody has organized themselves like that. We do it on the state level basis, but you can look at where the Ogallala Aquifer recharge is happening. There's a pocket in Texas, there's a pocket in a couple other states, and it's only in the places where they organize themselves like we did. And then they're getting the recharge responses that we're having. I talked with a bunch of organic farmers after the drought -- remember 2012. Not worried about last year's floods, remember 2012 when it was over 100 degrees. 100-- over 110 degrees on a regular basis in the summer and the Platte, like got really, really low. I talked to a bunch of farmers and I said, how was that? What was that like for you, and the organic farmers, even the ones on the top of a hill said, well, I had to irrigate once in July or did we irrigate twice? We might have irrigated twice. Another one said, I don't think it was that big a deal. It would have been an issue if it had been a multi-year drought. The drought was so bad the Platte River was shrinking, but they had paid attention to their soil organic matter and it put so much carbon into their soil, exactly what we have to pull out of the air. They had put it into their soil that the drought didn't affect them. Now, if you take a field that is uncovered by cover crops, it's out there vulnerable and the soil starts heating up the surface, the soil, just like a parking lot heats up, the organic matter and the soil starts volatilizing off, but if you keep it covered, which our farmers know how to do, you drive through Iowa and they've all winter plowed and the Iowa soils--

HUGHES: Your red light is on.

MOLLY PHEMISTER: Oh, my apology. Then Nebraska farmers aren't winter tilling. We know how to do stuff here. We can do this.

HUGHES: Thank you for your testimony. Questions from the committee? Thank you for coming in today. Don't be shy.

JILL FOX: Thank you. My name is Jill Fox, J-i-l-l F-o-x. I live on an acreage between Roca and Sprague with my family. I'm here to state my support for this resolution. Concern for climate and the environment is not a new radical issue. This resolution follows the United Nations definition of meeting the needs and aspirations of the present without compromising the ability of future generations to do the same. As written in a 1987 work called Our Common Future. This is an environmental issue and therefore a moral and social issue as we are the caretakers of our environment. This resolution follows a social statement of the Evangelical Lutheran Church in America from 1993, the

Catholic Climate Covenant that was formed in 2006, Pope Francis's appeal in Laudato si' in 2015, a United Methodist Church resolution from 2016, and the beliefs of many other faith-based environmental bodies, as well as the overwhelming majority of scientific bodies around our globe to acknowledge our increasing environmental challenges and our responsibilities in taking action. Please join these bodies in acknowledging the crisis and committing to take care of healing and protecting our common home. Thank you.

HUGHES: Thank you, Ms. Fox-- Ms. Fox. Any questions from the committee? Thank you very much for coming in today. Welcome.

JASON NORD: Thank you very much. My name is Jason Nord, that's J-a-s-o-n N-o-r-d. I'm speaking as a private citizen today of Nebraska. This resolution really doesn't do anything. And that's why you need to pass it. This is a slowball, it is a olive branch. This should be the simplest vote of your career because LR294 doesn't change any laws or make any new policies, it just asks you to acknowledge two basic truths. First, that we are in the middle of a climate crisis that is caused by human activity, and second, that you, as our elected officials, have a moral obligation to use your powers to help fight that crisis. So let's look at the first point. All of the scientific evidence shows that we are in the beginnings of a climate crisis that threatens the future of our civilization and that this crisis was caused by our activities. The scientific community is as close to consensus on this subject as you could expect any community to ever be on any subject. Scientists from across the planet who know thousands of times more about these topics than you or I do are all saying that we need to panic. That if we want to pass a stable economy and ecology on to our children and grandchildren, then we need to act now. But, of course, there are people who ignore the science that want to insist that climate change isn't happening or that it isn't as severe as the scientists say or that it isn't caused by human beings. There have always been humans that have been willing to ignore facts. Please do not be deceived. Passing this resolution and saying, therefore, the Legislature acknowledges that we are in the midst of an anthropogenic climate and economical crisis should be just as easy and uncontroversial as saying, therefore, the Legislature acknowledges that the Earth goes around the sun. Denying that climate change is real, caused by human beings, and that it threatens the future of our society is a form of lunacy, one that ignores all of the evidence and one that has the potential to damn future generations to a world of suffering. So, that brings us to our second point, that U.S. Senators

