STINNER: Please take your seats so we can get started. Some people just don't listen, do they? I wish I had one of those hammers. I'd have "gaveled." Welcome to the Appropriations Committee hearing. My name is John Stinner. I'm from Gering and I represent the 48th Legislative District. I serve as Chair of the committee. I'd like to start off by having members do self-introductions, starting with Senator Erdman.

ERDMAN: Thank you, Senator Stinner. Steve Erdman, I represent nine counties in the Panhandle, that's District 47.

CLEMENTS: Rob Clements from Elmwood, District 2, which is Cass County and eastern Lancaster.

HILKEMANN: Robert Hilkemann, District 4, west Omaha.

STINNER: John Stinner, District 48, all of Scotts Bluff, Banner, and Kimball Counties.

WISHART: Anna Wishart, District 27, Lincoln, Lancaster County.

KOLTERMAN: Mark Kolterman, District 24.

VARGAS: I'm Tony Vargas, District 7, downtown and south Omaha.

DORN: Myron Dorn, District 30, Gage County and part of Lancaster.

STINNER: Assisting the committee today is Tamara Hunt and to my left is Clint Verner. Our page today is Jason Wendling. At each entrance you'll find green testifier sheets. If you are planning on testifying today, please fill out a sign-in sheet and hand it to the committee clerk when you come up to testify. If you will not be testifying at the microphone but want to go on record as having a position on a bill being heard today, there are white sign-in sheets at each entrance where you may leave your name and other pertinent information. These sign-in sheets will become exhibits in the permanent record at the end of today's hearings. To better facilitate today's proceedings, I ask you to abide by the following procedures: please silence or turn off your cell phones. Order of testimony will be the introducer, proponents, opponents, neutral, closing. We ask that when you come up to testify that you first spell your first and last name for the record before you testify. We ask that you be concise. It is my request to limit your testimony to five minutes. Written materials may be distributed to committee members as exhibits only while testimony is being offered. Hand it to the page for distribution to the

committee and staff when you come up to testify. We need 12 copies. If you have written testimony but do not have 12 copies, please raise your hand now so the page can make copies for you. I want you to all know that this is my last hearing. So for eight years I've spent on Appropriations, I've been Chair for six. It's been a privilege to serve with these folks and all the members of the Appropriations Committee. So thank you all for your thoughtfulness and diligence over the years. With that, we will begin today's hearings with LB1160.

WISHART: Thank you, Chairman. I promised you I wouldn't cry, but it's hard not-- hard not to get a little teary-eyed thinking about not getting to serve with both of you.

STINNER: You won't have me to thrash around anymore.

WISHART: Well, good afternoon, Chairman Stinner and members of the Appropriations Committee. My name is Anna Wishart, A-n-n-a W-i-s-h-a-r-t, and I represent the 27th Legislative District in west Lincoln and portions of southwestern Lancaster County. I'm here today to introduce LB1160, a bill that seeks to appropriate \$10 million in American Recovery Plan Act dollars to the Department of Environment and Energy. LB1160 directs the Department of Environment and Energy to develop a grant program for small and rural communities to install reverse osmosis systems in community water systems where drinking water test levels are above 10 parts per million of nitrate and, if appropriate, provide funds to install reverse osmosis systems if test levels for nitrates in drinking water pumped from private wells are above 10 parts per million. I brought this behalf-- bill on behalf of the Ag Leaders of Nebraska, a group that includes the Farm Bureau and Nebraska Cattlemen. I also brought this bill on behalf of Nebraskans who care deeply about having access to clean drinking water. They will be here to testify as to the desperate need for rural communities to update their drinking water systems. I also want to say that this bill, I talked with Senator Gragert, who's been a leader in issues in terms of soil health and water health. And he's-- his priority bill this year is going to do wonders for our state in terms of nutrient management and ensuring that moving forward, Nebraska has clean drinking water for residents and balancing the work that's being done in terms of growing food for the world and ensuring Nebraska's water is clean. And so this bill is a partner with that. There are certain communities in which the water right now in the levels of nitrates within that water need to be improved. And so having the types of infrastructure that, that this bill would provide would allow for those communities to have a short-term solution while bills like Senator Gragert's move forward on a longer-term solution. And so that

is the intent of this piece of legislation in utilizing ARPA funds for that. I'd be happy to answer any questions.

STINNER: Any questions? Senator Clements.

CLEMENTS: Thank you, Mr. Chairman. Thank you, Senator Wishart. My town, my town of Elmwood put in reverse osmosis for this reason probably 20 years ago, over \$500,000 cost. We have a pretty high water bill now, but it's cleaner. If they need repairs to their system, would they qualify under this bill?

WISHART: Yes. And I've spoken with Senator Gragert about that as well. Yes. So this will help for communities that need to put in new systems, and it will also help for communities that have already put in that infrastructure and need to continue to update it and support the maintenance of effort that exists along with that.

CLEMENTS: Thank you.

WISHART: Thank you.

STINNER: Senator Erdman.

ERDMAN: Thank you, Senator Stinner. Thank you, Senator Wishart. As you may expect me to ask, what is your definition of small communities?

WISHART: So really, really west. No, as Senator Stinner said, there is a definition within statute for, for rural communities. The goal is that this is outside of Lincoln and Omaha for communities that frankly don't have the same level of municipal water systems that Lincoln and Omaha do.

ERDMAN: Would this be available to individuals?

WISHART: Yes.

ERDMAN: Or just communities only?

WISHART: Well, it would be individual, available to those who have well systems where they would need an upgrade.

STINNER: Any additional questions? Seeing none, thank you. Afternoon.

STEVE SUNDERMAN: Good afternoon, Chairman Stinner and members of the Appropriations Committee. My name is Steve Sunderman, S-t-e-v-e S-u-n-d-e-r-m-a-n. I'm a fifth generation farmer from Norfolk, where I manage my family's row crop farm and cattle feedlot. I'm a member of

Nebraska Cattlemen and I'm here today to testify on behalf of the members of Nebraska Cattlemen, Nebraska Corn Growers Association, Nebraska Soybean Growers Association, Nebraska Farm Bureau, and Nebraska Pork Producers. I'd first like to thank Senator Wishart for her willingness to work with Nebraska Cattlemen to bring LB1160 for consideration this legislative session. Agriculture depends on clean water and healthy soil to supply a growing world with food, fuel, feed and fiber. Farmers and ranchers meet daily challenges as they work to protect our resources for future generations, meaning Nebraska's farmers and ranchers are growing more with less water and fewer inputs than ever before. Organizations and individuals from a variety of sectors across the state continue to explore new practices, land management strategies, regulations, and policies for the purpose of improving nitrate concentrations in Nebraskans' drinking water. Fertilizers for lawns, gardens, flowers, and crops all use nitrates to provide the plants with this natural energy to help the plants flourish and remain healthy. Since the early 1980s, stakeholders have worked with the University of Nebraska and other organizations to identify and implement practices to minimize nitrate losses in the soil. These efforts have demonstrated success in some groundwater systems where nitrate concentrations have stabilized or decreased. While the scale and scope of these practices have not met the entire challenge facing the state, farmers, ranchers, and others have demonstrated continuous improvement by implementing research in nitrogen-saving strategies across the state. An issue that has taken generations to develop will take generations to rectify. The equipment cost of reverse osmosis systems falls well within the scope of how ARPA funds can be utilized. The up-front cost to install reverse osmosis systems is significant, ranging from \$250,000 to \$4 million or more for installation of a commercial system. For whole home reverse osmosis systems, equipment costs range \$500 to \$5,000. While we realize installing at-the-tap systems do not address the ongoing issue of groundwater nitrate concentrations, this step is an immediate remedy for the shared goal of safe drinking water in homes and communities. According to the 2021 Nebraska Groundwater Quality Monitoring Report, most public water supplies that utilize groundwater in Nebraska do not require any form of treatment. That said, as nitrate concentrations remain a challenge facing individuals, the state, and society, it will require all Nebraskans step up to improve the state's drinking water quality. One thing's for certain: Providing safe drinking water for all Nebraskans is a priority and dedicating ARPA funds to reverse osmosis drinking systems, as described in LB1160, is a small step towards that goal. I would be happy to answer any questions you guys might have.

STINNER: Any questions? Seeing none, thank you.

STEVE SUNDERMAN: Yeah. Thank you, Chairman.

KEN WINSTON: Good afternoon, Chairman Stinner. My name is Ken Winston, K-e-n W-i-n-s-t-o-n. I'm appearing on behalf of the Bold Alliance in support of LB1160. The Bold Alliance supports LB1160. Bold has consistently advocated for the protection of our groundwater in the state because we know that pollution harms people. For more than 12 years, Bold has been one of the leaders in fighting to protect Nebraska's water from contamination because we know that water is life and that contaminated water can cause illness or even death if left unchecked. Bold has shown its commitment to these ideals by providing water filtration systems free of charge to the people of-- to the residents of the Mead area in response to the contamination that has happened in that area. We support that, and I want to emphasize that Bold had no obligation to do so. They just did, did it because of the fact that we heard there was a need and people were afraid to drink the drinking water. And we-- and we stepped up to provide those filtration systems. We support LB1160 as an appropriate step to address situation -- situations where water has been contaminated by nitrates. We do always want to stop pollution before it happens whenever possible, and to hold those responsible for contamination accountable for the cost of remediation whenever possible. But we do support this funding because we believe it's important to protect human health whenever it has occurred. We respectfully request that LB1160 be included. Now I understand there's a separate budget dealing, just learned this from Senator Vargas today that there's a separate budget specifically dealing with the ARPA funds. So we would request that it be included in that budget. Thank you. I'd be glad to respond to questions.

STINNER: Thank you very much. Any questions? Seeing none, thank you.

KEN WINSTON: Thank you.

STINNER: Afternoon.

AL DAVIS: Good afternoon, Senator Stinner, and congratulations on your last hearing day.

STINNER: Thank you very much.

AL DAVIS: A cause for celebration and tears also so my testimony is very brief. But my name is Al Davis, A-l D-a-v-i-s. I'm the registered lobbyist for the 3,000 members of the Nebraska Chapter of the Sierra

Club. We're here today in support of LB1160. I grew up near Hyannis, Nebraska, in the heart of the Sandhills. Hyannis may be the most unlikely community in the state to have high nitrate levels since there is little to no farming near the community. Nevertheless, when testing became mandatory some years ago, that is exactly what took place and a lot of nitrate was found in the water. To solve the problem, the community drilled several wells without much success until finally installing a new well outside the immediate valley in which Hyannis sits. The process was extremely costly for the community. Senator Wishart's LB1160 provides a tool for our small communities to remedy some of the problems associated with high nitrate levels in community water systems, and it's a sensible and fiscally conservative approach to solving the problem. Unfortunately, the problems of high nitrates will be with Nebraskans for decades, despite the fact that technology and education have reduced the amount of nitrogen applied as fertilizer every year. We urge the Appropriations Committee to fund the project to help our small communities provide safe, clean water for their residents. Thank you.

STINNER: Thank you. Questions? Seeing none, thank you.

AL DAVIS: Thank you.

STINNER: Any additional proponents? Any opponents? Anyone in the neutral capacity? Seeing none, would you like to close? Senator waives her closing. We have no letters of support, one in opposition, in the neutral for LB1160. And that concludes our hearing on LB1160. We'll now open with LB1248.

: Senator Hansen is on his way. He'll be here shortly. [INAUDIBLE]

STINNER: OK.

VARGAS: It's not like you, Ben.

B. HANSEN: I just—— I just finished opening up in Judiciary. I have two bills up every day. It's crazy.

WISHART: Welcome.

VARGAS: Are you trying to implement laws, [INAUDIBLE]

WISHART: Let's go ahead and get started. Welcome.

B. HANSEN: Welcome. Thank you. OK. Vice Chair Wishart and members of the committee, my name is Ben Hansen, B-e-n H-a-n-s-e-n. I am pleased to introduce LB1248. This bill would direct \$30 million of state funds to Department of Environment and Energy from the Coronavirus State Fiscal Recovery Fund, according to the American Rescue Plan Act of 2021. This bill will be a tremendous help to Nebraska's municipal water treatment plants that need to expand their capacities, particularly those that process agricultural products, enhance water quality, and create new capital investments and jobs. As a former member of the Blair City Council, I am very familiar with the challenges of providing a significant volume of water to a campus of high-production agricultural processors. Blair and other communities need to expand their water treatment plants. Legitimate business opportunities in agricultural processing are picking other states or countries because our cities cannot afford to expand their facilities. High-capacity ag processors place significant stress on a city's infrastructure. Growth in water usage results in construction, with long lead times for equipment and expensive construction costs. These are risks borne solely by the communities. Here's a straightforward fact: Without a reliable source of potable water, companies will not grow in Nebraska. Our Nebraska Legislature is excellent at developing incentive programs to keep our state competitive in the recruitment of new businesses. Unfortunately, much of the infrastructure costs involved in serving those new businesses become the obligation of local communities. Municipalities across the state are eager to do their part to grow Nebraska's economy, but there's a limit to what they can do without the full support and partnership of the state. So with that, I thank you for your time and consideration. And I have been told explicitly that this is definitely only a one-time ask for ARPA funds. So he's not even listening here. So I urge you to advance LB1248. Thank you very much.

WISHART: Thank you, Senator Hansen. Questions? Senator Kolterman. Excuse me, Senator Clements.

CLEMENTS: Thank you, Senator Wishart. Thank you, Senator Hansen. The award of grants for this, is there a matching fund requirement from the local entity?

B. HANSEN: From my understanding, no, not in the bill itself.

CLEMENTS: All right. Well--

B. HANSEN: No.

CLEMENTS: --but possibly the award could be smaller than what the project is, I suppose. OK. I was just looking for the local entity to actually put some money in so the state's not building the whole thing for them.

B. HANSEN: Sure, that's, that's something we can definitely kind of consider too.

CLEMENTS: Thank you.

B. HANSEN: Thank you.

WISHART: Additional questions? Seeing none, thank you, Senator.

B. HANSEN: Thank you.

WISHART: Are you here for closing?

B. HANSEN: I probably will not be, because I have to go. I got another bill up in Judiciary.

WISHART: OK.

B. HANSEN: Thank you.

WISHART: Senator Hansen waives his closing. Proponents. Welcome.

