

Natural Resources Committee February 20, 2019

HUGHES: [00:00:00] Welcome to the Natural Resources Committee. I'm Senator Dan Hughes, I'm from Venango, Nebraska, and I represent the 44th Legislative District. I serve as Chair of the committee. The committee will take up the bill, bills in the order posted. Our hearing today is your public part of the legislative process. This is your opportunity to express your position on the proposed legislation before us today. The committee members may come and go during the hearing, this is just part of the process as we have bills to introduce in other committees. I will ask that you abide by the following procedures to better facilitate the proceedings. Please silence or turn off your cell phones. Introducers will make initial statements, followed by proponents, opponents, and neutral testimony. Closing remarks are reserved for the introducing senator only. If you are planning to testify, please pick up a green sign-in sheet that is on the table at the back of the room. Please fill out the green sign-in sheet before you testify. Please print, and it is important to complete the form in its entirety. When it is your turn to testify, give the sign-in sheet to the page or the committee clerk. This will help us make a more accurate record of public records. If you do not wish to testify but would like to record your name as being part, being present at the hearing, there is a separate white sheet at the tables to sign-in for that purpose. This will be part of the official record of the hearing. If you have handouts, make sure you have 12 copies, and give them to the page when you come up to testify. They will be distributed to the committee. When you come up to testify, please speak clearly into the microphone. Tell us your name, and please spell your first and last name to ensure that we get an accurate record. We will be using the light system today for all testifiers. You will have five minutes to make your initial remarks to the committee. When you see the yellow light come on, that means you have one minute remaining, and the red light indicates your time has ended and we would like you to wrap it up. Questions from the committee may follow. No displays of support or opposition to a bill, vocal or otherwise, are allowed at a public hearing. The committee members with us today will introduce themselves, beginning on my left.

MOSER: [00:02:04] Hi, I'm Mike Moser from District 22. It's Platte County, a little bit of Colfax County, and most of Stanton County.

HALLORAN: [00:02:12] Good afternoon. Steve Halloran, District 33: Adams and part of Hall County.

QUICK: [00:02:17] Dan Quick, District 35: Grand Island.

GEIST: [00:02:21] Suzanne Geist, District 25: the east side of Lancaster County.

HUGHES: [00:02:25] And on my right.

GRAGERT: [00:02:26] Tim Gragert, District 40: Cedar, Dixon, Knox, Rock, Holt, and Boyd County.

ALBRECHT: [00:02:33] Good afternoon. Joni Albright, District 17. It's Wayne, Thurston, and Dakota Counties in northeast Nebraska.

BOSTELMAN: [00:02:40] Bruce Bostelman, District 23: Saunders, Butler, majority of Colfax Counties.

HUGHES: [00:02:45] To my left is committee legal counsel, Laurie Lage; and to my far right is committee clerk, Mandy Mizersky. Go ahead and answer, please. Ms. Arrowsmith, welcome.

LANA ARROWSMITH: [00:02:58] Thank you.

HUGHES: [00:03:00] Can you hold on for just a second? We're just doing some housekeeping things and we will be with you shortly.

LANA ARROWSMITH: [00:03:06] That would be great.

HUGHES: [00:03:06] Thank you for your patience.

LANA ARROWSMITH: [00:03:08] You're welcome.

HUGHES: [00:03:09] Our pages for the committee today are Noah Boger, he is a freshmen at UNL with a double major in political Science and French; and Hunter Tesarek, who is a sophomore at UNL with a double major in history and political science. We do have a new feature in the, the Natural Resources today. We have a gavel. This is for Senator Halloran's benefit of what a real gavel looks like. So anybody gets out of line, your fingers will come up here and we will administer punishment. With that, thank you, Ms. Arrowsmith. We have an appointment up first this morning, a call-in. Lana-- Lana or Law-na [PHONETIC]?

LANA ARROWSMITH: [00:03:52] Lana, you're correct.

HUGHES: [00:03:54] Very good, Lana. Lana Arrowsmith, and she is seeking a position on the Niobrara Council. So, Ms. Arrowsmith, if you would give us just a brief background about yourself and about why you would like to be appointed to the Niobrara Council.

LANA ARROWSMITH: [00:04:12] OK. I am 41 years old. I was born and raised on a ranch in Northern Rock County, which is still family-run. I am married, I'm the mother of two girls: 23 and

13. I work in healthcare and I'm also the on-site ranch coordinator for the Audubon of Kansas ranch, which is also along the Niobrara River. And I myself am a landowner along the Niobrara River. I serve on the city council for the city of Bassett. I am a prior board member for Rock County Ambulance Association, and I am a member and have been for the past 15 years taking 911 calls. As far as the River Council, I guess I would like to be part of a growing and workable, in a workable financial position where the council could be independently proactive in resource protection. Ranging out from noxious weed control, also including that of cedar tree encroachment, which is a major problem, and as much or as more what the erosion of the river banks. And a personal opinion, sometimes I feel that after Rocky Ford, our end of the river, neck of the woods, seems forgotten about. I realize I am a new member, and it is painfully obvious that this board has zero ability to accomplish anything beyond the minimal boilerplate, you could say, for tasks, due to insufficient funds I feel involving state or federal funding.

HUGHES: [00:06:01] OK. So have you had the opportunity to attend any meetings yet?

LANA ARROWSMITH: [00:06:08] I have. I've, I've attended two. There isn't one-- I went and December and then I went in January. And there was, there's not one being held this month. So we'll meet again in March.

HUGHES: [00:06:20] OK. Thank you very much. I will open it up to the committee members for questions. Senator Geist.

GEIST: [00:06:25] Yes, welcome, Ms. Arrowsmith.

LANA ARROWSMITH: [00:06:29] Thank you.

GEIST: [00:06:30] I have a question about how-- I might be putting words in your mouth, but how you feel this is not an effective counsel. And can you elaborate on that for us?

LANA ARROWSMITH: [00:06:43] I can to a certain point, I'm pretty new to this. And when I was approached to take this position, I was like, ah. So I kind of had to jump in feet first. And take in mind, there's only been two meetings. But it seems like they're just kind of going with the flow. We can't do much, the funds aren't there. We can't do this, we can't do that. And it seems like, just from the two meetings, and I've not never met with anybody personal and went beyond those standpoints to say, why? Why, why is this what I hear in the open meetings, that the funds aren't there to do much? Just recently, with the ranch I manage and the place I own, that I've inquired about, you know, obviously our place is being taken over places by cedar trees not just the granite. We do have the Min Ag [Phonetic] program coming in that has been there. Then we kind of had a lapse of that is reopening again. That will help as far noxious weed cedar trees, I don't know. Fire, but that isn't always effective, and you scare every surrounding neighbor around you when you take that approach.