have a moral obligation to combat climate change. I'd like to take that a step further. You senators here today have a moral obligation to pass LR294. You have a moral obligation to show the youth of Nebraska that their leaders will listen to science. You have a moral obligation to tell these young people gathered here today that their futures mean something, that you will not throw their futures in a landfill, that you will be a hero that fights for the youth, not a villain who stands in their way. Because make no mistake, if you block LR294, then the only life-- lesson that you are teaching to the youth of Nebraska is that their futures are worthless to you. This should be the easiest vote of your career. Future generations will judge you based on what you do today. Thank you.

HUGHES: Thank you, Mr. Nord. Are there any questions? Seeing none, thank you for your testimony. Welcome.

MEGAN YORK LYONS: Hello. My name is Megan York Lyons, and that's spelled M-e-g-a-n Y-o-r-k L-y-o-n-s. I am a Lincoln resident, but here today representing the Nebraska League of Women Voters. I am codirector of Natural Resources and Energy for their board. The Nebraska League of Women Voters supports legislation with solutions for Nebraska's natural resources and energy issues. We hope this youth-led movement with LR294 sets a new standard for our state. The recent extreme weather events are a result of human impacts, according to research cited in the resolution written by the students. By acknowledging this, we can reduce human environmental impacts to create solutions. On behalf of the League of Women Voters, thank you to the students and all senators sponsoring LR294, and please vote this out of committee and I look forward to seeing you on the floor when you discuss it.

HUGHES: Thank you very much. Ms. York Lyons.

MEGAN YORK LYONS: Thank you.

HUGHES: Any questions? Seeing none, thank you for coming in today. Next testifier.

JEREMIAH PICARD: Hello. My name is Jeremiah Picard, J-e-r-e-m-i-a-h P-i-c-a-r-d. Captain Bullfrog, the worms are. I rule the worms in Lincoln, Nebraska. I have the largest confinement operation by headcount, not by animal feeding units, in Lancaster County, probably 15 million worms. We don't count them by head, just an estimation. We compost food waste diverted from Lancaster County school districts,

Lincoln Public Schools specifically; 13 schools, averages about 45,000 pounds of food waste a month. Compostable cups, bowls, food that's not eaten. The worms eat that and process it. We have a very small operation, two acres. Worked with, I don't know how many students in the last five years developing this process. I can't tell you how impressed I am by these students coming forth with this legislation to talk about a real issue facing us as a people. The problem that we're not looking at is how this resolution will help us create economic development in the future by realizing our problem and realize that we have potential to solve the problem by not only building organic matter in our soils, but by fixing the downstream problems that we talked about in the previous bill, which is an LB, not an LR. So, you know, if we want to talk about water, 1 percent organic matter change in the soils of farmable arable land in the state of Nebraska, we'll sequester the amount of water of 2.2 Lewis and Clark Lakes. I'm not for sure if you're familiar with the Gavins Point Dam and the downstream from that, which is the Missouri River, which flows into the Mississippi River, which causes epoxiation [SIC] of our coastal lines, which causes red tide when we have problems, things going down the river that aren't staying in our soil. If you talk about 1 percent organic matter building capacity in our soils in the state of Nebraska, the amount of nutrients that are not going to flow into our rivers, the amount of nutrients that are saved, the amount of carbon that is not created by bringing those products that are mined from nonrenewable resources, which we can create in our own state through the diversion of the food waste from our landfills, which has multiple stacking effects of carbon sequestration. Let's talk about economic development. This is the first step in us realizing we have a problem. We can address it. We can address it with solutions that are present in our state that are being funded by the lottery money from people wasting it because we have grants, because we are one of the most leading states in our country. Our people get together. We started COOL, Country of Origin Labeling, which got thrown out for stupid reasons, which is being fought. We are a leader in our country. We have the most rivers. We have the most water. We are the Ogallala Aquifer. We are the protectors. Let's stand together and do that. And these children are going to be voting for you on your next cycle, whether your term cycled out or not, and Ernie Chambers will talk to you about who will vote for him after he's been around for a long time. Thank you very much for your time, guys.