RODNEY STORM: Chairperson, members of the committee, my name is Rodney Storm, R-o-d-n-e-y S-t-o-r-m. I'm the city admin-- city administrator for the city of Blair, and I'm here to testify in support of LB1248. Blair is a community of about 8,000 north of Omaha. Our municipal water treatment plant provides water for approximately half the residents of Washington County, as well as many international and corporate partners. As a source of reference, we do draw water from the Missouri River, so we have plenty of, of quantity of just not very much quality. Our municipal plant has a capacity of about 20 million gallons per day. Our business partners consume about 15.5 million gallons per day, and that's been developed over the past 25 years in partnership with the corporate businesses in our area. Our partners continue to expand slowly, consuming future capacity to the point that we no longer have additional water for their requirements. I say slowly because each corporate expansion consumes small amounts of excess water capacity, but the future's arrived a few years ago. Blair was unable in recent years to compete for several industrial expansions and ended up in other states or countries due to the lack of water capacity or infrastructure inadequacies like natural gas. Our

corporate partners grow by increasing production, investment, and employment. We want them to grow their investment, jobs, and processing in Nebraska rather than another state or country. Their growth in Nebraska requires more water for processing, much more. The Nebraska Legislature does an excellent job in developing and setting programs to keep our state competitive and recruiting new businesses and industries. Unfortunately, much of that infrastructure costs involved in serving those new business industries are left to the local communities. Some incentives, like rebate and sales tax, actually removes city revenues that we rely on to help provide other local incentives, like developing new infrastructure to help support new businesses. These sales tax rebates are often the same sales tax a city would use to offer municipal incentives so that the same business -- to the same business or industry. Municipalities across the state are eager to do our part in the state's economy. However, there is a limit to what can be done without the full support and partnership with the state. When a prospective company comes to a location certain-- comes to do a location search, they present their criteria to the Department of Economic Development. It starts with a list of required infrastructure needs. DED forwards that requirements to the economic development entities that may match the company's criteria. As a result, cities without infrastructure, sufficient infrastructure cannot compete. Our challenge at the local level is to build infrastructure capacity so that we can bring new investment and jobs to Nebraska. But construction of infrastructure and expansions like water plants, water distribution systems are specific and costly. We have a corporate partner currently that is moving forward with a \$300 million expansion. It will create approximately 67-- 60 to 70 quality jobs. They need about 1.2 million gallons of water per day that we don't have. Our engineers say that a minimum expansion of 7 million gallons per day is the most cost effective. We are competing for other-- another project with an estimated investment of up to about a billion dollars and several hundred jobs. The company has narrowed that loca-- its selection in Nebraska to Blair. We need about 800,000 gallons a day for that project. How do we pay for the remaining capacity of about 5 million without putting our ratepayers at risk? Blair is just one of the communities across the state that struggles with infrastructure capacity. LB1248 would be significant for Nebraska's local water infrastructure needs. Using ARPA funds to help cities grow their infrastructure capacity today will help guarantee future economic growth in our state. I urge you to advance LB1248 to General File. And thank you, and I'm happy to answer any questions.

WISHART: Thank you for being here. Any questions? Seeing none, thank you. Thank you. Additional proponents. Hello again.

MICHAEL ROOKS: Hello. Senator Wishart and members of the Appropriations Committee, my name is Michael Rooks, M-i-c-h-a-e-l R-o-o-k-s. I'm the executive director of Gateway Development Corporation from Washington County, Nebraska. I'm testifying on behalf of Gateway Development to express our support for LB1248, legislation to provide federal funding for muni-- municipal water treatment facilities. Since 2019 Gateway Development, we've had a very strong economic development push, with over \$500 million in capital investments and over 500 jobs. However, one of the areas we struggle with is having enough water capacity for the larger projects, as Rod Storm has, has mentioned. It is hard for small rural communities to build new municipal water treatment facilities with limited funding and resources. Maintaining and expanding mutual -- municipal water infrastructure is a major undertaking and imposes a substantial burden on our systems -- system ratepayers. It does, though, come with measurable economic benefits. Development in one community has positive impacts across the entire state as it boasts markets from home-grown goods such as food and fuel commodities, industrial machinery, and Nebraska's product distri-- distribution network. Expanding and upgrading these basic services, such as water quality and supply, is both an economic driver and essential element for state and community growth. Over the last two years, we've had over eight RFPs looking for sites with large water and sewer demands in the Omaha MSA. We did not land any of these because the cost and time to build out the water facility was too much and it takes years to build out. Infrastructure is key to landing projects. We need to have these built out before RFPs come in if we want to be able to compete, compete with the larger communities in other states. Since I started the role in 2019, especially once COVID hit, more companies are looking to come to the Midwest. Nebraska needs to have the ability to deliver sites and necessary -- and necessary infrastructure in a shorter timeline. And if passed, LB1248 will help us do that. This, this will position Nebraska to respond to the global supply chain and position ourselves as a solution to the problem. Again, Gateway supports LB1248 and the efforts provided to provide federal funding for the municipal water treatment facilities. Thank you. I'd be willing to answer any questions.

WISHART: Thank you. Any questions? Senator Clements.

CLEMENTS: Thank you, Senator Wishart. Thank you, Mr. Rooks. What would the cost be to expand Blair's by 7 million gallons a day as Mr. Storm said?

MICHAEL ROOKS: I believe between 20 and \$30 million overall.

CLEMENTS: All right. Thank you.

WISHART: Additional questions? Senator Dorn.

DORN: Thank you, Senator Wishart. Thank you for being here. I've got a question, I guess. When, when you talk water or whatever, is there a difference between commercial type water that they use and I call it house water or it's all one class?

MICHAEL ROOKS: It's basically all one class.

DORN: OK.

WISHART: Additional questions? Seeing none, thank you.

MICHAEL ROOKS: Thank you.

WISHART: Additional proponents for LB1248? Seeing none, any opponents? Seeing none, anyone in the neutral? And Senator Hansen does waive closing. We do have three letters of support to read into the record, zero in opposition, and zero in neutral. That closes the hearing for LB1248 and we will open the hearing for LB1191. Hi, Senator, it's good to see you.

BREWER: Greetings. I was hoping to see Senator Stinner so I could get all emotional. [LAUGHTER] Not.

WISHART: He doesn't-- he doesn't like that, so he headed off.

BREWER: All right. Well--

WISHART: Before all of our tears could be shed.

BREWER: You can pass on to him how emotional I got. We're going to try this without the readers. Thank you, Chairperson Wishart. And good afternoon, fellow senators on the Appropriations Committee. I'm Senator Tom Brewer. For the record, that's T-o-m B-r-e-w-e-r. I represent 11 counties of the 43rd Legislative District of western Nebraska. I'm here to introduce LB1191. The Winnebago Tribe came to me and asked to have legislation introduced to help them address the poor drinking water quality in the village of Winnebago. This has been a

problem for some time. I have seen the water in Winnebago and it has a brownish color to it and it doesn't look, shall we say, very presentable as drinking water. I drafted LB1191 to give not only the Winnebago Tribe, but also the Santee and the Omaha Tribe an opportunity to voice the problems with the quality of drinking water. After the hearing today, we'll, we'll have a better idea on some of the issues they face and understand that this bill was brought to me literally on the last day, almost the last hour, so with that presented some challenges to get some of the numbers that we needed. But LB1191 would appropriate money from the-- from Nebraska's American Rescue Plan Act funding available under COVID for the State Local Fiscal Recovery Funds. The money would be used to repair and improve dangerous, substandard municipal water systems on our Indian reservations. LB1191 does not appropriate a specific amount of money pending information that we'll receive today, and I do have some numbers here that we'll hit right at the end. Again, as we were writing the bill, we didn't have that information yet and we were against the ten-day deadline to get in legislation. You, as members of the Appropriations Committee, are well aware of the ARPA COVID State and Local Rescue Funds, and this is going to be used for water and sewer projects that is well within those quidelines. Today, we are going to hear from a number of tribal leaders and experts on the ongoing needs to improve the drinking water within our state and within our Native American Indian reservations. Keep in mind that these areas that we're going to be talking about today are populated both by tribal and nontribal members. I ask the committee not to lose sight of the purpose of these funds, and it is simply to, to have safe, clean drinking water for all citizens of Nebraska to include those Native Americans on our Indian reservations. Now with that, some of the numbers I wanted to run by you, our total request is, is \$10 million. And how that breaks out is that's 10 of \$22 million so that's the match here, and I heard Senator Clements talk about that. So on the Santee side, \$6 million with the \$16 million match; on the Winnebago it's \$2 million with a \$3 million match; and with the Omaha, it's \$2 million with \$3 million match. There are a number of folks here that have brought specific details on their particular community and the issues. And so I guess at this point, I would ask that those details will hit the experts on those because I'm not the expert. With that, I'll take any questions.

WISHART: Thank you, Senator. Questions? Senator.

ERDMAN: Thank you, Senator Wishart. Senator Brewer, can you hit those numbers again?

BREWER: Yes. All right. So total, we're looking at \$10 million that will be matched by 22 and that's total here. So then as we went down and break it out, Santee it was 6, and that will be matched with 16; Winnebago, 2 matched by 3; Omaha match 2-- provide 2, matched by 3. So the Winnebago and the Omaha are the same. Santee are the ones who are higher.

ERDMAN: Thank you.

WISHART: So your request today from, from ARPA is \$10 million.

BREWER: Correct.

WISHART: OK. Any additional--

BREWER: Unless I'm corrected by someone behind me, we'll see. But as best I understand at this moment, that is correct.

WISHART: Any additional questions? Seeing none, Senator, will you be here to close?

BREWER: I will be here the whole time.

WISHART: Great. We're now open for proponents for LB1191. Welcome.

CLINTON POWELL: Good afternoon, Vice Chairman Wishart and members of the committee. My name is Clinton Powell, C-l-i-n-t-o-n P-o-w-e-l-l. I'm a senior engineer for Brosz Engineering and the civil engineer for the Santee Sioux Tribe of Nebraska. I'm here to talk today a little bit about some of the issues that are facing the Santee Sioux Tribe and what the \$6 million, I guess, would entail and, and the larger project as a whole. So a little backstory is useful. In 2008, I started working on this, this project as an employee of the federal government. It's a longstanding water quality issue in that part of the state. As part of that process, the, the tribe and nine tribal entities in that area went through both an appraisal study and a feasibility study on long-term water resource needs in that area and that both of those-- both of those studies were, were found to have merit. And the project received authorization for congressional funding based off of-- based off of those studies. It's not uncommon for projects to receive authorization for construction from the federal government and then for them to basically sit forever just because their appropriations process at the federal government level is, is what it is. I think we're all well aware of how that looks. And so this project is a -- is a federally authorized project. So the, the major concerns back in 2008 were the-- were the increasing amounts of

nitrates that we were seeing in the area, as well as some exceedance of secondary standards of, of water quality. Since that time, I got very involved in the project again in 2018. Since then, we've continued to see elevated levels of manganese. Manganese is now a primary standard for drinking water. That's been a recent change under, under EPA guidance. So as manganese has become a primary standard, the tribe then has also seen a do not drink order basically that's been implied or expressed by EPA. That do not drink order primarily is associated with that manganese, and its, its troubling aspects that it brings specifically to, to infants. And so the, the incident rates that you see of blue baby syndrome and higher infant mortality is really why, why manganese is a-- is a rated-- is a rated mineral in, in our drinking water. And so they have exceeded that. And so at this point, they're, they're not supposed to be using that water. And so that order was given, I want to say, in 2019. And so this continues to be an issue for them. At this point, we've explored a number of different funding options of, of how we get to a long-term source water solution for the-- for the tribe and nontribal members. I want to be really clear that when we've looked at this system, it makes sense to not only service the tribal areas, as well as potentially service the municipal nontribal areas near the Santee Sioux Reservation. And so that's something that we spent a lot of time looking at. And so this \$6 million is really the cornerstone to how we turn around and leverage about a \$22 million project. Additional project funding we would anticipate will come from places like Indian Health Services, USDA Rural Development, New Market Tax Credits, which is a federal tax credit program, as well as some private lending resources. And so that's how you get to a total project. When we look at what that total project is, it's most likely that we're bringing surface water, treated surface water down from, from some of the large systems in South Dakota to turn around and provide that municipal water supply to that area. The other thing that that does when we look at large scale, large scale regional rural water systems and we're talking about water systems that are, let's say, in excess of 50,000 square miles worth of service area, which is often times larger than what we're seeing for rural water systems in Nebraska, but that's fairly commonplace that we see back in South Dakota, is the interconnectedness of those systems. And so by bringing that amount of-- by bringing that amount of water down and bringing that water supply down, it gives us the ability, for example, to, to interconnect with, with Cedar-Knox Rural Water, for example, if they were to build a new system in the future. And what that does is that if we ever had a major failure, let's say like we had at Spencer Dam, that gives us redundancy where we can then turn around and provide water a different

way without having to go through all of kind of the emergency systems that we had to go through in-- during the flood. So that's their kind of project in a nutshell, and I'll stand for questions.

WISHART: Any questions? Senator Erdman.

ERDMAN: Thank you, Senator Wishart. Thank you for coming. So the location must be in very northeastern Nebraska. Is that correct?

CLINTON POWELL: So we're talking about an area in north central Nebraska. Yeah.

ERDMAN: OK. So you're going to get water from South Dakota?

CLINTON POWELL: So the proposed plan is to actually bring treated water from Randall Community Water District in South Dakota, bring it underneath the Missouri River and supply it as potable water to the citizens of Nebraska.

ERDMAN: How big a pipe is that?

CLINTON POWELL: So that final pipe size is still under design. It'll likely be a -- it'll likely be a redundant system. So you're running two smaller pipes that'll cross simultaneously, likely talking about 16- to 24-inch parallel pipe system.

ERDMAN: And South Dakota's OK giving us some water?

CLINTON POWELL: So South Dakota has a longstanding— has a longstanding understanding that this is a— this is an acceptable use of, of water and water rights in the state of South Dakota. And so when you look at— when you look at, example, for the Lewis and Clark Water System, Lewis and Clark Water System pulls water out from near Yankton, South Dakota, and actually provides water all the way up to Sioux Falls, South Dakota, as well as southwestern Minnesota. And so this is a longstanding thing that, that is acceptable under South Dakota water rights.

ERDMAN: We ought to have South Dakota talk to Colorado.

CLINTON POWELL: That's your guys's issue. We're staying out of that.

ERDMAN: Thank you.

WISHART: Additional questions? Senator Kolterman.

KOLTERMAN: Thank you, Senator Wishart. Thanks for being here. So you're saying you could do all this for \$30 million?

CLINTON POWELL: Ah, we can. So part of that— part of that is just the way the Randall Community Water System is already set up. And so Randall Community Water provides water to the south-central portion of South Dakota. And so an awful lot of the distribution system required to provide water down there is already in place because of the service that's provided to the Yankton Sioux Tribe. And so with that area already being in place with an awful lot of the storage tanks already being in place, it really becomes the major expense is the turnaround and boring underneath the river and then providing additional infrastructure once you're in Nebraska.

KOLTERMAN: Thank you.

CLINTON POWELL: You're welcome.

WISHART: Additional questions? Seeing none, thank you for being here today.

CLINTON POWELL: Thank you.

WISHART: Additional proponents? Good afternoon.