GEIST: [00:07:57] Do you feel like that your-- you would have a contribution to maybe make it more effective?

LANA ARROWSMITH: [00:08:03] I feel I've learned a lot when I went to work for-- when I got the management position for the Audubon of Kansas my boss was a pyro. I mean, the fires. And before that, I was always raised very scary. And I feel that after attending many of those, and we have put on several big burns, and their resources are out there and they're available. If we can just get in contact with them and have the funds to do some of that. As far as the erosion and losing the river, I can't even tell you how much land just in the two places personally that we've lost, I don't have the brains there. I don't know, someone's got to have some engineering there above my power

and, you know, the knowledge to know what to do to stop that.

GEIST: [00:08:59] OK, thank you.

LANA ARROWSMITH: [00:09:02] Thank you.

HUGHES: [00:09:02] Additional questions? Senator Albrecht.

ALBRECHT: [00:09:05] Thank you, Chairman Hughes. And thank you, Ms. Arrowsmith, for considering serving on something, on a board that hopefully they do have a lot of great things that they do. I'm sure that they've been around for a while. But would you have any knowledge of what their budget is or how they even accumulate any funds from the state or the federal government?

LANA ARROWSMITH: [00:09:30] As far as putting numbers on paper, I was going to get into that last time and I've been-- I felt like I was too new to be asking such maybe private questions and just jumping in as a new member. Just from what I've overheard, what other people talking about, it's just like, if the numbers aren't there, we can't do it. We don't have the funding. It's not there. We'll have to wait, we'll have to wait for another year.

ALBRECHT: [00:09:56] OK.

LANA ARROWSMITH: [00:09:58] And how many years they've been waiting, I have not, honestly, I cannot say, answer that productively and say, yes, I know the exact figures. It's just from what I've overheard the board members talking now, it's always the funds aren't there.

ALBRECHT: [00:10:13] Well, it's interesting now, now talking to a few people that were wanting

to appoint, makes me want to go out myself and find out a little bit more about your, your committee. So thank you for being here with [INAUDIBLE].

LANA ARROWSMITH: [00:10:27] That would be great. We would welcome you. I'd even welcome you to come stay. We have guest houses at both of our places. So if you're ever out this way and want to play in the river, you're more than welcome. Look me up.

ALBRECHT: [00:10:36] Oh, I have played in that river, it is nice. Thank you very much.

LANA ARROWSMITH: [00:10:38] Yes.

HUGHES: [00:10:39] Are there any other questions? Senator Bostelman.

BOSTELMAN: [00:10:42] Thank you, Chairman Hughes. And thank you, Ms. Arrowsmith, for your willingness to serve. Couple of questions for you. Do you, does the Audubon of Kansas, that site, that land area, is that included in that area that the committee would, commission would cover?

LANA ARROWSMITH: [00:10:59] Yes, it is. Before-- it is included in the scenic river, yes.

BOSTELMAN: [00:11:03] And do you see, or how would you proceed if there were some type of a conflict that may arise because of that?

LANA ARROWSMITH: [00:11:12] Because I work for them and I'm on the Niobrara Council, you mean?

BOSTELMAN: [00:11:16] Right.

LANA ARROWSMITH: [00:11:17] No, I don't see that. If anybody knows my boss, I could see where those conflict questions could definitely come up. No, I think it could all be worked out in a very positive manner. I am the only Nebraska employee, and so if something do butt heads, I do have the final say in everything back here. And as of this point, no, I do not see any conflict in that area at all. I told them my position, that I was applying for-- not really applying for, but that I had been asked to take. And everything came back very positive.

BOSTELMAN: [00:11:57] All right. About how much. What's the size of the acreage or landmass that's in that Audubon Kansas area?

LANA ARROWSMITH: [00:12:07] Five-thousand acres.

BOSTELMAN: [00:12:07] OK. The other, I guess, more a comment. I want to thank you for being an EMT and for your service to community as well.

LANA ARROWSMITH: [00:12:14] Thank you. Thank you.

BOSTELMAN: [00:12:15] Thank you.

LANA ARROWSMITH: [00:12:17] Yes, thank you.

HUGHES: [00:12:20] Are there any additional questions? I guess I just have one. Are you filling a specific slot on the Niobrara Council?

LANA ARROWSMITH: [00:12:28] I am filling in. I am taking Lance Cook's position.

HUGHES: [00:12:33] But was that designated, we have, you know, landowners and river outfitters and--

LANA ARROWSMITH: [00:12:39] It's a landowner position for Rock County.

HUGHES: [00:12:43] Okay. Okay, thank you very much.

LANA ARROWSMITH: [00:12:45] Yes.

HUGHES: [00:12:46] Senator, Senator Gragert would like to ask a question.

LANA ARROWSMITH: [00:12:48] OK.

GRAGERT: [00:12:49] Thank you, Senator Briese. Thank you, Ms. Arrowsmith. Not really a question, just wanted to introduce myself as the District 40 senator up there in Bassett, includes Bassett. So thank you.

LANA ARROWSMITH: [00:13:05] Thank you.

HUGHES: [00:13:06] Very good. I see no more questions, Ms. Arrowsmith. So we do thank you for your willingness to serve on the Niobrara Council. I will ask if there is anyone in the audience that would wish to come up and testify in favor of her appointment, of Ms. Arrowsmith's appointment to the Niobrara Council. Seeing none, is there anyone who wishes to come up and testify in opposition to her appointment? Seeing none, anyone wishing to testify in the neutral position? Seeing none, thank you, Mss. Arrowsmith. That will close our confirmation hearing of

Lana Arrowsmith for the Niobrara Council. Thank you very much, Ms. Arrowsmith.

LANA ARROWSMITH: [00:13:47] Thank you. And I invite any of you to come up any time to see how we live, see the river in this area. And if we wanted to discuss anything further.

HUGHES: [00:13:57] Very good. We appreciate that.

LANA ARROWSMITH: [00:13:59] OK. Thank you.

HUGHES: [00:14:01] With that, I will turn the hearing over to Vice Chairman Bostelman.

BOSTELMAN: [00:14:12] Just got to keep them in line. Thank you very much and good afternoon everyone. Senator Hughes, thank you for being here today, and you're welcome to open on LB368.