HUGHES: Thank you for your testimony. Any questions? Seeing none, thank you for coming in today. Next testifier. Welcome.

KRISSA HAMRIC: My name is Krissa Hamric, that's K-r-i-s-s-a H-a-m-r-i-c. I am here representing myself and other concerned parents. I'm a Lincoln native, a teacher, and proud mother of three. I think that these young people have proven that someone's number of trips around the sun does not limit one's capabilities nor dictate the amount of respect one deserves. There is no other age group currently living on this planet who will be more affected by the climate crisis than our children. Their voices are the most relevant in this movement and we must listen to them. These students are not playing a game or trying to get a good grade on a project. They are actively trying to secure a future they see slipping away from them because the adults, those of us who are here to protect them, are too afraid to admit fault and make changes. To be clear, this is not a moment, it is a movement. If LR294 is not passed today, rest assured you'll see these young people again. They will come back and they will come back with more evidence and more supporters, and they will take up more of your time. And if they tire, there are a lot of children waiting to pick up that tort-- torch for them. I will assume that many of you are parents and/or grandparents, and I believe that when you became a parent, you adopted the responsibility to consider the well-being of your own child, but also the well-being of all children. These children are giving you a gift today, a chance to be heroes, a chance to have your names etched into the right side of history. A chance to tell your children and your grandchildren, you will stand up for their futures. I want my children and my students to be proud of me. I want them to see how much I trust them and how grateful I am for the work that they do. I want them to know that their futures are not disposable, and that I will make this fight, the fight of my life for them, but the youth of Nebraska and the United States and the world know that you hear them and that you can align your beliefs and your behaviors with what is best for all by passing LR294. Thank you.

HUGHES: Thank you, Ms. Hamric. Very good. Any questions from the committee? Seeing none, thank you for coming in today. Next testifier. Senator, welcome back.

KEN HAAR: Thank you. It's been quite a while since I've been in this room and the drapes are still the same. My name is Ken Haar, K-e-n H-a-a-r, and I'm almost 77 years old, and that's just a little bit older than my good friend, Senator Kolowski, so I want the young

people to know that that they have a lot of support. Now, when I was a kid, I think I was just told to sit down and shut up and learn. But Time magazine has a really interesting cover from a couple of weeks ago. It's called Youthquake -- Youthquake. And the subtitle is, How the World Will Change When a New Generation Leads. And just to show you some of the generational shift that's going on, just a couple of weeks ago, Sebastian Kurz, aged 33, became Austria's chancellor by forming a coalition with the Green Party, and the Green Party supports surged in Austria last election as a result, many said of the work of a 17-year-old activist called Greta Thunberg. Thunberg may be the most visible, but young leaders raising their voices have become a force across the globe in areas ranging from climate to wealth inequality to corruption to freedoms. And by the way, as of this year, 50 percent of the population on this planet is 30 years or younger. And so this Youthquake that's going on is something that's just going to continue. And one of the -- in this country, one of the issues certainly that the members of Youthquake are very interested in is climate change. And the times are changing. And Youthquake is with us, and you're going to hear more and more, I hope, from young people about their future. So to the youth here today, I wish to say thank you for coming to testify. It's a bit scary, I know. Thank you for your research and your respect for science-based policy-- science-based policy. Don't give up. You'll soon be able to vote. And to state senators, I would urge you to first take these students seriously when they talk about their concerns for their future. Next, recognize the science in LR294. Read it, because these students got the science right. Then vote LR294 out of committee and finally support LB283, which is Pansing Brooks' climate change legislation. Just kind of a reminder, back in-- last year I was in the Legislature we passed LR455. Senator Larson and I co-chaired that committee and the unanimous recommendation of that bipartisan task force was that Nebraska develop a climate action plan.

HUGHES: Senator, your red light is on.

KEN HAAR: It is time. You are tough.

HUGHES: There are several people that want to testify yet.

KEN HAAR: I understand that. Thank you very much for your time.