KAMERON RUNNELS: Hello. My name is Kameron Runnels. My first name is K-a-m-e-r-o-n, last name, R-u-n-n-e-l-s. I'm the vice chairman of the Santee Sioux Nation Tribal Council. Thank you for letting us come here today to speak to you on this extremely important issue for our tribe and for the other tribes here with us today. I just want to give you a little brief history of our people. Our ancestors, you know, we were removed from Minnesota in 1862 for starting a rebellion in that state in a desperate attempt to make the U.S. government keep their promises to, to provide healthcare, food, housing, education, and money to win back and to try and win back our, our, our lands. And that failed and our people were shipped from South-- to South Dakota. And after a couple of years there, we were allowed to move to Nebraska, and that's where we are to this day in Knox County, Nebraska. And I know we, we-today, you know, we interact with neighboring communities, spending money in their businesses. You know, we, we follow our local community sports teams. You know, our people have served in the military since World War I. You know, we all enjoy watching the Huskers play football in the fall. We do a lot of the same things most citizens in the state do. However, we lack a basic necessity that most Nebraska citizens and probably most United States citizens probably take for granted. And we

don't have clean drinking water. You know, as far as I can remember as a little kid 30-some, 30 years ago or 25 years ago, clean drinking water straight from a kitchen sink is something that our tribal people has never had. You know, over the years, I think community members knew there was an issue with our water because it had, you know, a bad, bad smell or was discolored. This issue has been brought up time and again with government officials, but we never received any kind of aid or guidance or assistance to help solve this water crisis. And a couple of months ago, in fact, we spoke with a government official after explaining this issue to him, he replied that they had thousands of cases of bottled water they can give us. And OK, you know, thank you, yeah, but how is that a solution? And, you know, we've received, you know, a number of notifications from various state and government agencies, you know, telling us that we need to fix our water. You need to buy this to get your water fixed, you know, but you know, like our -- I have a comment from our secretary of our council. He once said this to me. You know, if you're not going to help us solve this problem, then don't tell us repeatedly that we need to fix our water infrastructure. You know, we are not a wealthy tribe. You know, many of our people, we don't make a whole lot of money. You know, today, community members, we have to-- we have to buy numbers of bottled water every week. Our, you know, our local grocery store can't keep up with the cases of water. You know, the closest supermarket or Hy-Vee is an hour away. You know, the households that can afford it, which aren't many, you know, they'll buy, you know, those five-gallon tanks from, you know, Culligan or EcoWater, you know, and long time usage of the -- of the current water that we have can, can damage equipment, erode faucets, corrode faucets, water heaters, pipes and worst of all, can cause health and neurological effects with infants, children, elderly because of the high levels of, of mag-- manganese. Like many tribal people in this nation, our people suffer from, from various underlying health conditions that are higher than most citizens. You know, we have to bathe, brush our teeth, wash dishes, wash clothes, cook with this current water. You know, what if these health issues relate to our water and our children? How are they being affected? You know, we always hear the phrase water is life among our people. Yet we can't even fill up a glass of water from our kitchen sink to give to our kids. Our people need this bill to help fix our water infrastructure and get us clean drinking water. You know, please pass this bill. Thank you.

WISHART: Thank you, Kameron, for being here. Any questions? Seeing none, thank you. Additional proponents? Welcome.

STUART REDWING: Thank you. Thank you for listening to us and hearing us. My name is Stuart Redwing, S-t-u-a-r-t R-e-d-w-i-n-g. Honorable Chair and members of the committee, my name is Stuart Redwing and I am the Tribal Council Secretary for the Santee Sioux Nations located in rural Knox County, Nebraska. I thank you for holding this hearing today in a matter of its primary importance to the tribe. The Santee Sioux Nation has been undergoing a clean drinking water crisis for several years, and I am hereby-- here, here to testify in support of LB1191 as it will provide badly needed funding to the tribe for clean drinking water infrastructure and hopefully resolve our ongoing crisis. As owner and operator of its public water system, the Santee Sioux Nation is responsible for that daily operation and maintenance of the wells, source of water, its water treatment plant, conducting monitoring, providing public notice, and delivering drinking water to its customers that is safe to drink and complies with the National Primary Drinking Water Regulations. In 2020, the nation learned that the two wells that supply the tribe's public water system had elevated levels of manganese. In response, the tribes issued a public notification sharing this information with its consumers, particularly for those with infants younger than six months old. Subsequently, samples taken by the tribe in 2021 showed levels of manganese in the system exceeded the EPA's health advisory level for all consumers. The tribe thus issued further public notices to its water customers that they should not drink the water from the public water system and instead should drink bottled water. The EPA further advised that boiling water would not alleviate the problem, but would only worsen the manganese concentrations in the water. As a result of the toxic levels of manganese and also high levels of iron and other contaminants in the water that causes the water to taste, taste and smell bad, tribal members are forced to purchase bottled water or seek out a supply of bulk clean water for drinking purposes. This has caused substantial burdens on a tribal population that is already severely disadvantaged. Manganese is a naturally occurring element that has been found in many surface and groundwater sources and in soils that may erode into the waters. At low levels, manganese is an essential part of the human diet. However, infants who drink water, including water in infant formula, containing more than 0.3 milligrams per liter of manganese over a period of 10 days may have negative neurological effects. The EPA and IHS have advised the tribe that a long-term solution is required to resolve the dangerous drinking water supply on the reservation. However, the tribe has scarce resources and not been able to secure outside funding for a long-term solution. LB1191 provides an opportunity for the Santee Sioux Nation to at least begin the process of identifying and implementing a long-term solution

to its drinking water crisis. On behalf of the Santee Sioux Nation, I urge you to vote in favor of LB1191. Thank you.

WISHART: Thank you for being here today. Any questions? Seeing none, thank you.

STUART REDWING: Thank you all.

WISHART: Additional proponents.

GWEN PORTER: Good afternoon, Appropriations Committee. My name is Gwen Porter. That's G-w-e-n P-o-r-t-e-r, and I'm here to testify as a proponent for LB1191. My name is Gwendolyn Porter and I have dual citizenship as an Omaha tribal-- Omaha tribal member of Nebraska and a citizen of Nebraska. I serve the Omaha people as an elected tribal council secretary. This testimony is presented with the support of the Omaha tribal governing body, the Omaha Tribal Utilities Department, the Public Housing, the Tribal Community Planning Department. The Omaha Tribe owns and operates the community drinking water and sanitation system. The provision is providing the public with, with piped water for human consumption. The system supplies water from a two-well field to approximately 1,800 users, tribal members, nontribal members, and agriculture within the exterior boundaries of the Omaha Tribe-- tribal reservation and in the town of Macy through nearly 360-plus service connections. The Omaha Tribe entered a consent decree in March of 2011. Due to several deficiencies throughout the years, water breaks and boil orders were becoming a norm. The community was reduced to purchasing bottled water for drinking and the tribe-- the tribe was working with the water system that was built in the early '30s and that had a lot of needs that did not develop with the growing community with housing, businesses, and agriculture. And since the consent decree of 2011, we have fulfilled and continue to-- continue to follow-- continue following by developing and supporting the Omaha Tribe Utilities Commission, hiring and training certified water operators, administration, installing meters, developing and submitting an operational plan. Our utilities director has been with the Omaha Tribe since 2014, and our current Omaha Tribe utilities director was also recognized as the 2021 National Tribal Water Program Water/Wastewater Operator of the Year. The utility has been diligent in identifying and repairing water system leaks, both in the distribution system and in the residential homes, which reduced their daily average water demand on one-- by one half. The director has helped the utility establish a budget, including reserve accounts, cleaned up the utilities waste transfer station, ensured completion of routine water sampling, installed residential water meters, create a

composite utility map, and made many more system-wide improvements. Our goal is to continue to achieve and maintain continuous, sustainable, and long-term compliance with providing safe and cleaning-- clean drinking water for the community. When the COVID-19 pandemic hit our communities, we recognized we were dealing with an additional deficiency. With more people at home 24-7, it took a toll on our water system, when water, when water is a necessity for survival and even more important for hygiene to mitigate the virus. So the Omaha Tribe supports LB1191 funding the tribe for a clean drinking water infrastructure. This support will allow the tribe to expand with, with a growing community and continue to provide safe drinking water. That is the end of my testimony.

WISHART: Thank you for being here today. Any questions? Seeing none, thank you.

GWEN PORTER: Thank you.

WISHART: Additional proponents?

JERRY HENSCHEID: Thank you, Senators. I am Jerry Henscheid, J-e-r-r-y, Henscheid, H-e-n-s-c-h-e-i-d, good old German name. I am the utility director/water operator for the Omaha Tribe of Nebraska. And as Gwen said, actually the national tribal operator of the year last fall so.

WISHART: Congratulations.

JERRY HENSCHEID: Want to plug myself a little bit, but thanks, Gwen. So we are requesting \$2 million for two projects: a water treatment plant and a groundwater well. The Omaha Tribe is currently under Department of Justice Consent Decree, as Gwen said, since 2011. We were cited for numerous drinking water violations. However, in the past eight years we have made tremendous progress. But in 2018, with some further tests, we found out that our radium levels 226 and 228 exceed the MCL of 5 milligram per liter and high manganese. We have a treatment plant under design currently. We have not gone out to bid, but it's under design. It's actually slated for construction in 2023. We have procured \$3.5 million towards that, but with high construction costs, we anticipate we will need 1 million additional dollars to complete that treatment plant. The second one we did test last fall. We all know we're kind of in a little mini drought. We have two wells. One of our wells now is at half, half its high static water, so we can currently not meet our 10 state standards to provide enough water daily to our-- to our system. So we're proposing a third well to our

system for it to meet our daily production. So that's our two projects and I kindly ask your consideration for this bill.

WISHART: Thank you. Any questions? Seeing none, thank you.

JERRY HENSCHEID: Thank you.

WISHART: Additional proponents? Welcome, Judi.

JUDI GAIASHKIBOS: Thank you, Chair-- Vice Chair Wishart, and sorry that Senator Stinner is not here. Is this his last hearing for the whole?

WISHART: Yes.

JUDI GAIASHKIBOS: OK. So I am Judi gaiashkibos, the executive director of the Nebraska Commission on Indian Affairs. And that is spelled J-u-d-i q-a-i-a-s-h-k-i-b-o-s. And I'm really honored to once again be back this session. I've seen you quite a lot. So I come before you on behalf of the Commission on Indian Affairs, and we are in support of LB1191. As you've heard in the previous hearings prior to us, it's essential for us to have life, we must have water. That is part of who we are as human beings. Water is life and water is sacred to all of us. So I think that we all agree that that is so important. And during these COVID times, water was essential and it was a part of keeping our hands washed and cleaning the counters and all. So this morning, as I woke up and prepared for the hearing for the day, what did I do? I turned on the water and I had a shower and it was clean and it was hot and it was wonderful. And I gave thanks for that water. And then I went down to my kitchen and I made myself coffee. I turned on the faucet and I had a cup of wonderful coffee, and it made me think of my Santee Sioux grandmother and when she lived on the reservation and her mother. As you heard the stories here from my Santee relatives, I am enrolled Ponca, but I am also Santee and very proud to be a Dakota descendant. My grandmother told stories about when her mother came down as a child during that removal to Nebraska and what that was like, and about the days when she was a little girl and she had to haul water on the Santee Reservation, and she went to the Santee Normal Training School. And she always would say to me as a young girl, why are you complaining about doing the dishes? You've got hot water. It's coming out of the faucet. So as we in our culture look forward to life and we always say what we do today impacts the next seven generations. I'm very proud to be here on behalf of all of our tribes. And I'm very proud that my daughter is an attorney, and she was a legislative page here many years ago, went to the University of

Nebraska, and some of you have met her out in D.C. at the Standing Bear unveiling. She dedicates her life to Indian law, and water law is her specialty. And she has negotiated the water settlements for the Crow Nation in Montana, the Pechanga Nation, the Gila River. And so as I was preparing for this, I reached out to my daughter. It's so nice when you can go back to the younger people, and she sent me many articles about data, etcetera, to prepare for this hearing. And one of the articles that I read stated that throughout America, 48 percent of tribal nations don't have access to clean water. They still have to haul the water. So in summarizing, we're here to say that we are in total support of this bill. We think it will really be a life changer. And as a dual citizen, a citizen of the Ponca Nation and as a citizen of the state of Nebraska, as all of our testifiers from the tribal nations are, many non-Indians work for our tribes and live on our reservations. And they, too, should have safe water, just like all of you enjoy and like and want. And there are some communities, I know Lyons recently was struggling with brown water, so it happens in Nebraska. But we have an opportunity this one time here with these special funds to make a difference and provide equality for our first people. As the director of the Indian Commission, we are named in the bill as we're going to manage the fiscal. We'll be the fiscal. So that's a little concern to me and I want to get that out on the table on behalf of our staff. I only have a budget of \$250,000; two other people that work on any payment that goes through our system. It's a cumbersome E1 system. So if we have \$10 million on the table for the three tribes, 6 for the Ponca or for the Santee; 2 for the Omaha and 2 for the Winnebago, I would like to see something in this bill that gives our agency money to hire a contractor to manage all those contracts. And also, I'd like some funds for my two employees to have a little bit of compensation because they will still have to do the segregation of duties and do the input. Even if it's a contractor, you have to be a state employee to use the E1 system. So I want to be an advocate for our tribes, but also I don't want this \$10 million to be a hardship on our agency. And at the end of the day when audits are done, we're the ones that will be-- I will be the person that has to answer to the federal agents on compliance, etcetera, of all those contracts. So with that, I would close and say that I do hope that you'll move LB1191 out of committee. I appreciate and thank Senator Brewer for introducing this bill and for the Ho-Chunk Nation bringing this bill on behalf of all of our tribal nations.

WISHART: Thank you, Director. Any questions?

JUDI GAIASHKIBOS: No questions.

WISHART: Seeing none, thank you.

JUDI GAIASHKIBOS: OK.

WISHART: Additional proponents? Welcome.

RON NOHR: My name is Ron Nohr. It's R-o-n N-o-h-r, and for the past 26 or 27 years, I've worked with the Winnebago Tribe of Nebraska. I'm a licensed civil engineer in Nebraska, Iowa, and South Dakota. And I worked at Winnebago weekly for the last 25 or 26 years managing and administering their construction projects. And I put together a little bit of information on, you know, kind of where we're at and what, what some of the problems are on that sheet. We have serious problems with sodium, calcium, magnesium, sulfates to total dissolved solids and just, just hardness in general. We have issues with just our-- just the aesthetics of our water. I mean, people don't even drink it up there. I mean, we've got bottled water in all the, the, the businesses and the tribal buildings that, you know, people utilize for, for drinking water. We have, you know, I've been there for a long time and I, I think it's every week somebody says something to me about, you know, when are we going to do something with our water quality? And a lot of times it'll be in reference to, you know, I put my two-year-old in the bathtub and, you know, it's brown, brownish yellow, yellowish water. And I see it when we, we open up a water main for, you know, just for improvements, you know, for the Indian Health service projects and it's, it's pretty bad. I mean, it's not-- and I'm-- I didn't grow up there. I'm German. I'm probably more German than Jerry is back here, actually. But, but-- and I've seen it and I've spent half, about half my life up there and, and really good people up there, and they deserve a lot better than what they have for water quality right now. I'll be open for any -- for any questions.

WISHART: Thank you. This is helpful. Any questions? Senator Erdman.

ERDMAN: Thank you, Senator Wishart. Thank you for coming. Your chart shows nitrates were very low. Is that common?