HUGHES: [00:14:29] Thank you, Senator Bostelman, members of the Natural Resources Committee. I, my name is Dan Hughes, D-a-n H-u-g-h-e-s. I represent the Legislative District number 44. I'm here to introduce LB368 for your consideration. In 2004, the Legislature enacted LB962, which was groundbreaking legislation that changed the way we manage surface water and groundwater in Nebraska. It recognized that surface water and groundwater are hydrologically connected and put into law the public policy that we that we need to sustain our use of water in Nebraska. The goal of LB962 is to manage all hydrologically connected water for the purpose of sustaining a balance between water users and water supplies so the economic viability, social and environmental health, safety, and welfare of each river basin could be maintained for the near and long-term. LB962 required groundwater depletion to be tracked annually to determine the long-term availability of hydro logically connected surface and groundwater. If the track-- if the tracking showed that available water supplies in a river basin over a period of time on average are equal to

the long-term consumptive use of water. Then that basin would be declared as fully appropriated. Being fully appropriated means there can be no new water uses until the NRDs in that basin adopt an integrated management plan or an IMP to manage the balance, to manage and balance new and existing water users. LB962 also recognized that there were some basins in the state where the water use was greater than water supplies, and the consumptive use of water had to be reduced until water use could be in balance with the water supply. This designation of overappropriated requires the affected NRDs to develop their IMPs accordingly. The overappropriated areas in the state in general coincides with the area of the Platte River Basin involved with the Platte River Recovery Implementation Program for endangered species, which requires the affected NRDs to work on increasing stream flows. If you look in the handouts, there is a map that shows the state of Nebraska that does show you the fully and overappropriated. And I believe it's a colored, yes, that's the map, Senator Albrecht. So that does give you an idea looking into the, the lower Panhandle of Nebraska, where the overappropriated NRDs are. These NRDs have worked on these mandates over the years, as well as IMP regulatory controls, to reduce irrigated acres with the assistance of the three-cent levy provided in law for fully and overappropriated NRDs. That levy authority expired at the end of 2018. Some NRDs claim that without the help of that levy, they are unable to access the funds needed to meet their legal obligations. I introduced this bill to provide the committee with the information about why we manage the water, why we manage water the way we do today, to help the committee better understand what it means to be fully or overappropriated. And the challenges associated with those designations. I also wanted to give those who were involved in the development of our water law the opportunity to give background and context to our discussion, and whether we should-- whether we should maintain our water management policy decision that was made over 14 years ago. With that, I'll end my testimony and try to answer questions, knowing that there will be individuals coming behind me that were involved in the development of fully and overappropriated and NRDs and IMPs, and we can think of a whole other bunch of acronyms. But with that, I'm happy to answer any questions.

BOSTELMAN: [00:18:56] Thank you, Senator Hughes. Does the committee have any questions?

Seeing none--

HALLORAN: [00:19:03] Quick question, sorry.

BOSTELMAN: [00:19:04] Sorry, Senator Halloran.

HALLORAN: [00:19:05] Bostelman. So my understanding is that whether it's fully appropriated or overappropriated, there is a requirement for IMP.

HUGHES: [00:19:13] Yes. That if you are a fully or overappropriated NRD, you do have to have an integrated management plan to deal with how you use water within your jurisdiction.

HALLORAN: [00:19:30] Even though it might be-- even if it's in balance?

HUGHES: [00:19:35] That's where the fully appropriated is.

HALLORAN: [00:19:38] Right.

HUGHES: [00:19:38] Yeah. That's why you have the IMP, in order to keep it in balance.

HALLORAN: [00:19:44] Okay, thank you.

BOSTELMAN: [00:19:45] Sarah Moser.

MOSER: [00:19:47] The additional tax authority that sunsetted, was available for fully or overappropriated?

HUGHES: [00:19:57] Correct.

MOSER: [00:19:59] And so are you entering this bill to allow them to reinstate or allow us to reinstate that tax?

HUGHES: [00:20:06] There is a bill introduced by Senator Stinner that is in the Revenue Committee to do just that. That, that is the appropriate committee for that, that bill. This is more of a--

MOSER: [00:20:20] Policy bill.

HUGHES: [00:20:21] Yeah, a policy of why, why we are where we are today with our water management in the state of Nebraska and, you know, what the reasoning was for that three cent, the, the challenges that having that designation in your river basin or your-- within your, your boundaries, your jurisdictional boundaries, you know, what you needed to do and why that additional three cents was necessary.

MOSER: [00:20:47] So does whether that bill succeeds or fails affect what we do with LB368?

HUGHES: [00:20:55] Not necessarily, no. They don't, they don't have to travel as companions.

MOSER: [00:21:05] Thank you.

BOSTELMAN: [00:21:08] Senator Albrecht.

ALBRECHT: [00:21:09] Thank you, Vice Chair. So, Senator Hughes, would this overappropriated area have a policy in play right now? Would, would they already know that they have a problem and would have to have a plan? Or do they have a plan?

HUGHES: [00:21:29] Yes, they do have a plan, and there's probably someone coming behind me that can better explain that. But the overappropriated, that's those are the really challenged portion in the Upper Platte because of the Platte River Recovery Program, which is federal, as well as state, of making sure that there is more water flowing down the Platte than there is today. I think, I don't remember what the year was, but they're trying to get the river back to a point in history when there was more water in the river. So the upper reaches of the, of the north Platte, especially, are doing things to put more water back into the river. And that, that is a moving target. The next increments of additional or more flow that has to be in the river, is coming. And I'm not sure when, but it is coming soon.

ALBRECHT: [00:22:33] Thanks.

BOSTELMAN: [00:22:37] Other questions from members of the committee? Seeing none, thank you, Senator Hughes. Would ask for anyone who would like to testify as a proponent for LB368 to please step forward. Welcome.