HUGHES: Very good. Any questions for the Senator? Seeing none, thank you for coming back. Next testifier. Welcome.

ANIA SZARY-BERKOWITZ: Hello. My name is Ania Szary-Berkowitz, A-n-i-a S-z-a-r-y, hyphen, B-e-r-k-o-w-i-t-z. Thank you for letting me spell it. I'm a Lincoln resident and an educator and I'm here to represent myself. I'm here to applaud the students of Prairie Hill Learning Center, their concern, their passion and their hard work in drafting this resolution. I would like to add my voice in asking you to support LR294 and to take into consideration the plea of these young people who are our future so that they, and our children, our grandchildren and generations to come have a future. Climate change and its effects do not discriminate in their destruction. We and all organisms on Earth will suffer the consequences, as they say, we all are in it together. There is no denying that we as a people continue to increase greenhouse gas emissions in the atmosphere. We can see the effects on the polar ice caps already. Eventually this will reach our shores. Overlooking or denying this will not stop the temperatures and the oceans from rising, but our cumulative action can. Thank you.

HUGHES: Thank you very much for your testimony. Any questions? Seeing none, thank you for coming in today. Next testifier.

LINDA BROWN: My name is Linda Brown, L-i-n-d-a B-r-o-w-n. I'm also 77, and I'm here to say that I came to become a climate activist kind of late in the game and I realized it's a huge educational project. I wasn't an activist until after I was 70, so I appreciate the education process that we all have to go through in order to get to the place where we're-- we really need to do some action. This is an opportunity to move the conversation to the floor where our leaders are helping to make decisions for all of us Nebraskans. As soon as I learned about what was happening in this world, I divested of -- at Exxon, but I wouldn't have done that if I hadn't done-- done the education. This process will help us make better decisions. It was an opportunity for me to sit here during Senator Groene's presentation of his bill and to hear Senator Loran Schmit say it really made our process better to invite environmentalists to the table. This is an invitation to invite environmentalists to the table to help us all make better decisions about what's going to happen in the future. I urge you to move this resolution out to the entire Senate. Thank you for your time and not letting your eyes glaze over. And I loved your respect for how you were handling the students, thank you, Senator Hughes.

HUGHES: Thank you, Ms. Brown. We appreciate your coming today. Any questions from the committee? Very good. Thank you for coming today. Next testifier. Welcome.

JORDAN HOPE: Good afternoon. Thank you for having us. My name is Jordan Hope. I'm a mother. I'm an educator. I'm the executive director of Prairie Hill Learning Center, but I'm here to represent myself and other parents.

HUGHES: I need you to spell your name, please.

JORDAN HOPE: J-o-r-d-a-n H-o-p-e. It's a good-- much easier one to spell. To a certain extent, Earth's climate has always undergone change, but it's been gradual. The difference today is that it's changing faster than ever before. As Earth's climate changes, so does our hydrological cycle-- our water cycle, patterns of precipitation where rain and snow fall, when and how much are affected. So is the flow of water in the ocean. The air on the ground and beneath our feet. The High Plains aquifer, our vast underground deposit of water soaked clay, silt, sand and gravel is our most important water source in the U.S. It supplies water to residential and agricultural communities across eight states where 90 percent of our pumped water is used to irrigate our crops. Like the vast uses of corn we heard about in the bill before, water continues to be used at an unsustainable rate throughout many of these states. Nebraska needs to ensure our own effective management techniques and to acknowledge climate change, to encourage and require sustainable practices in order to ensure its depletion isn't secured. Clean, plentiful water is not always available when and where it's needed. Climate change contributes to these global water problems. Rising sea levels can lead to saltwater intrusion in our groundwater and the shrinking mountain glaciers reduce drinking water supplies to Nebraska's rivers and waterways. Scientists and engineers and everyday Nebraskans need to have monetary support to be creative problem solvers, to use alternative energy and clean sources like wind, tidal or solar power. Just like our school does. Major water conflicts and disputes about water control and other natural resources will only continue to grow. The demand for resources such as water have grown twice as fast as the world's population over the last century. Population growth continues to expand out of control. Demand far outstrips our supply. With the risk of shortages becoming more and more of an issue, Nebraska governmental action becomes a crucial role in maintaining peace and avoiding conflict. Do you want to be the state to be the front runner of peace and appropriate action? Or at last-- at least to do what is needed to be done? Let us let these children, our leaders in the back of the room, lead us to know what's needed to be done. You can make

the easiest call of your career, you can pass this resolution and be peacemakers. Thank you.