RON NOHR: Yeah, we have a filtration plant and we, we get our nitrates down to where they're, you know, they're acceptable, you know, by EPA standards. It's most of the-- it's the secondary items, which are the ones that are in yellow that, you know, that the sulfates are real high. Just our hardness is-- it's about double what, like, the maximum contaminant levels would be for, for like, what's, what's considered desirable household consumption water. So our nitrates are good, but we, we installed a new-- we installed a treatment plant about 50-- 50

years ago. And the main reason that we're only asking for \$2 million is that treatment plant that we installed, I think it's a little bit less than 50 years ago, is still in service. And we use that building and we want to be able to continue to use that and then to, to provide a supplementary type water treatment off the back end of that. So we'll get all, you know, most of that iron, manganese and you know, a lot of the, the bad particles out of it, you know, before we do a soft supplemental type system.

ERDMAN: Thank you.

WISHART: Any additional questions? Seeing none, thank you.

RON NOHR: [INAUDIBLE]

WISHART: Additional proponents? Thank you.

RON NOHR: Thank you. Thanks, everybody.

WISHART: Good afternoon.

VICTORIA KITCHEYAN: Good afternoon. Good afternoon, Vice Chair Wishart and members of the, excuse me, Appropriations Committee. Thank you for holding this important hearing on LB1191. And I'd also like to acknowledge Senator Brewer for his leadership and for his efforts to always support the Nebraska tribes. So my name is Victoria Kitcheyan, V-i-c-t-o-r-i-a K-i-t-c-h-e-y-a-n, and I have the honor of serving as the chairwoman of the Winnebago Tribe of Nebraska. As an elected leader such as yourself, I'm also personally committed to elevating our community issues and working towards better outcomes for our citizens. This includes both at the federal and state level, and so I have a great appreciation for the good work that you folks have done here at the Unicameral. LB1191 would be providing funding for the drinking water in our communities and the sewer systems. This critical need for Nebraska tribes and in Winnebago we face drinking water needs daily. Our drinking water, as been noted, is classified as undesirable for household consumption, and this is true across the board for all the Nebraska tribes. And we heard the explana-- or the example about a bathtub. Well, in my area of town, it's a beautiful hue of orange. So it's, you know, we've got-- we've heard brown, we've heard yellowish brown, and we've also got orange. And so when a bath smells like rotten eggs and it's discolored, that is not the tub that you want to put your loved one in, your elderly mother, your infant child, or maybe yourself. So it's just sad that this issue is not unique to the Winnebago Reservation, and the number of times that the tribes have

had to issue public notices to our citizens is unacceptable and a burden on the community, an impoverished community. Access to safe, clean drinking water is necessary for all of us and has risen to an urgent necessity in the face of this global health pandemic. When the public health infrastructure was developed in the 1950s, often Indian Country was left out. So you can imagine, it wasn't surprising when we faced a variety of issues when this pandemic onset, including overcrowded housing, strained healthcare systems, and what we heard today was the lack of clean drinking water. So I'm really thankful to have all my colleagues here today because I think it's time we come together. And when I see colleagues, I also, you know, consider our state partners our colleagues. This pandemic has shined a light on our shortcomings and the fundamental needs for clean drinking water as a public health priority. So it's not just for the reservations, it's for all Nebraska, and we heard other folks here today concerning their rural communities. So while our infrastructure needs are great and this one-time funding isn't going to fix everything, we have an opportunity here to leverage existing funding and other resources to make it enough. And that's a challenge that we have often in our tribal communities is we're piecemealing solutions and every pot of money has its own restrictions. And so it's, it's really challenging to, to put this together, and it seems like the stars have aligned and it's the right timing. And, and with the support of this LB1191, we could be setting a new path for clean drinking water, and the next generation won't have to have fond memories of a smelly bath. And I often think of the wisdom of our elders, and they have shared that we always have to leave things better than we found them. And I think that together that we can do that and we can address the drinking water for all Nebraskans. And it can become a new day for rural Nebraska with clean drinking water. So thank you all for your time, and I look forward to your kind support in favor of LB1191. Thank you.

WISHART: Thank you, Victoria. Any questions? Seeing none, thank you for being here.

VICTORIA KITCHEYAN: Thank you.

WISHART: Additional proponents?

ROSE GODINEZ: Good afternoon.

WISHART: Welcome.

ROSE GODINEZ: My name is Rose Godinez, spelled R-o-s-e G-o-d-i-n-e-z, and I'm here to testify on behalf of the ACLU of Nebraska in favor of

LB1191. First of all, I have to thank Senator Brewer for introducing this legislation. Second, LB1191 is an important measure to advance racial justice, utilizing federal funds address— to address the economic fallout because of the pandemic and directly assisting Nebraska tribes and Nebraskans, as you've just heard, who have been disproportionately affected by the pandemic. Access to safe drinking water is a basic human right that should not be affected by race, ethnicity, income or geography. And for those reasons, we urge you to advance this bill to General File.

WISHART: Thank you, Rose. Any questions? Seeing none, thanks for being here.

ROSE GODINEZ: Thank you.

WISHART: Additional proponents? Seeing none, any opponents? Seeing none, anyone in the neutral? Senator Brewer, you're welcome to close.

BREWER: I was feeling pretty confident on any opponents but. All right. Just some quick notes. You heard the term IHS used, that's Indian Health Services, just so we're on the same sheet of music there. I think in closing what I wanted to just share with you is that if we had the exact same circumstances in Waverly instead of Winnebago or Nebraska City instead of Niobrara, we probably would have dealt with this a little sooner. We've got a chance to, to right an obvious wrong. There's, there's no logical reason for folks to have to deal with what they're dealing with. We're looking at, you know, building huge ditches on the Colorado border and racetracks and a lot of things that are just a good idea maybe, but they're not essential to day-to-day life. This is. So I would just ask for your support on this and I'll take any questions you have.

WISHART: Any questions? Seeing none, thank you, Senator.

BREWER: Thank you.

WISHART: We also have two letters in support and one letter in opposition to LB1191. And with that, that closes our hearing for LB1191. And it opens our hearing for LB1196. Tamara, who wrote in opposition? Robert, can you take over? I need to run down the hall.

HILKEMANN: OK. Senator McDonnell.

McDONNELL: Thank you, Senator Hilkemann and members of the Appropriations Committee. My name is Mike McDonnell, M-i-k-e M-c-D-o-n-n-e-l-l. I appear before you today to introduce LB1196.

LB1196 would allocate \$45 million, the American Rescue Plan dollars, to the state's Department of Economic Development to assist the metropolitan utility districts with lead service line replacements. Lead service lines are the liability of the homeowner. The federal government has specifically advocated that we use our ARPA funds to replace lead service-- services because of the significant public health hazard they pose. This was even mentioned Tuesday evening asat the president-- President's State of the Union address. You will hear from MUD later that these service lines exist primarily in disproportionately impacted parts of our community, where homeowners are on a fixed and marginalized incomes. Without financial assistance, this public health hazard simply will not be addressed, leaving future generations to suffer the health consequences of lead in their water. ARPA dollars have been allocated to states, counties, cities, and tribal governments. However, because MUD is a stand-alone political subdivision, they did not receive the ARPA dollars intended to replace the lead lines in their service area. MUD serves water to over a third of our state's population. They currently estimate that they have 17,000 homeowners with lead services. The cost to replace lead, lead lines range from \$5,000 to \$8,000 each and the total estimated cost to replace all of the lead lines in the Omaha metro area and surrounding communities is roughly \$120 million. The reason why we are requesting \$45 million today is because that is how much MUD could expect-- could expect to expend through 2026. Here to answer any of your questions.

HILKEMANN: Senator Dorn.

DORN: I don't completely understand MUD, but you said here it's a stand-lone political subdivision. So then they didn't receive hardly any or very little ARPA funds.

McDONNELL: None.

DORN: None.

HILKEMANN: Additional questions? Thank you, Senator.

McDONNELL: I'll be here to close.

HILKEMANN: All right.

RICK KUBAT: Good afternoon, members of the Appropriations Committee. My name is Rick Kubat, R-i-c-k K-u-b-a-t, here today on behalf of the Metropolitan Utilities District in support of LB1196. I'd like to thank Senator McDonnell for bringing this important legislation. In my testimony today, and it's relatively brief, I want to cover three

things: What are lead service lines? How big of a problem is this financially for those in our jurisdiction? And why ARPA dollars should be allocated to address this issue. You've been provided a handout of materials, and on page 3 is an illustration that shows service lines are what feeds homes with water from the water main. MUD, like most utilities in the country and in our state, we, we own and are responsible for the water main. We do not have any detectable level of lead in the water main itself. The problem occurs when the water leaves the water main and enters the homeowner-owned service line, where leaching can occur in old lead service lines. As you know, lead in water can cause significant health issues, especially amongst young children and young adults, and can lead to reduction in cognitive ability and other long, serious, long-term health consequences. One of the-- one of the main reasons why ARPA dollars were allocated to the states to begin with is the federal government wanted to specifically pay to remove lead service lines. How big of a problem is this for us? The Metropolitan Utilities District has roughly 220,000 water customers, and we estimate we have roughly 17,000 homeowners with lead service lines. At an average cost to replace each one at \$7,000, our homeowners have a collective liability in today's dollars of \$119 million. The reason why we're asking for \$45 million through this legislation is that is essentially what we could expend-- expect to expend through the year 2026. Lead service lines exist almost exclusively in older parts of communities, primarily because we stopped using lead right around 1940. This is statewide. My theory is, is it may have been because of the war effort, but we stopped using lead in service line in 1940s, and because of that, they're almost always in older parts of towns. They exist where homeowners are on fixed and marginalized incomes and amongst those who can ill afford the cost of replacement. On page 10 and 11 of your handouts, you will notice that the problems exist primarily in disproportionately impacted areas east of 72nd in our community, specifically north and south Omaha in Senator Wayne, McKinney, Vargas and McDonnell's areas. One of the other issues that makes this an extremely difficult issue to, to work through is it's a slippery slope. Once we go down the road of replacing some homer-- homeowners' lead service line, we'll be expected to replace them all. In other words, we can't tell Mr. Smith on one side of the street, hey, we as a utility, we're going to pay to get your lead service line out of the ground. But now that we're out of money, Mr. Jones down the street, we can't do anything to help you out. I want to conclude with, with these thoughts, and I know that my testimony was relatively brief. I know that you certainly have ARPA fatigue, that this committee has heard a lot of testimony on, on various ARPA requests. This specific request really does check all the

boxes. It's the reason why the money-- monies were provided to the state to begin with. It addresses a significant public health issue. It serves dis-- disproportionately impacted area. And it really is a one-time program in the sense that once we're done removing these lead service lines, the project is over. Thank you for your time today, and thanks again to Senator McDonnell for having this introduced.

WISHART: Thank you for being here. Any questions? Senator Erdman.

ERDMAN: Thank you, Senator Wishart. Thank you for coming. If you turn to slide 12, you have slide 12? It's the last one.

RICK KUBAT: Yes.

ERDMAN: What does that mean? Primary objectives: If awarded funds, would the program look like, childcare facilities funding. What are you talking about [INAUDIBLE]?

RICK KUBAT: Senator, we don't have a lot of childcare facilities that still have lead service line. But if monies are allocated, the first thing that we're going to do at the very top of the list is we're going to make sure that childcare facilities get taken care of.

ERDMAN: So what kind of line do you replace them with?

RICK KUBAT: They can be PVC pipe or, or various other plumbing materials that don't cause a public health hazard. And the problem is we want to get the, the lead service lines because the water's fine leaving the main. It's when it enters the homeowner-owned service line where the leaching occurs.

ERDMAN: OK. So if there is lead service coming through the house--

RICK KUBAT: Yes.

ERDMAN: -- and the house is of the age you say it is, --

RICK KUBAT: Yes.

ERDMAN: -- the lead pipe is in the house?

RICK KUBAT: Yes.

ERDMAN: So what about that?

RICK KUBAT: And I've asked that very question myself. My understanding of the problem is in some of the older homes do have lead fixtures,

but where the main problem as far as high detections of lead, where it occurs is, is that service line, and it's probably because the water sits there. It's when the water leaves the main and the primary leaching occurs from the service line itself. Obviously, it's not good for a home to have lead, lead fixtures. But in terms of the plumbing like the sink and stuff, it's less problematic than the lead service line itself.

ERDMAN: So you're, you're changing these lines that belong to the homeowner.

RICK KUBAT: That's correct.

ERDMAN: These aren't your lines.

RICK KUBAT: That is correct. And it, it's because of this kind of sticky situation that these homes with service lines tend to be in poorer parts of communities. And I would argue and again, Senator McDonnell mentioned that's why it was mentioned in the State of the Union is in relation to ARPA it's one of the main reasons why the state of Nebraska received ARPA dollars to begin with.

WISHART: Additional questions? Seeing none, thank you for being here.

RICK KUBAT: Thank you for your time.

WISHART: Additional proponents? Seeing none, any opponents? Seeing none, anyone in the neutral? Senator McDonnell.

McDONNELL: Unless there's questions, I'll waive.

WISHART: OK. Senator McDonnell waives closing. My sheets walked away.

HILKEMANN: Did it? Well, here it is.

WISHART: There it is. Thanks, Robert. For LB1196 we have one letter in support, zero in opposition, and zero neutral to read into the record. That closes our hearing for LB1196 and opens our hearing for LB1048. Senator Blood, welcome. Good timing.

HILKEMANN: Madam Vice Chair, can we make an official [INAUDIBLE] that Senator McDonnell cannot introduce any more bills?

McDONNELL: [LAUGH] I'm officially done.

WISHART: We're a little late.

McDONNELL: I'm literally done. I'm walking out of it.

WISHART: Welcome, Senator.