LARRY REYNOLDS: [00:23:03] Welcome. Good afternoon. Senator Hughes, members of the Natural Resources commission, I'm Larry Reynolds, board member of the Tri-Basin Natural Resource District, and also president of the Nebraska Association of Resource Districts, testifying today on behalf of Nebraska Association of Resource Districts in support of LB368. I'd like to thank

Senator Hughes for bringing this bill before the Legislature. We believe discussions need to continue about the direction of water management in Nebraska, especially as it relates to property tax and regulatory red tape. The overappropriated requirement came into effect in 2004, after the states of Nebraska, Colorado, Wyoming, and the U.S. Fish and Wildlife Service entered into the Platte River Cooperative Agreement. Nebraska entered the agreement specifically to help Nebraska Public Power District and Central Nebraska Public Power and irrigation district satisfy their federal energy regulatory requirements concerning Section 7: Endangered Species Act requirements. I want to make clear that we think this cooperation is critical and it's very important. The statutes require the NRDs to offset the impacts of groundwater irrigation on stream flows needed to satisfy existing water rights and meet endangered species flow targets. The offset requirement was placed on the back of local irrigators through integrated management plans developed by local NRDs and the state of Nebraska. The NRDs worked with the state to develop programs to retire irrigated acres, create augmentation projects, provide recharge projects, while maintaining the economic viability of the basin. The first planning increment goal was to offset completions to the Platte River back to 1997 levels of development. The fixed-- first increment of the plans ran until this year. They're now being revised and renewed, and one of the biggest problems with current statutes is the continually moving goal line. There are five districts in the overappropriated area and all five NRDs have worked with the state of Nebraska and interested parties to meet the goals of the first increment of the Platte River Cooperative Agreement. That was originally 24,500 acre-feet of depletion credit back to the river annually to get to 1997 levels of development. The districts have met these goals. In 2018, these first increment numbers were reviewed and revised and several of them increased. For example, the Twin Platte offset obligation went from 7,700 acre-feet on an annual basis to over 25,000 acre-feet. The Central Platte NRD obligation changed from 3,400 acre-feet to 18,500 acre-feet. In addition to providing these offsets to meet 1997 levels of development, all five NRDs have to offset new uses by all cities and villages in the basin. As these communities benefit both directly and indirectly from NRD water management activities, the districts would prefer that all

beneficiaries contribute. All the existing projects have ongoing annual costs. The districts have invested \$54-- \$57.4 million in infrastructure, irrigation retirement, and other projects to return the first increment offset back to the river annually. The districts also spend approximately \$4.1 million annually in operation and maintenance costs to maintain existing projects. Current laws has two objectives in the Platte Basin. First, we must either reduce water consumption or offset groundwater impacts to water rights enough to get back to '97 irrigation levels. We must then work toward reaching a full balance between water supplies and water uses, which is a fully appropriated condition. State law does not define how much water is needed to get from overappropriated to fully appropriated. Our organization has tried for the past two years to extend our groundwater management levy authority to fund water projects in the fully and overappropriated areas. Both attempts have failed. It is very apparent to many involved that the public did not understand the mandates that have been placed on local NRDs in these river basins. However, we fully understand the direction of the government, Governor, and the Legislature in trying to reduce property taxes. We support policies to cut regulatory red tape, taking down barriers that keep from promoting economic activity and opportunities for all Nebraskans. We're willing to work with all parties involved to accomplish these important tasks. We hope to provide certainty to users in the basin that additional regulations will not be necessary. LB368 removes mandates and provides the assurance to landowners in the basin. With that, I conclude my testimony.

BOSTELMAN: [00:29:01] Thank you, Mr. Reynolds. Are there questions from the committee members? Senator Moser.

MOSER: [00:29:08] The moving goal line that you're talking about, who's moving the goal line?

LARRY REYNOLDS: [00:29:14] Through the integrated management plan process. The depletions credits that we receive from each NRD to the river are reviewed, and through the use of

updated information and hopefully the best science available, then those offsets that are required sometimes change due to cropping use and other issues that come then before the Natural Resources Commission.

MOSER: [00:29:45] Is it a federal government.

LARRY REYNOLDS: [00:29:47] It's the state.

MOSER: [00:29:48] It's the state regulation that's making it move? And are we doing it, well, I guess this isn't your question maybe, but we're doing it at the behest of the federal government, I would assume?

LARRY REYNOLDS: [00:29:58] A large part of what is driving all of the overappropriated/fully appropriated issues in the statutes deal, are dealt as a result of having to deal with the Endangered Species Act.

MOSER: [00:30:12] Thank you.

LARRY REYNOLDS: [00:30:14] And there may be somebody following that could answer that fully, more fully for you too.

MOSER: [00:30:19] Thank you. They'll fully appropriate that question.

LARRY REYNOLDS: [00:30:22] Yeah.

BOSTELMAN: [00:30:26] Senator Geist.

GEIST: [00:30:26] Thank you for your testimony, Mr. Reynolds. And I just want to refer to one of the-- actually, Senator Moser asked the first question I was going to ask you, because I was going to ask who is moving the goal posts. Secondly though, in your testimony you say that state law does not define how much water is needed to get from overappropriated to fully appropriated. Would it be your preference that it is defined?

LARRY REYNOLDS: [00:30:51] Senator, I guess, I guess it's for instance it depends on Mother Nature. This year, we were under-appropriated, probably 8 out of the last 10 years we are at most fully appropriated and or under-appropriated.

GEIST: [00:31:06] Because of the amount of rainfall?

LARRY REYNOLDS: [00:31:08] The real challenge is in a drought scenario. And through the integrated management plan process, we are trying to address that, at least in the Platte Basin right now. And that will be a big challenge.

GEIST: [00:31:20] And I have, I had a second question about that. And so how long does it take to evaluate your water usage as compared to your water supply? Do you know, like, does that question make sense? Should someone behind you answer that?

LARRY REYNOLDS: [00:31:38] There may be someone more technically adept to answer that, but it does have to do with the [INAUDIBLE] model. And the modeling, as you put more information in, and get more current information, then it changes your result.

GEIST: [00:31:54] OK.

LARRY REYNOLDS: [00:31:54] In a short answer, I guess.

GEIST: [00:31:56] Thank you.

BOSTELMAN: [00:31:59] There other questions? Senator Quick.

QUICK: [00:32:01] Thank you, Senator Bostelman. I guess my question would be, and maybe you can explain a little bit about that with your NRD, what project, I mean, how does that affect the projects that you have going on? Could you, I see you have both over, overappropriated and fully appropriated and that, that may move according to what, what your requirements are. But how do you plan for like a project? I mean, that makes it kind of tough, right?

LARRY REYNOLDS: [00:32:29] Well, it depends on which side of Highway 183 you're living on, probably. But it is a challenge for our NRDs, since we do have three basins. We not only have the Platte Basin, which has both fully appropriated and overappropriated designations in that basin in our NRD; we also have the Republican River, which the Supreme Court decree; and then the little blue-- portion of the basin. While there are not necessarily any interstate agreements or anything that we're having to deal with, we are having to deal with a declining water table, Senator.

BOSTELMAN: [00:33:05] Senator Gragert.