HUGHES: Thank you, Ms. Hope. Are there any questions? Seeing none, thank you for coming in today. Next testifier. Welcome.

DAVID CREWS: Welcome. Thank you. My name is David Crews, D-a-v-i-d C-r-e-w-s. I'm here as a private citizen and as a farmer. The increase of carbon dioxide in the Earth's atmosphere since the industrial revolution has raised the overall temperature of the Earth. These higher global temperatures have affected the water cycle, changing weather patterns and climate. Rising ocean surface temperatures and melting glaciers have caused sea-- sea lows to rise. Warmer than average temperatures increase the rate of evaporation of water into the atmosphere, drying out our-- our land by pouring excess precipitation on to others as we have seen with the fires in Colorado, California and Australia and flooding here and in our neighboring states, just such as I experienced in the last year, causing losses to my own farm and income. We transform landscapes, dam rivers, cut forest, extract coal and oil and disrupt habitats. The consensus from climate scientists is clear and undeniable. Human-made carbon emissions are the driving force behind global warming and global climate change. We need to conserve the water we use for both agricultural and industry. We need to limit waste. We need to prepare. Governments need some take action and be at the forefront addressing this crisis. The students are not here as a learning exercise, but to fight for their future. A future where all Nebraskans have access to food, clean water and safe places to live, a future with a strong government they can be proud of for making our agriculture and other industry sustainable. Every year we must take bold action to reduce carbon emissions and guard Nebraska's agricultural and industrial economy from the damages of a warming and changing climate. I want to thank the students, especially the students from Prairie Hill and for the students at the University of Nebraska-Lincoln for their testimony. I hope that you will pass LR294 so that we can say good job to you as the committee. Thank you for your time today.

HUGHES: Thank you, Mr. Crews. Are there any questions? Seeing none, thank you for coming in today. Next testifier. No one else? OK, very good. Senator Kolowski, do you want to close at all? We have multiple letters on LR294.

KOLOWSKI: Mr. Chairman and committee, I want to thank you for your patience and having the opportunity to hear the students and adults

that shared with us today. It's important. You did your job very well and I thank you for that. My-- my closing would be very simple. I'm trying to keep this short and sweet and to the point. My friend, Ken, here talked about his age and I'm just two years younger than he is, but we're very experienced in what we've been able to do and and things that we have done in our lives and places we have been. I've been fortunate enough to be around the world and see a lot of different places that people haven't been to and some places that a lot of people have been to, but that's OK. That gave me a perspective in the last 60 years of my life as far as the changes that are taking place and continue to change around our world, and that is changing the environment that we're living in and the impact upon our lives. I hope we can do what we need to do with this particular legislative opportunity that we have. It is important to us to think back on all of our committees that we've all been on the last eight years in my own life here, and all the things that we have heard and all the things that we've been exposed to. Think in terms of this day and what you heard today and what niche that will place in your life as far as reflections back on this particular day and the exposure you had. The students, both the elementary, middle school kids-- students, as well as university level students that were here and the adults all gave us a great deal of information today. Most of it's in the common press and there are deniers as well as there are supporters. You have to make the decision on your own life as to the direction you're going and the impact you're having on what's going to take place in our lives, in our future. Again, thank you for the opportunity today. I really enjoyed hearing every one of the students and adults that were able to contribute today. It's quite a cross-section. I hope you'll agree with me on that. And we're doing things that hopefully will be very fundamentally different in our future as we all work ahead. Thank you very much.

HUGHES: Thank you, Senator Kolowski. Are there any questions from the committee? Seeing none, that will close our hearing on LR294. I'd like to thank everybody for coming today. Come back to the Natural Resources Committee anytime.

KOLOWSKI: Thank you.