BLOOD: And thank you, Senator, and good afternoon, fellow senators, friends all. My name is Senator Carol Blood spelled C-a-r-o-l B as in boy-1-o-o-d as in dog and I represent District 3, which is western Bellevue and eastern Papillion, Nebraska. Thank you for the opportunity to bring forward LB1048 to the esteemed Appropriations Committee. I bring forward LB1048 as one piece to the puzzle of supporting Mead, Nebraska, through the crisis that AltEn has inflicted on their community. Now I'm sure you are all already familiar with what happened in Mead. But as a short refresher, AltEn is an ethanol plant that has been using seed treated with insecticides and pesticides off label to produce biofuel. This is a good time to also say that our other ethanol plants are exceptional, and that Mead plant was an outlier. They brag that they took in 98 percent of the nation's excess coated seed. It gave AltEn free supplies, but left Nebraskans with a waste product too ridden with pesticides to even feed animals. In Mead, AltEn created giant piles of waste known as wet cake that comes from the leftovers of the company turning pesticide-coated seed corn into ethanol. The wet caked toxins then leached into the ground, blew into the air, and spilled out of containment berms and burst pipes. The AltEn facility housed enough wet cake to cover a football field 150 feet deep, and it's been freely exposed to the volatile weather conditions in Nebraska for nearly a decade. Now the University of Nebraska has undertaking -- has been undertaking extensive research on Mead and the surrounding areas of ethanol plant for two years, assessing and evaluating the environmental and human health effects of the toxic chemicals contained in the dry residue and wastewater produced and stored at the AltEn ethanol production plant in Mead. LB1048 would appropriate funds to the university to continue this research as their funding runs out in June. I'll quote from a white paper that the university wrote on the research project, which is included in the handouts. The results of the environmental study would inform the people of Saunders County and affected Nebraskans as to how to protect and potentially clean up their environment. This project also will inform citizens of their health risk, if any, from the contamination. This evaluation of environmental and human health status began in April of 2021, and most of the work is anticipated to be completed by December of 2025. The project is divided into four main approaches. In one, samples of air dust water, which means surface water, groundwater and domestic water, and soil, and will be sampled to determine whether the water, soil, wildlife, and people living near the AltEn plant or near fields where wet cake or

wastewater was field applied are being exposed to hazardous levels of insecticides and/or fungicides. In the second, adults living near the AltEn plant or near the fields where wet cake or wastewater was field applied will be asked to complete a survey of perceived adverse health effects and to provide blood and urine samples for analysis of the compounds. The survey has been approved and a pilot version has been tested. In January, the survey will be rolled out to people in the affected areas of Saunders County. In the third arm, insects, pollinators, vegetation, and wildlife will be sampled for contaminants from the plant and their effects. Lastly, a medical registry will be established in early 2022 to track potential long-term effects caused by exposure to contaminants from the AltEn plant. Enrollment in the registry will be offered to people living in Saunders County. They plan to monitor the long-term health effects quarterly in the registry for 10 years. These four arms of the study will be connected so that we can determine off-site migration as a possibly toxic contaminants, particularly in water from the AltEn plant, and whether exposure to these contaminants may have adverse effects on people's and animals' health. In addition, hospital records with no personal identifiers will be examined to determine whether there's an increased incidence of particular health problems in the affected areas in the past three to four years. The effects of the pesticides used by AltEn on humans, animals, and insects vary greatly though they all have-- they are similar at being as-- though they all had the similarity of being devastating to the crucial functioning systems. Developmental or neurological effects of these pesticides on humans can include malformations of the developing heart and brain, autism spectrum disorder, and a cluster of symptoms, including memory loss and tremors. There's been research that points to organ damage, reproduction issues, respiratory issues, and cancer. Continuing this research in Mead is critical for the future of the citizens who reside there and critical to protecting the watersheds surrounding the area. The results from the project are preliminary. It implicates contamination in the water and land that spread several miles downstream from the ethanol plant. There are also concerns about how the source of Lincoln's high-quality water from a river aquifer will be affected. This project is clearly eligible for ARPA funding under the Department of Treasury's Interim Final Rule, water and sewer infrastructure qualifications. Quoting the Final Rules it states: Understanding that state, local and tribal governments have a broad range of water and sewer infrastructure needs, the Interim Final Rule provides those governments with wide latitude to identify investments in water and sewer infrastructure that are the highest priority for their own communities, which may include projects on privately owned

infrastructure. The Interim Final Rule does this by aligning eligible uses of the fiscal recovery funds with a wide range of types or categories of projects that would be eligible to receive financial assistance through the Environmental Protection Agency's Clean Water State Revolving Fund or Drinking Water State Revolving Fund. So looking at the EPA's Clean Water State Fund eligibility, it states that site assessments of contaminated sites fall under this-- fall under this. Definition of contaminated sites include brownfields, superfund sites, and sites of current or former aboveground or underground storage tanks, which is Mead. Eligible projects include those that remediate or prevent contamination from these sites. So it's imperative the university research continues. The state's mishandling of AltEn crisis has allowed for this situation to fester and grow into our most catastrophic environmental crisis in recent history. Now it's our duty to protect those poisoned, Nebraska's animals and insects, and our agricultural assets by funding this project. Thank you.

WISHART: Thank you, Senator. Any questions? Seeing none, thank you. Will you be here to close?

BLOOD: I will be here to close.

WISHART: Great. We will move on to proponents. Welcome. If you do plan on testifying in support, please move to the front. Thank you. Welcome.

JANECE MOLLHOFF: Good afternoon, Senator Wishart and members of the committee. I want to thank you for hearing this bill today and to thank Senator Blood for sponsoring it. I'm from Ashland in Saunders County, downstream from AltEn. The request for funding for research and to--

WISHART: Can I stop you for a second and just have you spell your name?

JANECE MOLLHOFF: Oh, J-a-n-e-c-e M-o-l-l-h-o-f-f, Janece Mollhoff.

WISHART: Thank you.

JANECE MOLLHOFF: Thanks for the reminder. The request for funding for research into the long-term effects of— to environmental, ecological, and human health of the chemicals released by AltEn is critical for all Nebraskans. Because NDEE was not testing for pesticide residuals in the emissions in wastewater, which were released into the air and water for the five years that the plant was in operation, it is

unknown exactly which compounds the area residents and those of us who live downstream were exposed. For soldiers and staff at the National Guard training site; for students, professors, and staff at the Eastern Nebraska Research Center; and for the residents of Saunders County, Saunders County, who have reported symptoms and concerns, it is critical that the state of Nebraska fully fund this research, either from the Recovery Fund or from the General Fund. This work has only just begun as the UNMC team tries to find individuals who lived and worked at the plant nearby during that time, starts gathering baseline testing from the area's contaminated with waste materials in the entire discharge area that may include Lincoln and Omaha's wellhead areas. NDEE has told AltEn to include surface water and sediment sampling in the drainage area. Yet only the university is really doing this testing ongoing. The future of agriculture and water quality in this state is dependent on accurate testing and research that protects the general population. Why \$10 million? That's a lot of money. The testing alone is hundreds of dollars each time, and the hours needed to go through medical history of people living and working nearby to find and track preterm birth, cancers, and neurological diseases and other anomalies will require thousands of hours of work. And this will identify clusters of disease in the area following this exposure, but overwhelming anecdotal evidence of respiratory problems, Parkinson's, and other illness in animals and humans points to a correlation. This appropriation will be the right thing to do in the face of a disaster caused by bad actors at AltEn that may affect the two largest cities in the state. I urge you to appropriate some funds for this research, and others following me will have more specific details. I'd be happy to answer any questions.

WISHART: Thank you for being here today. Any questions from the committee? Seeing none, thank you.

JANECE MOLLHOFF: Thank you.

WISHART: Additional proponents? Good to see you again.

AL DAVIS: Good afternoon, Senator Wishart, members of the Appropriations Committee. I've talked to several of you about this issue already. You're going to hear me repeat some of the things that Senator Blood said. I think that's the way testimony goes and you all understand how that works. My name is Al Davis, A-l D-a-v-i-s. I am the registered lobbyist for the 3,000 members of the Nebraska Chapter of the Sierra Club. We are testifying here today in support of LB1048, and want to thank Senator Blood for introducing the bill. We are seeking full funding for this proposal. Several years ago, an ethanol

plant in Saunders County, Nebraska, began manufacturing ethanol from surplus seeds, which it acquired free from the seed companies who needed to dispose of those seeds. A normal ethanol plant will produce ethanol, a wastewater known as stillage and distiller's grain or wet cake, which is fed to livestock. But the byproducts of ethanol production at this particular plant produced a toxic sludge of wet cakes saturated with pesticides and millions of gallons of wastewater stillage, which had come in contact with the wet cake in the manufacturing process and were full of pesticides and toxic to living beings, and also to rainwater that fell upon those, those piles of wet cake. These products remain on site today, the wet cake encompassing 16 acres of land. The volatile mixture of pesticides, exposed land, water, mammals, birds, insects, invertebrates, and vegetation to long-term damage over many years. Residents near the plant complained of the acrid, fetid smell that rose from the material. I can vouch for that myself, having been to the plant. Dogs were sick, dead raccoons found near piles of the product, dead beavers at a nearby contaminated pond, the disappearance of birds and insects, and numerous respiratory health problems within the human community there. The product was land applied to nearby farms, including the Eastern Nebraska Research and Extension Center owned by the university. This kind of environmental damage is unprecedented in Nebraska. The scope of the damage is incalculable. But last spring, UNMC estimated that a coordinated long-term evaluation of the region should be done, requiring a 10-year commitment at a cost of \$10 million. Exposure to these pesticides is known to cause physical changes in birds and mammals, and one of the biggest concerns is the exposure of the fetus in the womb among women living in the area and children growing up nearby. Whether this project is funded through the ARPA funds or via a General Fund appropriation, it is essential that the state step up and provide the research dollars necessary to study the potential damage to residents and to the ecosystem which surrounds the plant. The damage is not isolated. The Keiser Pond is six miles downstream, and the Lincoln well field is only a few miles farther to the southeast, all in line with the direction water traveled during the many flooding events which took place over the prior several years. Dr. Ann Hubbard, a specialist in pediatric cancer, was so concerned about the environmental damage to the Saunders County that her family foundation made a donation of \$250,000 to kickstart the work. The problem is not one which should be privately financed by good Samaritans. In large part, the problem can be laid at the feet of regulators who failed to recognize what was going on at the plant and did not step in earlier to mitigate the damage. Nebraska cannot shrug off this situation as

someone else's problem. We must step up and provide the research dollars required, and I urge you to fully fund the project. Thank you.

WISHART: Thank you, Al. Any questions? Seeing none, thank you for being here.

AL DAVIS: Thank you.

WISHART: Additional proponents? Good afternoon.

ELEANOR ROGAN: Good afternoon, Senator Wishart and senators on the committee. My name is Eleanor Rogan, E-l-e-a-n-o-r R-o-g-a-n, and I'm a professor in the College of Public Health at the University of Nebraska Medical Center. I'm a founding chair of the Department of Environmental, Agricultural and Occupational Health in the College, but I'm currently serving as the interim chair of the Department of Health Promotion while we search for a new permanent chair. I'm here today speaking though, as a private citizen, and I'm not representing the University of Nebraska. I support LB1048. Since last spring, I have served as a coordinator of these efforts that you've heard about by a number of faculty members at UNMC, UNL, and Creighton University to assess and evaluate the possible effects of the highly contaminated solid waste residue, so-called wet cake, and the wastewater that is stored on the AltEn property. As you know, the wet cake and wastewater are highly contaminated with neonicotinoid insecticides and fungicides present on the seed corn used as stock to extract ethanol. These neurologic toxins affect not only insects, but also aquatic life, animals, and people. As part of our-- I'm going to tell you today briefly about the studies in people that we're, we're carrying out. As part of our assessment, we are currently conducting a survey that has been distributed now to 10-- to a thousand households within a six-mile radius of the AltEn plant to determine what adverse health effects people think might have arisen from exposure to air, water, or soil containing these toxins. We also are distributing it to the numerous people who have contacted us one way or another, saying that they want to be in this study. This-- and now the survey was distributed only recently, so we don't have any results to share with you. But I can tell you that within a few days of sending this survey out, we already had 50 responses, people who had completed the survey. So people seemed very-- have been very anxious to tell us about the problems they've been having. We also plan to assess possible health effects in two other ways. One is to invite those who respond to the survey to also have blood and urine samples collected at the Saunders Medical Center. And again, we have had numerous people who have already volunteered that they'd like to have their samples collected.

These samples will be analyzed to determine whether each individual, individual has detectable levels of these AltEn-- any of the AltEn contaminants in their blood and/or urine. The analyses will be conducted by the Nebraska Public Health Laboratory at UNMC, which is a certified laboratory for human specimens and the results of the analyses, good or bad, will be reported back to the individuals, as well as used collectively as data about the possible effects from this contamination. In addition, we're establishing a medical registry so that we can monitor the health of the people in Saunders County who wish to enroll for the next 10 years. We're setting up this medical registry because we know that some of the possible adverse health effects from these toxins may not show up immediately, but rather can appear after a few years. As mentioned before, we're particularly concerned about neurologic effects on infants and children. These three approaches to assessing the possible effects of the toxic chemicals in the wet cake and wastewater being stored at the AltEn site are some of the areas we will use these one-time funds appropriated by LB1048 to improve the health of the citizens living and working in Mead and the surrounding areas. This funding will allow us to get a solid foundation for understanding the health effects of these contaminants on the people of the area. We are continuing with these efforts to obtain information for the good of the people living in the vicinity of the AltEn plant and also for the citizens of Nebraska in general, because we consider this an important part of the health of Nebraskans. In fact, through this work, we will be developing an exportable model for assessing such environmental contaminations if they should occur again, which will be useful in other potential situations throughout the state. As an indication of how important we faculty members can think this work is, all of us involved are currently donating our time to carry out this assessment and evaluation. The money that we have for this is going entirely to supporting the collection of the information and the data that we're getting. Nonetheless, I have to tell you that our efforts to document the possible effects on the health of the people and the environment will come to a halt soon if we don't receive funding to continue this work. Thank you for you--

WISHART: Thank you. Any questions? Senator Vargas.

VARGAS: Thank you very much for being here and appreciate your work. And so the question I have is a little bit along the lines of one of the things that I've tried to work on is maternal and child health. You know, we just moved forward a bill that would try to improve the way that we do our maternal and child health review teams so that we can better assess what the long-term data trends are. And that's being

proactive. We know that there's something for us to learn from these, you know, not only deaths, morbidities of women and children. But I say that because— and I guess the purpose of this bill is I am concerned about the long-term health impacts if we wait. And I wanted to give you the opportunity to react to that. What are the long-term health burdens if we wait to then not move forward and do something like this? So I want to see if you had a reaction.

ELEANOR ROGAN: Well, I would think the, the long-term health effect, effects on human health would be if we just wait until we see what lots of people getting sick, particularly if we-- if we wait for infants and children who have been born and lived in that or their mothers were pregnant and exposed to these things, we just wait for them to develop neurological problems, we're going to have a lot more problems, much bigger problems to deal with than we can treat than if we are proactive and, and can find out about this sooner so that the problem can be handled sooner. The other -- and it won't be as severe, the problems, potential problems. Again, the same thing is with is if we find that, that we can survey people so that we can detect cancers sooner. That would be another place where we could mitigate some of the effects of these and treat people before cancers get so bad that they're not treatable. So that's, I would say there's a-- there's a huge financial aspect to doing this sooner rather than later so we know what we're dealing with and we can do some preventive and remedial work.

VARGAS: Well, I appreciate that. We're looking at infant mortality through these changes that we've made to, to look at that data. And what I would hate to happen is we start seeing this data show up in the child and maternal health review teams. And when we see the data come up, we're typically looking at how to improve the system rather than reacting to an environmental hazard that has affected the community.

ELEANOR ROGAN: Yes.

VARGAS: And that's not what the review teams are meant to do. So I appreciate you bringing this and thank you for your answer.

ELEANOR ROGAN: Thank you.

WISHART: Thank you. Any additional questions? Seeing none, thank you for being here. Additional proponents?