GRAGERT: [00:33:06] Thank you, Senator Bostelman. Is-- thank you for your testimony. Is this figured on an annually basis or do you look at a trend or the, you know, the supply you can't, can't hardly keep up, like you said, there's never a normal year?

LARRY REYNOLDS: [00:33:20] That's a really good point. I think the thing that you have to keep in your mind, these are depletion offsets. And so a river can be maybe, let's just say, a 50,000 acre-foot depletion occurring but it can still be in flood stage. There can still be flows beyond that bank, even though there's this depletion that has occurred. So as you can see, it's very difficult when you are trying to deal with your producers and satisfy an offset depletion and they look at that river and it's a flood stage. You know, what are you doing? So I don't know if that truly answers your question but it's something to keep in mind that it may not necessarily have anything to do with flows.

GRAGERT: [00:34:09] Yeah, it's more complicated than it looks. Yeah. Thanks.

BOSTELMAN: [00:34:14] Senator Halloran.

HALLORAN: [00:34:16] And thank you, Mr. Vice Chair. If you would help clarify this for me, because it's a little confusing to me. LB368 provides that a river basin, subbasin, or reach that was designated has overappropriated will now be deemed fully appropriated. If it was overappropriated, you know, which we're withdrawing more than, we're withdrawing more than adequately supplying the rivers, the aquifer, why are we suddenly just with the stroke of a pen saying now they're going to be fully appropriated? From overappropriated to fully appropriated?

LARRY REYNOLDS: [00:34:55] I will give you Larry Reynolds' opinion on that question. The definition of fully appropriated and overappropriated really is never been established. So to go from fully appropriated to overappropriated, the most junior water user in the system, their water rights were not satisfied 100 percent of the time. Now, how much of that time were they not satisfied? Was it 20 percent, was it 30 percent? As I recall, that was a decision made by Roger Patterson, former director of the DNR, and I was told it was 70 percent of the-- 30 percent was not satisfied.

Again, it was pretty subjective and that's strictly, I don't have any documentation, I guess, to back that up.

HALLORAN: [00:35:54] OK. I guess I'm still confused that from what I understand, this bill will with a stroke of the pen designate overappropriated and deem it now fully appropriated. And you're saying there hasn't been a good, solid definition of those two: overappropriated and fully appropriated?

LARRY REYNOLDS: [00:36:15] Again, the testimony that follows may be able to further clarify that for you. In my opinion, there is not.

HALLORAN: [00:36:22] Okay, thank you, sir.

BOSTELMAN: [00:36:25] Senator Moser.

LARRY REYNOLDS: [00:36:26] Everybody else have their chance for the first time around?

MOSER: [00:36:31] How far, and I live just a few miles from the Platte River, and I know over the years that it's gone dry, long before 1997. And then, you know if the next year where it will kind of resurface again. So how far west does the Platte, when it goes dry, I mean, how, how far west can that go where there's no water flowing in it at all? I mean, have you seen that in your area? Do you have the Platte River in your area that's actually gone dry ever, that you recall?

LARRY REYNOLDS: [00:37:05] There are times during August, during summer months, where flows are somewhat or are pretty reduced, depending on droughts and Mother Nature. I don't know if that totally answers it, but I live in an area where our underground aquifer is very healthy. My

own place, 10 foot to 15 foot where the house is. And in the bottom of the quarter, one foot. In that area, we are very fortunate. The state of Nebraska is very fortunate, Senator, in that we have this huge sponge called the Sandhills. The elevation of the Valentine airport is about 180 foot higher than the elevation of Lexington airport. There's 180-some miles there of aquifer recharge capability. And so I think that's what we have to think about, our challenge as we go forward is, in this drought scenario planning, how do we share the shortages? During normal years, those 8 out of 10 or however you want to put the goalpost, there is enough water for all users.

MOSER: [00:38:13] And when you say enough water, are they talking about the depth of water in irrigation wells or test wells along the area or are they talking about flow in the stream?

LARRY REYNOLDS: [00:38:26] They're talking about the most junior water user in the system and their water needs being satisfied.

MOSER: [00:38:35] So if they can't pump enough water to put 14 inches of irrigation water on, then there--

LARRY REYNOLDS: [00:38:43] Well, and this--

MOSER: [00:38:43] That's the trigger point?

LARRY REYNOLDS: [00:38:44] In our part of the state, Senator, it's Central Nebraska Public Power irrigation is the most junior water right. And when they don't have enough water to generate hydropower for industrial use whenever they need to, then that would be classified with--

MOSER: [00:39:02] So it's more than just irrigation, you're also generating electricity at the same

time?

LARRY REYNOLDS: [00:39:07] The priority is human consumption, human needs; and then agriculture, food production is two.

MOSER: [00:39:13] So it's a combination of well depth and flows, surface water?

LARRY REYNOLDS: [00:39:20] Again, depending on how that well affects the river, how far away it is, and where it's pumping, what aquifer it's pumping out of. The effect to the river is somewhat delayed, and that's why we have these offset depletions that grow, requirements.

MOSER: [00:39:41] We've had a couple a testifiers come before our committee on other bills and talk about water that's going down the Platte and running into rivers downstream and that that water is being wasted. Do you have an opinion on that comment? Is that an uninformed comment or is that accurate?

LARRY REYNOLDS: [00:40:05] Well, again, I think the state is so fortunate in that we can look at our aquifer as much you would look at as an above-ground reservoir. We can recharge that aquifer and, during times of plenty, bring that aquifer level back up. And in times of drought or shortage, pull that aquifer down and still maintain that ability to recharge it. Unlike California, unlike different parts of the world, due to the gravels and stuff that exists there.

MOSER: [00:40:38] Thank you very much.

BOSTELMAN: [00:40:38] Senator Albrecht.

ALBRECHT: [00:40:42] Yes. Thank you, Vice Chair. It's probably because you're the first one up, you're helping all of us try to figure this out and understand what we're going to be talking about here today but--

LARRY REYNOLDS: [00:40:52] Well, the senator was first.

ALBRECHT: [00:40:53] I know, but he gets a break because we got to hear from all you folks. OK, so you're in this Tri-Basin right here.

LARRY REYNOLDS: [00:41:00] Yes.

ALBRECHT: [00:41:00] Is that the NRD that you represent, that you sit on a board?

LARRY REYNOLDS: [00:41:03] Yes, Senator.

ALBRECHT: [00:41:03] But yet, we're talking about all of these folks up here that are ending up where you're at. Correct? That's what we're talking about, the overappropriated surface water?