JOHN SCHALLES: Good afternoon. I'm Dr. John Schalles, that's J-o-h-n S-c-h-a-l-l-e-s. I'm a biology professor and cofounder and former director of the Environmental Science Program at Creighton University, where I've been for 42 years. I teach courses in environmental toxicology, aquatic ecology, water quality, and zoology. I happen to be a member of both the University of Nebraska Medical Center Investigative Team, headed by Dr. Rogan and by Dr. Ali Khan and the Perivallon Group. And both are working-- both groups are working to understand the scale and impacts of this environmental disaster at the AltEn ethanol plant. My work is provided, as Dr. Rogan has mentioned for others, pro bono in service to those impacted. I am not receiving nor am I seeking any compensation for my work. I come before you to register my strong support for LB1048, which would provide the longer term funding requirements, as has just been enumerated by Dr. Rogan, for the investigative science and for the clinical health assistance to the residents of Saunders County and I think importantly, to the workers that worked at this site and are working now to clean up this site. We know that in many cases they did not have adequate personal protective measures taken. And so in many toxicological stories, one of the first places you want to look, in addition to the residents, are the occupational exposures. And I think that's, that's something that needs more attention and certainly could be part of what Dr. Rogan has just described as in the survey. So we hear a lot about it called a Mead problem, but it's -- it, and it is, but it's larger than Mead. It can easily be said a good chunk of Saunders County. And I want to point out, too, that there is a very precious groundwater resource that's a legacy of geologic change in this state. It's called the Todd Valley, and it used to be a former path of the Platte River, which has shifted east over geologic time. That former valley is laden with sand and gravel and is a really good reservoir for what has been very high-quality water. And this environmental disaster threatens the quality of that water. And as hard as it is to clean up surface water, cleaning up groundwater is very difficult. You may be aware that this, that Saunders County in this area is already a federal Superfund site because of the Mead Ordnance Plant that provided munitions in World War II and Korea. And it was later found that waste were not only in the soil, but it leached into this Todd Valley Aquifer. We are now as taxpayers paying considerable amounts of money to filter that groundwater and put it back clean. And so that is a predecessor event that I think is really important in acknowledging what the potential problems are for this new environmental disaster. I have four prime-four primary motivations for supporting this bill, and these sprang from my experience as a scientist and as a resident of eastern Nebraska. As has been stated, the AltEn plant is the only ethanol

plant in the entire company -- country to accept massive amounts of pesticide-coated waste seeds. And since 2015, brought together greater amounts of fungicides and neonicotinoid insecticides than any other location in the United States and perhaps globally. Our, our single county here in this large state was a focus for not only immediate area, but all of North America, including I understand Canada and Mexico seed waste came to this site. No other ethanol plants in Nebraska or elsewhere use pesticide-treated corn and other seeds. It's also clear that the handling and storage of the highly toxic liquids and semi-solid wet cake from the ethanol production was grossly inadequate. Furthermore, state permits and state and federal regulations were violated by the plant's operators. Basic business ethics and tenets of environmental stewardship and environmental justice were, in many instances, ignored. Why were these indefensibly -- indefensible and arguably criminal actions allowed to happen in Saunders County? Who will ultimately pay for the needed and extremely important cleanup work now underway at the plant and for the widespread contamination--

WISHART: John.

JOHN SCHALLES: --of Saunders County's soils and surface and groundwater?

WISHART: Excuse me, John.

JOHN SCHALLES: These expenses alone--

WISHART: The red light is on, so I'm going to have to have you stop. We have your written testimony [INAUDIBLE]

JOHN SCHALLES: OK, I'm sorry.

WISHART: Any questions from the committee?

JOHN SCHALLES: Sure.

KOLTERMAN: So you-- you're with-- you've been with Creighton University and we've got the Med Center and University of Nebraska here. Do you plan to work together in harmony on this? And maybe--

JOHN SCHALLES: Indeed we are. And in fact, I was invited by Dr. Rogan and Dr. Khan to enter into this investigation. There are several other faculty members at Creighton that have done so, and I think we are working well as an integrated team. It's not-- it's not competition. We're not in it for any personal--

KOLTERMAN: So you share-- so the expenses will be shared amongst all colleagues that are working on this?

JOHN SCHALLES: That's my understanding. Yes.

KOLTERMAN: Thank you.

JOHN SCHALLES: You're quite welcome.

WISHART: Any additional questions? Seeing none, thank you.

JOHN SCHALLES: Thank you.

WISHART: Any additional proponents? Welcome.

SHANNON BARTELT-HUNT: Thank you. Good afternoon, Senators. My name is Shannon Bartelt-Hunt, S-h-a-n-n-o-n B-a-r-t-e-l-t-H-u-n-t, and I'm a professor and chair of the Department of Civil and Environmental Engineering at the University of Nebraska-Lincoln. I'm a licensed professional environmental engineer. I have over 20 years of experience evaluating the occurrence and behavior of environmental contaminants. I'm a member of the research team evaluating the environmental and health impacts of the AltEn wastes. I'm here speaking today as a private citizen and I am not representing the University of Nebraska-Lincoln. I'm speaking in support of LB1048. Based on the data collected by the Nebraska Department of Environment and Energy, we know that the insecticides and fungicides present, present in the treated seed corn used at the AltEn facility were concentrated in the solid waste, also called the wet cake, and the wastewater that was produced by AltEn. We also know these waste products were applied to cropland over a wide area in the region. We also know that chemicals present in the AltEn waste are currently moving through the environment. They're being carried by wind and water to impact soil, surface water, and groundwater. In addition, the spill that occurred in February of 2021 due to the broken pipe at the AltEn facility released wastewater onto the property of the Eastern Nebraska Research and Extension Center, known as ENREC, located immediately to the south of the AltEn facility. Currently, the extent of how and where the contaminants have moved in the region and been redistributed in air, soil, surface water, and groundwater is not completely understood. Since April of 2021, our team has been collecting environmental samples to characterize the environment and the ecology in the area. We've monitored surface water along Johnson Creek from north of the AltEn facility to the Johnson Creek Reservoir. We've monitored surface water in the flow path of the spill in the

drainage canal across the ENREC property. We've collected soil and groundwater samples and we have sampled the air at locations around the property boundary. We have methods to detect the presence of 14 of the chemicals used in the treated seed, as well as 7 other compounds, which are transformation or degradation products of the original insecticides and fungicides. Our data analysis is ongoing, but I can report that we have detected 11 chemicals in air samples collected from near the AltEn property boundary. We have detected 7 chemicals in groundwater and 13 chemicals in surface water. We detected the presence of chemicals in surface water and groundwater as late as November of 2021, when we ended our sampling for the season. We detected chemicals in Johnson Creek and the Johnson Creek Reservoir, which were not impacted by the spill that occurred in February 2021 and are not hydraulically connected to the AltEn site. Some of the chemicals we have detected in air and water are the original insecticides and fungicides present in the wet cake and wastewater, while others are the transformation products. Transformation products may be more or less toxic than the active ingredients, and the health effects of being exposed to a mixture of these chemicals is not understood. The funding we have received to conduct these studies will soon end. Each sample we have analyzed so far is a piece of a puzzle, but we don't yet have enough pieces in place to give us the full picture of how and where these chemicals are moving in the area surrounding the AltEn facility. LB1048 would allow this work to continue to protect the environment and the health of people who live and work nearby. For these reasons, I support this legislation. Thank you.

WISHART: Thank you, Shannon. Any questions? Seeing none, thank you for being here and for your work. Next proponent.

JUDY WU-SMART: Hello. My name is Dr. Judy Wu-Smart, spelled J-u-d-y W-u-S-m-a-r-t. I'm an assistant professor and extension specialist at the University of Nebraska-Lincoln and the director of the D-lab. I want to first thank the committee and Senator Blood for introducing this bill. I'm here representing myself and not as a representative of the university. I've been conducting research on bees and pesticide effects for almost 15 years. I've been here roughly six years and we have had consistent losses, which I think Senator Blood has submitted the white paper. That was almost two years ago. It's almost been a full year since my first testimony regarding this issue, and I have some, some main concerns listed here in the-- in the testimony. But I'd like to flip, flip to the, the graphic just to illustrate the complexity of the system. A lot of times, you know, we assume some of the sciences is already there. I think it's useful for us to just take

a really quick look at this graphic. This is an infographic summarizing current knowledge of the global literature regarding neonicotinoid insecticides and how they affect different types of animals. So that first row shows a whole bunch of different critters, from my bees to amphibians, birds, and mammals. The second row shows how these animals could potentially come into contact with these residues. So, for example, my bees would be most likely to be in contact through the forage plants and through the air when they're flying, whereas soil dwellers might be more of the green vegetation represented in green or the soil where they live and dwell represented in brown. So as you're moving along these organisms, you can see that these animals are exposed to different rates and in different areas. That's why the environmental sampling that Dr. Bartelt-Hunt and Dr. Snow-- Schalles that are working on looking at the residue levels in air, water, soil, and plants is so critical because that's going to inform us who's at highest risk, which organisms in our ecosystem are at highest risk to this kind of disaster and where, where are these hot spots? If you look at the third row, that represents how much we know within these animal systems. The more circles that are represented in that column, that means that there's more evidence showing that these animals are impacted. So the ones that I've outlined in red, these are bioindicator species that tend to be more sensitive. They show effects at low doses and acute really rapidly show declines. The animals all the way to the right, those ones in blue are not-- those are those animals that tend to be less sensitive. They might have problems at prolonged exposures or at high doses. But we're just talking about direct toxicity because those animals are also really heavily reliant on the food support that our bioindicators animals provide. So all of the-- the little critters that are outlined in red, the bees, the invertebrates, the aquatics, those are supplying food support for the amphibians, the birds, and the mammals. So if they're not directly impacted by the pet-- by the pesticides, they're going to be indirectly impacted by the loss of food. So the other thing I wanted to point out is that there is a number of data gaps with these larger animals because we don't know much about the population and community level effects. And that makes it extremely challenging to look out in an ecosystem like this, if you turn to the map on the next page, how do you find these animals? How do you, you know, follow bird populations or find their nesting sites? So this map that I'm showing right here represents our priority research area. This-- the dotted line shows six-mile radius of coverage where I've been putting bees or trying to look for vegetation samples or looking to try to map the waterways. The big green dots and yellow dots are one-mile markers, so this covers a one-mile radius. That's just

typically what the bees will fly, a foraging range for a bee. So I'm trying to remove, you know, where exactly these piles were, were applied and where my hives are. But it goes and shows that the-- what the efforts of cleanup are happening on site, that little star right there. That needs to continue to happen. The cleanup needs to happen. But the ecological, environmental, and human impacts is much further than just the site. We found dead beaver six miles down. So that image shows impacted ponds six miles down. And it's the catch spring of, of a lot of the runoff, this pollutant. So there's-- so there's evidence that there's sick wildlife, you know, health issues in community members. Note that this Johnson's Creek Reservoir was mentioned many times. That pond connects to Clear Creek, which then feeds into the Platte. We also show right here the close proximity of our National Guard training site. I have two active militaries working in my lab, and they have also voiced concerns about what is happening with the people who come onto the site, train, and then leave. So there's a lot of people not just living in the area that are concerned, but that work and interact with the -- with, with this general area as well as the-- everything downstream from it really. So I am in support and I encourage you guys to review some of these documents. Thank you.

WISHART: Thank you so much for being here. Any questions? Seeing none, thank you.

JUDY WU-SMART: Thank you.

WISHART: Additional proponents.

KEN WINSTON: Good afternoon, Senators. My name is Ken Winston, K-e-n W-i-n-s-t-o-n, and I'm appearing on behalf of the Bold Alliance in support of LB1048. I was really fascinated by all that scientific information, and unfortunately I won't be present -- presenting more scientific information. But I want to-- I do want to talk about the importance of this issue and the importance that it has to a lot of people. The Bold Alliance was one of the hosts of two town hall-halls that were held in Mead last year, and I know that some senators attended that, at least one of those. And it was held in a church in Mead. One of the characteristics of that event-- of those events was the fact that, that the people of that area and as other people have indicated, is not just the people of Mead, it's the surrounding area: people of Saunders County, people from Ashland. They're very frustrated because of the fact that, well, first of all, because of the fact that this had happened in the first place because of lack of appropriate regulation by state officials and also because of the fact they couldn't get any answers. Nobody was willing to talk to them. And

I know that if both of those events there were, there were invitations made to state officials to attend to other state officials, and most of them chose not to do so. And we were really appreciative when Dr. Ann Hubbard stepped up to the plate and offered funding to support the work of the university team that has been discussed earlier this afternoon. Now, one of the things that residents talked about at that -- at those meetings was the fact they were -- they were afraid to drink the water. And who could blame them when there's all these concerns about the various pesticides that are out in the air and in the groundwater? There have been pesticides detected as in, in the groundwater at 27 feet below the surface. The aquifer is very shallow there. And so at one of the meetings, Bold's executive director offered water, water filtration systems to the-- free of charge-- to the residents of the area. And so far, there have been 70 people who have taken us up on that. And we had no obligation. Bold had no obligation to do that, but it was just one of those things where a need was heard and there was a way of responding to it. And we hope that, that now there will be other folks who will step up and take care of those things as well. One of the things that I wanted to mention is just it, well, most of our work at Bold is focused on stopping pollution before it happens. And unfortunately, the AltEn disaster is an example of why our work is justified and that some of our warnings have been prophetic, sadly-- sad to say. However, we believe it's absolutely vital to protect people and the environment when contamination has occurred, and the funding provided by LB1048 would go a long way to addressing those concerns. One of the things I want to talk about just briefly is the fact that there's been some messages in the-- out in the community that all the problems are being taken care of, and that's just simply not true or inaccurate, to put it mildly. There's nearly 100,000 tons of pest-pesticide-contaminated wet cake on the site and 170 million gallons of contaminated water. There's still another art-- there is some work being done to address that, but so far there isn't a plan to deal with the wet cake. They're just covering it up. They don't have a plan to dispose of it. They need-- this needs to be disposed of, not just covered up. Plans to deal with the contaminated water involve running it through a filtration system, which we applaud. We think that's a good, good idea. However, what's going to happen with the contaminants that are captured by the filtration system? That hasn't, to my knowledge, has not been addressed. Now currently, the remediation plans have, have some groundwater monitoring, but not nearly the amount that's needed for this kind of situation. And they need-- also the groundwater monitoring needs to be offsite. None of the, the current plans address-- it only addresses things on the site. And as

Dr. Wu-Smart indicated and other people have indicated, there's contamination, considerable contamination off site; and we need to be looking at those things. We need to be doing research and monitoring. There was runoff from the 2019 flood that went directly over Lincoln's water supply that ran directly off this site. We need to figure out whether the water supply of Lincoln and Omaha are, are impacted. And there's also been no opportunities for the public to comment about any of the remediation plans. So with that, I'd be glad to respond to questions.

WISHART: Thank you. Any questions? Seeing none, thank you, Ken.

KEN WINSTON: Thank you.

WISHART: Additional proponents? Seeing none, any opponents? Seeing none, anyone in the neutral? Seeing none, Senator Blood, you're welcome to close.

BLOOD: So, friends, a short session has been the absolute worst time to bring the Mead issues forward this year. We've had multiple bills that were meant to protect the citizens of Mead. And to be really frank, when I started helping out last spring with all these really smart people, by the way, you want to feel stupid, be in a room with these folks-- that they're amazing. And they all got together for one reason and that reason is compassion. Yes, it's about science, but it's ultimately about compassion, because somewhere along the-- along the line, Nebraska decided that its residents could be collateral damage. And when I went to the town hall that we put together as a group and I heard the stories of the people who had to sell their house because they didn't know whether the water was safe to bathe their children in or to drink or to grow their vegetables, and that was a veteran who had found his dream home and put his money and his love into that house, built a playground for his kids. Now he had to move to Papillion. They're in my district now. We had heard story after story of dead animals and people with healthcare issues. And yeah, now you're hearing stories like, oh, it smells so much better. Well, great; smells better. But there is nothing that's preventing that contamination from going into the ground right now. And there is nobody tracking what that contamination is doing to those people that live in the Mead and surrounding area. And ultimately the Lincoln area could be affected because of the waterways. I just -- this isn't one more ask for research just because they need something to do. This is an ask from a group of people who put their, their heart and soul and own time and efforts into this project. And Dr. Schalles, by the way, I don't think I've ever seen him in person. We've always communicated

via Zoom. He's been down in Florida doing research. These-- because that's how dedicated they are, we meet weekly via Zoom and have since spring. How do we move this forward? How do we help save this community? And I have to be really frank, friends. Nebraska just wants to put it underneath the rug and walk away and forget about it. You know, everything's fine. Keep driving by. But everything is not fine and people are going to be sick and people are going to have health issues. But would we rather get in front of it or would we-- would we rather address it in 10 years, like we do the superfund sites, which they are as well? I grew up in a community with a superfund site and people had brain tumors and people had pancreatic cancer and other types of cancers and health issues that all pertain to that munitions depot that was there outside of Hastings, Nebraska. Nebraskans aren't collateral damage. Nebraskans deserve better. And Senator Clements, in the wings, I just got soil samples back from Alvo, Nebraska. By addressing issues like this, we can be better prepared to address issues like what's going on in Alvo. It seems like every time I pick up my phone, there's another Mead, Nebraska, somewhere else going on. We have the opportunity to take the science, to take the research and do better. And I know that you have had more than I can probably count as far as people coming and asking you for funds. I get that. But this is an opportunity. We're not trying to build a lake. We're not trying to, to, to bring tourism in. We're, we're trying to save Nebraskans. And if that isn't a noble thing to do with your money, I don't know what is. So I appreciate your time today.

WISHART: Thank you, Senator. Any questions? Seeing none, thank you, Senator. We also have 12 letters of support and 2 opposition and zero in the neutral on LB1048. That closes the hearing for LB1048 and opens our hearing for LB1255.

VARGAS: The last hearing of the year.

WISHART: Last hearing, last but not least.

VARGAS: Last hearing of the year, Mr. Bostar, Senator.

WISHART: OK, we're going to go ahead and get this-- we're going to go ahead and get this hearing started, so if those of you in the back could clear the room if you're going to have conversations, that would be great. Thank you. OK. Senator Bostar.

BOSTAR: Thank you, Vice Chair Wishart and members of the Appropriations Committee. I feel honored to be the last hearing that you will have this session. And what a session it's been, especially

for this committee. So I just want to thank you for all the work that you've done because it's been sort of a Herculean undertaking, and I know myself and all our colleagues really appreciate all the work that you've put into sorting through really just everything that we have going on this year. So thank you for that. I am Eliot Bostar. That's E-l-i-o-t B-o-s-t-a-r, representing Legislative District 29, here to present LB1255, a bill to allocate \$150,000 in fiscal year '22-23 to the University of Nebraska. This allocation will provide the Institute of Agriculture and Natural Resources with the financial resources necessary to update the Assessing Climate Change Report, originally released in 2014 and then contract with a third party science-based organization to develop independent recommendations related to specific measures which could be taken by the state of Nebraska based on the findings of the updated report. The original version of this report was a product of legislation passed in 2013. That report has been provided -- has provided us with a useful understanding of the scientific impact of climate change on the state of Nebraska. It's now time to update that report. The number of annual extreme weather events facing our nation is increasing, and it's costing us billions of dollars every year. According to NOAA, the National Oceanic and Atmospheric Administration, between 1980 and 2020, the average number of extreme weather and climate events with losses exceeding \$1 billion was seven. The annual average for 2016 to 2021 was 17.2. Our nation experienced 22 such events in 2020 and 20 events in 2021, both far exceeding the previous annual records of 16 events that occurred in 2011 and 2017. In fact, 2021 was the seventh consecutive year in which 10 or more billion dollar weather and climate disaster events have impacted the United States. From 1980 through 2021, the years with 10 or more separate billion dollar disaster events, include 1998, 2008, 2011, 2012, and every year between 2015 and 2021, including those years. In a broader context, the total cost of U.S. billion dollar disasters over the last five years, 2017 through 2021, is \$742.1 billion, with a five-year annual cost average of \$148.4 billion per year, both of which are new records and nearly triple the 42-year, inflation-adjusted annual average cost. The U.S. billion dollar disaster damage costs over the last 10 years, 2012 through 2021, were also historically large, totaling more than \$1 trillion from 142 separate billion dollar events. Nebraska experienced increasing frequency and severity of extreme weather events in line with what we've experienced nationally. According to Yale University, the most up-to-date modeling projections are forecasting that the impacts of climate change may be even more severe than previously thought. These climate models calculate the physical properties and interactions between main climate forces like the atmosphere, oceans, and solar

input, along with other systems like ice sheets, forest, planetary albedo, and the biosphere. Every few years, there's a new released-- a newly released comprehensive international valuation called the Coupled Model Intercomparison Project or CMIP. The sixth such effort, known as CMIP6, is now underway; and experts are reviewing approximately 100 updated models for a report to be released, released later this year. The Intergovernmental Panel on Climate Change released its latest report, Climate Change 2022: Impacts, Adaptation and Vulnerability, on February 10-- on February 28, Monday of this week. This report recognizes both the increasing rate of climate change and the increasing threat of inaction. As modeling techniques are refined and the total catalog of climate data grows, climate assessments are routinely updated and reissued. The United Nations Climate Change Annual Report, The National Flood Risk Assessment, and the World Meteorological Organization Statement on the State of Global Climate are all routinely updated. Nebraska is no less deserving or in need of accurate updated climate data. Last session, I introduced LB576, a similar but not identical piece of legislation. I want to briefly highlight some of the notable differences between LB1255 and LB576. Committee comments during the hearing for LB576 made it clear that members of the Appropriations Committee preferred legislation with specific recommendations. LB1255 directs the University of Nebraska following the updating process to contract with a third-party science-based organization to recommend specific measures to be taken by the state of Nebraska based on the findings of the updated report. The funding for LB1255 is sourced from monetary allocations originating from the American Rescue Plan Act allocated to state of Nebraska. LB1255 constitutes an appropriate use of ARPA funds, as indicated in the Final Rule by the United States Department of the Treasury for the Coronavirus State and Local Fiscal Recovery Funds. The water and sewer infrastructure guidance found on page 37 of the overview of the Final Rule of the Coronavirus State and Local Fiscal Recovery Funds from the United States Department of the Treasury encourage recipients of funds to consider green infrastructure investments and projects to improve resilience to climate change. Federal spending guidelines regarding water conservation management infrastructure all make it clear that investing American Rescue Plan Act funding to address climate resiliency is both approved and encouraged. It's imperative that we are measuring and gauging the impact of climate change on our state with accuracy and timeliness. The impacts of climate change will be most severely felt by people in industries that are vulnerable to natural externalities. Nebraska, a state so heavily reliant on agriculture for its economic well-being, must have up-to-date climate data in order to ensure we are making

optimal decisions for our future. Thank you for your time and consideration. I encourage you to support LB1255. I'd be happy to answer any questions you may have.

WISHART: Thank you, Senator Bostar. Any questions? Senator Vargas.

VARGAS: Thank you for being here, Senator Bostar, and being our last hearing of the year.

BOSTAR: It's an honor.

VARGAS: Classic. Just a couple of questions as I was writing down a couple of things as you were talking about climate resiliency and I wanted to give you an opportunity to expand on— and this is my question is two things. One, have you seen other states how they've been investing in climate resiliency or utilizing federal dollars? So that's the first question. And the second question is just you talked about green infrastructure. If you can just elaborate on how having this climate plan will help us to prepare for how it affects our economy beyond agriculture, I think in agriculture and I hope we hear that from other testifiers. So what are other states doing with these ARPA funds for climate resiliency and how do you see this affecting our economic impacts, this study?

BOSTAR: So what I'll say that I will get you detailed information following this hearing, but we have seen allocations that involved a lot of water infrastructure related to projected climate impacts to ensure that, you know, populations and communities will continue to have access to water going into the future. And, and that sort of is one of the ways that I hope that you'll consider this bill. You know, as this committee and the body at large considers really significant investments in water projects, water infrastructure projects, reservoir development, it's imperative that with that process that we have up-to-date data about what these depletable resources will look like going forward with accurate modeling for our specific state so that we can ensure that those projects are developed in the best way possible to ensure resilient population in Nebraska. And so we're seeing a lot of that too. We are seeing actual climate planning and research allocations of funds to accompany water infrastructure projects similar to what this would look like. And you see some of that reference, too, in the, the ARPA rules, basically that, you know, with water infrastructure development or infrastructure development that is related to a potentially depletable resource, ensuring that you've taken that into account and you're doing what you can to

maintain resiliency. And so this is my hope that this is what this would do for us. And you may have had another question in there.

VARGAS: Just on the economic impact. I know we'll probably hear that from testifiers about the impact on our agricultural economy. I don't know if you have any other information or data on how this doing a climate study and to drive policies will impact our sort of economic state GDP so.

BOSTAR: Yeah, I think we certainly know that there is going to be incredible shifts in where different industries can thrive across the country. Getting down to a state level, you know, all we have right now to go off of is the report that the Legislature called for in 2013 and that was written in 2014. And since then, the amount of data that we have available to us, the amount of models that we can use to get a much better picture for what that looks like for us so that we can actually answer that question in detail is, is what this is. A lot's changed since 2014. And so we need to—we need to sort of catch up.

VARGAS: Well, I just want to react to that if I can really, Chair, Vice Chairwoman. Is -- the reason why I ask is, and you're right, I think this committee has heard so many water projects, the need to protect our water supply. We haven't really had these discussions in regards to how extreme weather events and the changing climate are contributing. How we contribute to that affects these big decisions we're making that are more like hundreds of millions of dollar asks. And it reminds me and this, this body, the Executive Board, also passed, we do financial stress tests for our state budget where we do these long-term fiscal impacts on what happens when we have these specific events that happen in the world and how they affect our bottom line. It's what helps us inform our cash reserve policy, and it leads me to believe that 2014 is too much time. We probably should be thinking about just having this recurring every three to five years, an ongoing report that comes to us because we're all going to be gone by the time if we wait another five or six years. So I appreciate you bringing this, and I hope we can try to work on something.

BOSTAR: Yeah, like-- and the other thing I'll add is I think there will be people who talk about agriculture. But, you know, with this data, too, we can look at-- we can use precision measurements in the field of agriculture and be informed by what we're seeing and reference that to climate data to understand how best to preserve the most significant industry we have in this state.

WISHART: Thank you. Any additional questions? Senator Clements.

CLEMENTS: Thank you, Senator Wishart. Thank you, Senator Bostar. The 2014 report, I assume it had some predictions for what was going to happen in the future. How accurate were those predictions?

BOSTAR: So you're going to have the opportunity to speak with our state climatologist who was able to, in very good detail, go through some of that. But my understanding is that we've actually— the predictions— climate impacts have exceeded what we thought they would in our predictions and our model. Things are becoming more extreme faster than we anticipated. I hope that answers your question.

CLEMENTS: Thank you. It's good.

WISHART: Additional questions? Seeing none, are you going to be here to close?

BOSTAR: Absolutely.

WISHART: OK, great. We'll see you then. First proponent. Welcome.

MARTHA SHULSKI: Good afternoon. My name is Martha Shulski, M-a-r-t-h-a S-h-u-l-s-k-i. I serve as the Nebraska state climatologist and I'm a professor of applied climate science at the University of Nebraska in Lincoln. My job as state climatologist is to respond to the climate and weather information needs of your constituents and provide a science-based, trusted voice on the hazards facing our state. I come to you today as a private citizen and not representing the university. Nearly a decade has passed since the Nebraska Climate Report was published in 2014. The most effective and useful scientific reports are ones that are living documents, those that include and synthesize new knowledge and understanding; those that identify risks and provide us the ability to manage weather hazards. Some hazards emerge slowly and some quickly. The key to mitigation and response is to track these regularly and systematically. Right now, 38 percent of Nebraska is in severe drought. Just three years ago, we all felt the massive impacts from the third wettest year on record: the March flood, the summer flash flooding. December of 2021 was the warmest on record. We had a swarms-- a storm system called a derecho that resulted in 30 tornadoes in winter, well outside of when a derecho typically occurs, and 10 times the number of confirmed tornadoes in Nebraska's historical record. The best way to help Nebraskans prepare for what is to come is to use the most relevant and up-to-date information. We don't stop assessing drought. It is ongoing on a weekly basis. In fact, we don't stop looking at our risk of spring flooding. We assess that every year, and we shouldn't turn our back on any other emerging weather

trend. Managing our state's resources efficiently and appropriately under changing conditions requires systematic tracking of these conditions. Some of you may agree with this legislation, and some of you may not. At this point in time, however, tracking weather trends is not a choice. It's a must. Your constituents all across Nebraska exhibit a level of concern that I have not seen before. I urge you to hear and support their concerns by passing this legislation. The question is not if, but how. Thank you very much. I'd be happy to take questions.

WISHART: Thank you. Senator Clements, did you want to ask that question of her as well?

CLEMENTS: Oh yes. The 2014 report, was it accurate in its predictions?

MARTHA SHULSKI: So typically, climate reports look at decades into the future. So the year 2022 currently would not have been articulated specifically in that report. But the climate model projections that Senator Bostar referenced, CMIP6, those are the most recent ones that have come out. There are some differences in the previous model projections that were used in the 2014 report. Specifically, the amount of temperature change that we'll experience as well as precipitation change. Something of interest probably to this committee is the fact that winters and springs are projected to be wetter than what they are now. Summer is projected to be drier, so a shift in the timing of when we receive our precipitation, as well as the amount that comes in extreme events. And the signature of, of the human signature on climate change is, is stronger than what it was in previous reports.

CLEMENTS: Thank you.

WISHART: Additional questions? Senator Kolterman.

KOLTERMAN: Thank you, Senator Wishart. Thanks for being here today. Who funds our Nebraska State Meteorology program at the present time?

MARTHA SHULSKI: So my position is a state funded one within IANR. There is another staff member who is part of Nebraska Extension, so both of us are fully funded from the university. The other funds to-for our four other staff members, that comes from external grant dollars that I and others write to bring in.

KOLTERMAN: So, so our state dollars fund-- the information that we get from the state meteorologist is funded by the state through the university fund?

MARTHA SHULSKI: Correct.

KOLTERMAN: OK, thank you.

WISHART: Thank you. Any additional questions? Senator Dorn.

DORN: I've got a question, I guess somewhere is of interest. And this is because one of the ag programs, the state climatologist we always hear Al Dutcher. What— tell me about him or whether you compare to him or what— why am I— why is— why do we hear his name as the?

MARTHA SHULSKI: So he is my predecessor. He was the Extension state climatologist currently.

DORN: OK.

MARTHA SHULSKI: So I moved into this role in 2016.

DORN: So I mean, he's a broader part of the state than you are or no?

MARTHA SHULSKI: We're with-- he's right across the hall from me. We're both within the umbrella of the Nebraska State Climate Office.

DORN: OK.

MARTHA SHULSKI: Yeah.