LARRY REYNOLDS: [00:41:15] Yes.

ALBRECHT: [00:41:15] Right? So when you say the, the districts, so are you talking about these overappropriated districts have spent \$57 million in infrastructure and in irrigation retirement and other projects? Or are you just talking about your Tri-Basin?

LARRY REYNOLDS: [00:41:37] The districts in total. There should be a handout that you will receive, if you haven't, that sums up where the, the-- what each district.

ALBRECHT: [00:41:45] OK. And then I'd like to know, who are these districts? So if you're out there you know, tell me, but 50-- who, who spent \$57 million and annually, you need \$4 million to continue taking care of what you've spent?

LARRY REYNOLDS: [00:42:03] North Platte NRD, headquartered in Scottsbluff.

ALBRECHT: [00:42:06] OK.

LARRY REYNOLDS: [00:42:07] South Platte NRD, headquartered in Sidney. Twin Platte NRD, headquartered in North Platte; Central Platte NRD, headquartered in Grand Island; and Tri-Basin, headquartered in Holdrege. Now, those are the Platte Basin NRDs that are involved in the overappropriated portion of the Platte Basin.

ALBRECHT: [00:42:30] Correct. So that's everybody on this map that we just talked about.

LARRY REYNOLDS: [00:42:32] Correct. But it does not read-- it does not include any of the Republican NRDs.

ALBRECHT: [00:42:40] Because they are fully appropriated with surface water.

LARRY REYNOLDS: [00:42:41] Yes.

ALBRECHT: [00:42:41] Correct? OK. So is this bill just talking about these one, two, three, four, five people or are they talking about all the NRDs in the state?

LARRY REYNOLDS: [00:42:55] This bill would apply to all the NRDs in the state.

ALBRECHT: [00:42:56] All of them in the state?

LARRY REYNOLDS: [00:43:00] Yes.

ALBRECHT: [00:43:00] But it appears that the overappropriated surface water areas are the ones with the most concern?

LARRY REYNOLDS: [00:43:08] At this point in time, that's where the most need has been, for not only the levy authority but also the biggest challenge to offset depletions to the stream largely due to Endangered Species Act issues. However, all of the NRDs, including South Platte NRD, Lincoln, are involved in integrated management planning processes now to try to address this issue of when we have shortages what are we going to do. And this is an issue that hopefully we're out in front of in the state of Nebraska. When you look at the Great Basin: Arizona, southern California.

ALBRECHT: [00:43:47] And would you say that these six, five or six that we're talking about, have they reached their levy limit, all of them? Or do they have room to find the funding to take care of this problem?

LARRY REYNOLDS: [00:44:02] Again, this will probably be addressed by a one or two of the managers probably later, and I will defer to that. I guess I will just make the comment that I think there is only one NRD that's used the full three-cent levy authority.

ALBRECHT: [00:44:18] And isn't that on the east side of the state or within your--

LARRY REYNOLDS: [00:44:21] No, it's the Upper Republican.

ALBRECHT: [00:44:24] The Upper Republican?

LARRY REYNOLDS: [00:44:26] Yes, in the Republican Basin. And that had to do with the Supreme Court decree.

ALBRECHT: [00:44:31] Oh, yes. OK. Very good. Thank you.

BOSTELMAN: [00:44:36] Are there are other questions from committee members? I have a couple for you, sir. On the bottom of your first page, our first page on your-- you're talking here about the offset obligations increased from 7,700 in the Twin Platte to 25,000; and from Central Platte from 3,400 to 18,050-- or 18,500. Could you explain that a little bit more to us?

LARRY REYNOLDS: [00:45:01] If you don't mind, I am going to defer that question to our manager.

BOSTELMAN: [00:45:06] That's fine.

LARRY REYNOLDS: [00:45:06] My Tri-Basin manager. A lot of it has to do with land use and cropping use.

BOSTELMAN: [00:45:13] OK. That's fine. And they can answer that when they come up.

LARRY REYNOLDS: [00:45:16] Probably much better than I.

BOSTELMAN: [00:45:17] Sure. Now, the other question I have is on the second page what you had, you talked about other communities, communities within the districts. Sounds almost like they're not participating, they're not contributing. Is, is there something along that line you'd like to share with us a little bit more?

LARRY REYNOLDS: [00:45:33] When the statute was passed, there was an agreement that the NRDs themselves would offset any increase in industrial use that resulted from Grand Island or any community in those NRDs, that those offsets would be found and paid for and provided for by the NRD itself, not the municipality.

BOSTELMAN: [00:45:56] So one change perhaps, or needed change, that may be here on the funding side is could we infer maybe that the communities need to be-- know, or someone needs to be chipping in a little bit more that have not been before?

LARRY REYNOLDS: [00:46:13] Well, that would, that's what the three-cent levy would do is it spreads that taxing authority out, amongst not only the water users, but the communities and the municipalities as well.

BOSTELMAN: [00:46:25] Right. And I believe last time that was on the floor, the last time, I don't remember, it was, there was another funding mechanism that was being argued should be used instead of the three-cent levy override. And I don't remember the name of that.

LARRY REYNOLDS: [00:46:38] There, there is a capability to use a \$10 per acre, it's called an occupation tax.

BOSTELMAN: [00:46:44] That's it. Right.

LARRY REYNOLDS: [00:46:45] And the actual farmer himself or whoever that landowner would you, whoever that land owner is, if it's irrigated, certified as irrigated land, then they would pay that tax.

BOSTELMAN: [00:46:57] Then that would not go to your cities, though, or to other--

LARRY REYNOLDS: [00:47:00] That tax collection would not include the cities or municipalities, it would only be that land that is certified as irrigated acres.

BOSTELMAN: [00:47:10] OK.

LARRY REYNOLDS: [00:47:10] And I think, if I could add, short-term, yeah, that's a way to generate the funds. But long-term, the value of that ground is going to decrease. So now that's going to affect your tax base. And so it really is not a tax savings.

BOSTELMAN: [00:47:28] I appreciate that. OK, thank you. Are there any other questions, final questions? Thank you, Mr. Reynolds, appreciate your testimony. I would invite the next proponent for LB368 to please step forward. Good afternoon.