DORN: Thank you. I didn't know if he'd left or what or.

MARTHA SHULSKI: No.

DORN: I mean that-- yeah.

WISHART: Any additional questions? Seeing none, thank you. Additional proponents? Good afternoon.

KRISTAL STONER: Good afternoon, Senator— Senator Chairman and members of the committee. My name is Kristal Stoner, spelled K-r-i-s-t-a-l S-t-o-n-e-r. I'm the executive director of Audubon Nebraska, and I'm here in support of LB1255. So this is on behalf of the 12,000 members of Audubon Nebraska, which is a state office of the National Audubon Society. The Audubon Society is a conservation organization that's focused on birds and their conservation and works to bring awareness to the condition of our environment and how changes impact birds, natural resources, our economies, and our communities. In Nebraska and around the world, attention stemming from challenges of a warming world have become mainstream conversations. Statewide, we've

experienced climate change firsthand. Nebraskans have been devastated in the last several decades from repeated record-setting floods and droughts. There's a multitude of studies that tell compelling and terrifying stories about climate change. For example, the National Audubon Society, my own organization, found that two thirds of our birds are vulnerable to extinction if we don't reduce our carbon emissions. Examples of these highly vulnerable species in Nebraska include the iconic mountain bluebird found in the western end of our state, eastern meadowlark, and long-billed curlew, which is disappearing in neighboring states. But we still find them here in our Sandhills. Now, perhaps the plight of the mountain bluebird might not be a compelling reason for change, but the reality is that the safety for Nebraskans, conservation of our natural resources and sustainable communities, decision makers need to have the best available information to be able to make these decisions. So this existing report, this Understanding and Assessing Climate Change: Implications for Nebraska, it's our current gold standard. It's the one that I've been using since it came out in 2014. Any time anybody has questions about the impacts that are specific to Nebraska, this is the document that I pull out. It used scientific data and sector specific expertise to really dig into what the future risks were going to be, as well as the opportunities as we can think about our future and make intelligent decisions about that. It's dated 2014. It's time to update it. And I also just wanted to note that we should keep in mind Nebraska is falling behind in this area as we think about preparing for climate change and trying to be proactive in our decision making. According to the Center for Climate and Energy Solutions, 34 states have released a climate action plan or are in the process of doing one. And I know this isn't specifically to write a plan, but it is to make sure that we have the best information that we can for people to make plans for our future. So Nebraska is among the states that don't have a plan. So the cost of this proposed legislation, in my opinion, is cheap compared to the implications of inaction. This legislation supports empowering Nebraskans with knowledge that's needed for action. So we encourage you to support LB1255 and we thank you for your consideration.

WISHART: Thank you. Questions? Seeing none, thank you.

KATIE TORPY: Good afternoon. My name is Katie Torpy, K-a-t-i-e T-o-r-p-y, here today representing the Nature Conservancy. Respected members of the committee, thank you for the opportunity to share our support for LB1255. The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. We've worked in

Nebraska for over 50 years and currently own and manage over 66,000 acres of land in the form of nature preserves and working ranches. We support a proactive statewide approach to identify strategies for mitigating against climate change and adapting to those impacts we can't avoid. LB1255 provides for this need sensibly and without cost to taxpayers. Experts agree that climate inaction is a threat multiplier, resulting in more compound extremes. This is when-- this is when climate hazards such as extreme temperature occur simultaneously in the same place, affect multiple regions at the same time, or occur in a sequence, a phenomenon no better exemplified than by that 2019 bomb cyclone, an event that cost \$10.8 billion for the region as a whole. The continued absence of a climate action plan not only leaves Nebraska vulnerable, it leaves us unable to capitalize on solutions that benefit our economy and the environment right now. One set of solutions is hiding in plain sight. We call them natural climate solutions. These are land management practices that store and sequester carbon. For example, preventing more grassland from being plowed up, expanding sustainable agricultural practices, and also protecting wetlands can create large reductions in emissions while providing habitat for wildlife and economic gains for, for people. Economic interests and environmental interests need not conflict, and they don't require tradeoffs. Our landscape offers another set of solutions that are similarly unrealized, renewable energy expansion. Twenty-one times the amount of land necessary to meet the renew-- the Department of Energy's 2030 goal for wind production in the state of Nebraska can be met on our already disturbed lands. And yet scaling up these solutions remain a challenge. The university is the most trusted resource on climate change here in Nebraska. It is the climate ambassador we need to better understand our climate vulnerabilities and illustrate how mitigation and adaptation pathways can improve conditions for Nebraskans. And it bears stating that this is the seventh time, maybe even-- there might have been more than seven times this request has been made of the Legislature. And I think this is the moment that we need to take action. And I would also like to respond to Senator Vargas' question earlier on the benefits of, of a proactive, proactive approach. Research shows that every dollar spent on risk reduction saves an average of \$6 in disaster costs. So I think that is all I have. I'll take any questions.

WISHART: Thank you. Any questions? Seeing none, thank you.

AL DAVIS: Almost the last testifier on the last hearing date, I'm sure you guys are ready to go.

WISHART: No pressure.

AL DAVIS: Good afternoon again, Senator Wishart, members of the committee. My name is Al Davis, A-l D-a-v-i-s. I'm here today as the registered lobbyist for the Nebraska Chapter of the Sierra Club in strong support of LB1255. Nebraska is a powerhouse in the world of agriculture, provided with tremendous soils, adequate rain, and loamy soils, which have a significant ability to contain recharge when rain falls on it. Farmers tapping the Ogallala Aguifer have moved Nebraska ahead of many other states in terms of crops produced. We lead the nation in cattle on feed; rank in the top three on ethanol and corn production; produce wheat, soybeans, sugar beets, barley, milo, and other crops to feed the nation. Nebraska's Sandhills raise hundreds of thousands of mother cows in the world's largest grassland ecosystem. Agriculture, or the service industries associated with it, provide hundreds of thousands of jobs for our citizens, and the state truly does feed the world. And Nebraska is particularly vulnerable to the ravages of climate change. 2012 is a harbinger of the kind of damages which extreme heat and drought can do to our state. Just a year earlier, massive flooding on the Missouri River contributed to a red event at the Cooper Nuclear Station, which was surrounded by flood waters and lost the ability to cool water for over an hour. Since 2012, we've seen an extraordinary number of freakish weather events indicating that the climate is no longer a stable, reliable friend, but sometimes a ferocious opponent. On October 3, 2013, a freakish rain and snowstorm killed thousands of cattle, sheep, and horses in western Nebraska and South Dakota. In 2019, massive flooding occurred all across the state, causing millions in damages, which resulted in the breaching of the Spencer Dam on the Niobrara River. In December 2021, hurricane force winds tore through eastern Nebraska, contributing to massive power outages in the Omaha area and deaths in Minnesota. Nebraska recently received a \$30 million disaster recovery grant from FEMA just for that storm alone. An unstable climate isn't fictional. We're living it every day. Nebraskans are particularly vulnerable to climate change because our economy is so directly tied to food production. The 2014 climate study demonstrated clear and convincing evidence that the problem was real and was not going to go away. Projections made at the time for problems decades in the future have already occurred in Nebraska. While the nation is focused on the problem, Nebraska needs a specific study focused on our own problems to better prepare for what-- for what is to come. That is why the Sierra Club is supporting the updating of this study and developing an action plan to protect the state and our largest industry. The need for food will only increase over time, and Nebraska's ability to meet these needs will be better served by updating the 2014 study. The economic well-being of our state is tied to understanding our future.

Thank you, and that's the extent of my written testimony. A couple of points that I think are pertinent. Chris Clayton is a reporter from DTN, and it's one of the best known ag reporting entities out there. And Chris came to climate change kind of lately in his career, but one of the things that I've always been struck by was the statement that he learned from climate change work, which said that North Platte, Nebraska, will probably have the same temperature as Waco, Texas, by 2060. That's really not very far off. You may think it is, but it isn't. So this state needs to prepare and get ready for what's coming so that we can take care of ourselves and we need to update this study. I was here at the time that it took place, very supportive of it, and the report was revealing and very informative when it was done. I think it would guide the Legislature in their plans for the future, so I would urge this small request for Senator Bostar's bill to move forward. Thank you.

WISHART: Thank you. Any questions? Seeing none, thank you, Al.

AL DAVIS: Thank you.

JOHN HANSEN: Vice Chair Wishart, members of the Appropriations Committee, for the record, my name is John Hansen, J-o-h-n, Hansen, H-a-n-s-e-n. I am the president of Nebraska Farmers Union. I am also their lobbyist. Our organization has been serving family farmers and ranchers since 1913. We have about 4,000 families that we represent, and we had a fair amount to do with the creation of the study that was approved by the Legislature in 2013. It came out of the Ag Committee and it came out of the Ag Committee for a reason is because those of us in agriculture are directly impacted by what goes on in the natural world. And when it comes to weather, our nose bleeds first and it bleeds worst and there is no spin to it. We simply are at-- we are where the rubber meets the road, and very small changes in weather patterns have very huge consequences. So when you look at the aggregate data, a lot of times you don't even really fully understand or appreciate the extent of those small changes. Because if you get a four-inch or five-inch or an eight-inch gully washer, that doesn't do near as much good as four or five one-inch rains that soak in by a wide margin. So in all the time that we have been working on climate issues, we have been doing so with the knowledge that the more data we have and the more that we understand what's going to go on, the better we can plan and the better that we can start making the kinds of incremental changes that we in agriculture need to be able to make. It's very difficult for us to make major and radical changes in a short amount of time. We're-- we're an industry that ratchets our changes an inch at a time and we, we do a little more of this and a

little less of that. And so we felt very strongly that we had the-some of the very best resources in the country relative to the University of Nebraska's Drought Mitigation Center. It is the National Drought Mitigation Center. It is staffed by the University of Nebraska. We have world-class resources at our university. The International Drought Mitigation Center was born and started out of the University of Nebraska. So what we did in that period of time is really do a study of all the studies. And so then based on that, what were the most likely scenarios and what are the most likely Nebraska impacts? Well, jeepers creepers, that's nine years ago. A lot of things have changed. Our ability to be able to do studies is much more sophisticated, much more detailed. And so what we need is a benchmark study to update what we did and we need to find out whether or not things went faster, they went slower, whether different things are happening. But very small differences in the vascular system of our planet that's called the oceans and those water temperature streams that go through the oceans have huge impacts. And so we're-- so what I've done in my, my last opportunity for a huge data dump at the end of the hearing process this year is to give you some numbers and some data. And the National Centers for Environmental Information is an excellent resource and their methodology is quite impressive. All of the scientists that I work with give them very high marks. I've included Nancy Gardner's really excellent piece in the Omaha World-Herald that helps us better take a bunch of that information and integrate it relative to what it means in Nebraska. And so I've highlighted some of the impacts. We have become numb to records. And so as you look at some of, just some of the highlights of things that have happened in this last, last year, we started out with a record setter-- setting polar vortex and we ended it with 30 tornadoes and record setting in the middle of December. We have never had these kinds of events before. We usually set flood levels by inches. We set four rivers by feet in 2019. The size and the scope of the changes are amazing. The last thing is, this particular piece from DTN's meteorologist explains that the extreme weather costs have been greater than farm income. So when you put it into perspective, and so that Bryce Anderson's just excellent blog piece that he put in and has all of the data in and that is in your second piece.

WISHART: John--

JOHN HANSEN: I would recommend that to you.

WISHART: Your red light is on. Thank you. Any questions from the committee? Seeing none, thank you.

JOHN HANSEN: Thank you very much.

KEN WINSTON: Good afternoon. Once again, my name is Ken Winston, K-e-n W-i-n-s-t-o-n, and I've changed hats. I'm now appearing on behalf of the Nebraska Interfaith Power and Light in support of LB1255. I'm actually going to start with the last paragraphs on the-- on the-- on my handout and just indicate that the reasons why Nebraska Interfaith Power and Light is interested in this. Nebraska Interfaith Power and Light is a statewide interfaith, nonpartisan, nondenominational organization that believes that we have a moral obligation to address issues related to climate change and care for God's creation. We believe that climate change is the most important moral issue of the 21st century, with the potential to impact every person on the planet. And a major reason why we believe this is because of the impacts that climate change has on low-income and vulnerable people because they are much more at risk for the impacts of climate change, including floods. They're more likely to live in, in flood plains. They're more likely to live in substandard housing, which creates more risk when we have heat, heat waves and cold spells like we had last February. And they're more likely to have economic and food insecurity, which increases during times of drought. And as previously indicated, some of the reasons that we-- there are a bunch of, of numerical factual financial reasons, which is what this committee deals with, that we also support this legislation. The costs, as several people have testified, the costs of failing to address the impacts and the causes of climate change are potentially devastating to the state's budget. And that's what you -- what this committee is, is charged with doing. The reported cost of the 2012 drought in Nebraska was \$4 billion. Now, not just to the state-- not just to the state of Nebraska, but in the state of Nebraska. And then the reported cost of the 2019 bomb cyclone was \$3.4 billion. And so those-- when, when those things happen, that has an impact on revenues. That has an impact on things that get appropriated by this committee. And so we-- there's billions of dollars' worth of reasons why this needs to be addressed. On the other side of the coin, I've spent a lot of time advocating for-- in support of clean energy. And I'm sure that John Hansen has probably provided you with some information on that. But I thought I would-- I would reiterate that. It is my understanding that, that this year, Nebraska farmers and ranchers will receive \$14.8 million in annual -- in revenue from, from wind development; another \$19 million would go to local tax revenues; and it has created approximately 400 new jobs, new permanent jobs in the state of Nebraska. In addition, climate planning and wind and solar development have been key, key, key to attracting businesses like Google, Facebook, and Microsoft. And in addition, examination of

these issues can help local policymakers and service providers prepare for such events, such as floods, floods, droughts, cold snaps and heat waves. And, and then there's been discussion about the impacts on agriculture so I won't further discuss that. So and finally, this can help provide a roadmap to help individuals, businesses, and governments negotiate the challenges ahead. Thank you.

WISHART: Thank you, Ken. Any questions? Seeing none, thank you.

KEN WINSTON: Thank you.

WISHART: Additional proponents? Seeing none, anyone in opposition? Seeing none, anyone in the neutral? Senator Bostar, you're welcome to close.

BOSTAR: Vice Chair Wishart and members of the Appropriations Committee, thank you for your time and attention to this issue. And really, I just wanted to come up and thank you, see if there's any final questions. For the committee members that are going to be ending their terms of service at the end of this year, thank you in particular. And I guess Senator Kolterman, of the ones here, this is just to you, but and it's a-- it's a pleasure and honor to be with you here at the end of your hearing schedule. And with that, I would be absolutely ecstatic to answer any questions you might have about this subject.

WISHART: Any questions? Seeing none, thank you, Senator.

BOSTAR: Thank you.

WISHART: You have a record number of proponent letters, 56. That might be the most that we have received.

VARGAS: We had 116 yesterday.

WISHART: Nevermind, but close.

VARGAS: Second.

BOSTAR: --what I heard is it's a record. Thank you very much.

WISHART: Zero in opposition; zero neutral. That closes the hearing for LB1255 and that closes our hearings for the year. Thank you, committee.