JOHN THORBURN: [00:47:53] Good afternoon, Mr. Chairman, members of the committee. I'm John Thorburn, I'm the manager of Tri-Basin Natural Resources District in Holdrege, and we're responsible for protecting the soil and water resources and Gosper, Phelps, and Kearney Counties. I appreciate Senator Hughes providing us with an opportunity to discuss the issues local natural resources districts and water users face in the overappropriated area of the Platte Basin in Nebraska. Larry Reynolds provided you some background on this issue, including the moving targets and

uncertainty of the amount of water needed in the Platte River to remove the overappropriated designation. Nebraska is fortunate to have local NRDs and the state of Nebraska working together to protect our irrigated agriculture economy. We're number one in irrigated acres, and Nebraska's NRDs are dedicated to ensuring the sustainability of our valuable groundwater resources. When the overappropriated language became law as part of LB962 in 2004, sufficient dedicated funding source that would help NRDs manager overappropriated areas was intended to be part of that legislation. Unfortunately, that dedicated state funding mechanism was not part of the final bill. Eventually, the state provided some funds for offsetting groundwater depletions in districts that are fully or overappropriated. These funds provided through the Nebraska Environmental Trust require a 40 percent local match from NRDs. This 40 percent match requirement was established knowing districts have a three-cent levy authority to tap into to provide the match. The levy authority has now expired, but it is proposed to be extended with LB134. The joint funding effort helped all Platte, Upper Platte NRDs reach their offset depletion goals during the first increment of our integrated management plans. Repealing the overappropriated statutes and declaring the Platte Basin fully appropriated would provide assistance to NRDs and the public that, even though we must still satisfy the requirements of the, of Nebraska's new depletion plan, we won't be chasing an arbitrary fully appropriated condition that has not been defined. Putting additional water in the river and offsetting new municipal uses is not cheap either. It has caused NRD property tax levies to increase since 2004. However, if there is not local funding for water projects that offset groundwater depletions, our only alternatives to regulate irrigation use, which has economic consequences locally due to reduced irrigated acres and reduced crop yields. State and local water management has worked and has built partnerships that might not have otherwise materialized. For example, many of the districts now have partnerships with surface water irrigation districts to help them improve their irrigation efficiency and put excess water back in the river. Many of these don't require reductions in irrigated acres but they do have up-front and operational costs. Past and current offset projects will not get us to the goal of reducing streamflow impacts down to the

undefined fully appropriated levels of development to achieve this goal. We anticipate that the NRDs must continue to dry up irrigated acres, reduce our property tax base, and regulate irrigators even more strictly. The political results of accomplishing these goals will be pushback from county officials and the public. I provided a summary of streamflow offset activities undertaken by each district that has authority to use the three-cent groundwater management levy. This includes the five Upper Platte Basin districts, the Republican Basin NRDs, and parts of the Upper Big Blue and Upper Niobrara-White NRDs. Currently, we do not know the fully appropriated offset target number for the Platte Basin or for each NRD in the overappropriated area. This uncertainty is not helpful to the Platte Basin economy or to our constituents. This bill provides a starting point for discussions to provide them with some of that certainty. We are open to discussing this issue further with all interested parties. Thank you.

BOSTELMAN: [00:51:46] Thank you, Mr. Thorburn. Are there any questions from the committee members? Senator Gragert.

GRAGERT: [00:51:55] Thank you, Senator. In the second-to-last paragraph then, just clarifying, the only ones that can use the three-cent are the fully appropriated overappropriated NRDs, right?

JOHN THORBURN: [00:52:10] That's correct, Senator.

GRAGERT: [00:52:10] OK. So not all NRDs get to use this?

JOHN THORBURN: [00:52:14] No.

GRAGERT: [00:52:16] Thank you.

JOHN THORBURN: [00:52:16] That is not.

BOSTELMAN: [00:52:20] Other questions from committee members? I'll go back to my question then, that I asked before. And then you don't necessarily have this, but in the, in Mr. Reynold's testimony, if you can answer, here it says the district-- I'll read it, says the districts met those goals in 2008. These first increment numbers reviewed and revised and several of them increased. For example, the Twin Platte offset obligation went from 7,700 acre-feet to an annual basis of over 25,000 acre-feet; and the Central Platte obligation changed from 3,400 acre-feet annually to 18,500 acre-feet.

JOHN THORBURN: [00:52:56] Right.

BOSTELMAN: [00:52:56] Could you explain that?

JOHN THORBURN: [00:52:57] Yes, Senator. State of Nebraska NRDs and the public power and irrigation districts have been working together for almost two decades developing a computer modeling system for the Platte River Basin, a way to estimate the amount of water supply available, the amount of water that's being pumped for irrigation, the amount of water being diverted for various purposes. And so as a result of this computer modeling, then we've developed these depletion impacts, the impact of groundwater pumping on either the river or tributaries that reduces flows. And of course we're not talking about all flows either, it's only those flows that are needed to satisfy water rights or to satisfy the Endangered Species targets. Well, over time, the modeling machine has improved, the data that we've put into it has become more accurate. And so our estimates have been revised and we believe are, are more accurate now. That, unfortunately, has been detrimental or has led to a greater burden on some of these NRDs. Tri-Basin NRD was fortunate, I guess, in the sense that our offset obligation went down somewhat from 3,500 acre-feet

a year down to 2,000 acre-feet a year. And in my district's case, that primarily is the result of changing farming patterns and practices, where guys went from continuous corn and alfalfa in the Platte River Valley, more to our corn and soybean rotation, which uses less water. And our irrigators have become more efficient as well. So as I say, as, as a result of more data better, data better modeling processes, we've developed revised estimates, and that's how we've arrived at these new numbers.

BOSTELMAN: [00:54:44] Are the majority of irrigators in this in the overappropriated area surface water or groundwater irrigators?

JOHN THORBURN: [00:54:53] The majority would be groundwater irrigators, although there are significant large surface water irrigation projects as well.

BOSTELMAN: [00:55:00] So could you explain to me, obviously, there's an inflow from another state or states, primarily Wyoming. I don't know if Colorado contributes at all. How does that impact or how has that impact, and has it been detrimental to what we're doing now? Or are there things that can be changed potentially there to, to help us out?

JOHN THORBURN: [00:55:22] Well, Nebraska and Wyoming have some history of arguing over water, just as all the western states do. But there was a lawsuit between Nebraska and Wyoming settled, oh, more than a decade ago now. So as I understand it, Wyoming is providing their fair share of water to Nebraska. How it's managed and when it's provided, there's always ways to improve that and ways to become more efficient in distributing the water. But yeah, I think Wyoming is arguably doing what they're supposed to do. State of Colorado, the South Platte River flows are much more variable, you don't have as many large reservoirs on that system. And so as you may have seen in news media in past years, there's been some big floods out of Colorado

through the South Platte system. On most average, the dry years, there's not a lot of water coming out of Colorado, and they strive to keep as much in their state as they can. So that was part of the motivation for this multi-state agreement and the agreement with the federal government on what we call the Platte River Recovery Program or the cooperative agreement, as it was initially, to try to work together to reduce shortages, primarily for these endangered species issues. But also, that enables the states then to be able to have at least more assured supplies of water, more certainty about what will be available for our use and development.

BOSTELMAN: [00:56:53] Thank you. Senator Albrecht.

ALBRECHT: [00:56:57] Thank you, Vice Chair. So you gave us this handout, Mr. Thorburn, right?

JOHN THORBURN: [00:57:03] Yes, ma'am

ALBRECHT: [00:57:04] To help us understand better where everybody's at, of these six: North Platte, South Platte, Twin Platte, Central Platte, and Tri-Basin areas. So some, in fiscal year 2017-18, did exercise, you know, the ability to draw on that three-cent levy, but others did not.

JOHN THORBURN: [00:57:25] Right.

ALBRECHT: [00:57:26] So in the Tri, which we've been talking about in your area, the Tri- Basin, you did--

JOHN THORBURN: [00:57:36] I'll save you the looking up, Senator.

ALBRECHT: [00:57:38] 0.5?

JOHN THORBURN: [00:57:38] It was like five-hundredths of a cent was what we used, or five-tenths of a cent.

ALBRECHT: [00:57:42] OK. So I'm confused to try to understand why you would not have been drawing on it, if it takes \$4 million annually to operate and maintain the certain cost, that's with all six of you. So what is your budget, then? If you're, if you're still obviously, I mean, taking in the funds, right? You're not asking for the full three cents, but you're getting how much in that fiscal year, 2017?

JOHN THORBURN: [00:58:15] Okay. Well, yeah, that, that last fiscal year in which the levy was available to us, we did intentionally lower our asking from that groundwater management levy, knowing that it was going to go away. And earlier years, we were up to I believe using about two cents of that three-cent levy authority. But yeah, we recognized it was going to go away and so we had to transition. And you may be aware that there are levy lids and limits, and limits on how much we can increase our levy over time. The groundwater management levy, if I'm remembering correctly, was an exception to that. But our general levy has limitations on how much we can increase it. So we kind of had the transition over a series of fiscal years from that groundwater management levy to our general levy. You asked about our budget. The district's budget of course varies quite a bit, depending on what projects we have in place. And we're kind of an unusual subdivision in that respect, that we don't have a lot of base costs, our base operating budget as a district is probably around half a million dollars. Our total budget, this past fiscal year, if I'm recalling correctly, was in the neighborhood of \$2.2 million. And so it does depend on what projects we have going and what programs we're involved in as to how much money is needed in a particular year. Just like any subdivision, I suppose.

ALBRECHT: [00:59:44] And I guess that's kind of what I looked at even in deciding on that LB98, whether people needed the money or not. You've been in operation as an NRD for how long?

JOHN THORBURN: [00:59:54] Since 1972.

ALBRECHT: [00:59:56] So, so since 1972, your, all your projects are pretty well laid out, pretty well-- you pretty well know where you'd need to go. And I would think that most things that you wanted to do have been done and maybe you should be more into the sitting back and kind of watching things take place. I do understand though that Mother Nature plays a major role in what you end up getting yourself involved in and what you don't, but that's, that's where I, you know, whenever we talk about this, I just keep thinking, if you're really here to help us with property tax relief you would be doing what you just did in 2017-18 and just being conscious of what you're doing to your particular area. You know, to the, to the folks. So this is just an observation that I see. And I appreciate all this information on all of the overappropriated surface water users in the area. I appreciate the information you put together for us. Thank you.

JOHN THORBURN: [01:00:59] Could I respond, Senator?

ALBRECHT: [01:01:01] Sure. Go right ahead.

JOHN THORBURN: [01:01:01] Just a couple points.

ALBRECHT: [01:01:02] Yeah.

JOHN THORBURN: [01:01:03] We're asking for levy authority, not necessarily the ability to use

that levy authority in full every year. And certainly that's, that's not been the history of my board of directors, or I think most NRD boards. They're composed of landowners, and they have no interest in trying to maximize property tax asking. But there are times, and especially in the nature of water resources projects, that you need a lot of money one year, less money other years. And so that variable need requires to have a little headroom in terms of your taxing authority so. And you had asked earlier about the overappropriated designation. And Larry did a capable job, but I'm going to try to clarify a couple of fine points. It's only the Upper Platte NRDs that are designated as overappropriated. And by law, they're the only entities under current law that can be designated as upper-- as overappropriated. That cannot be applied to other river basins. Fully appropriated can and does apply to other river basins. And while fully appropriated is definable, I mean, it's essentially the balance, as Senator Hughes described, it's a balance between uses and supplies. And overappropriated we know is that imbalance, where, on average at least, uses exceed supplies. Finding that difference is the difficulty, and defining overappropriating and the criteria for overappropriated is the difficulty.

ALBRECHT: [01:02:39] Makes sense. Thank you.

JOHN THORBURN: [01:02:40] Thank you.

BOSTELMAN: [01:02:42] Senator Moser.

MOSER: [01:02:43] When you're in an overappropriated area, what are your tools to reduce water? You have conservation plans that you try to impose upon landowners?

JOHN THORBURN: [01:02:58] Senator, yeah. There are regulatory options of limiting the amount of water that irrigators can pump. We could require them to uniformly reduce irrigated

acres. We could even, which no, to my knowledge, NRD has ever done, we could prescribe what crops they could plant. There are those sorts of regulatory options. Beyond that, really what we have to work with, and what we in my district certainly have viewed as a preferential option, rather than regulation, is to try to retime the water supplies. Take the water in times of excess, store it. Store it in the ground, store it in a reservoir, release it when it's needed. And that's the nature of the Platte River system especially, is that seasonally and year to year those supplies are highly variable. In those wet years, we want to try to capture more of that water in Nebraska, not let it run out to the Gulf of Mexico. And in those wet years, put that water back to the stream.

MOSER: [01:04:00] So do you sometimes pay farmers not to irrigate?

JOHN THORBURN: [01:04:05] No, sir, that is not--

MOSER: [01:04:06] Not in your area?

JOHN THORBURN: [01:04:07] --a policy of ours. We do pay farmers to--

MOSER: [01:04:12] Subsidize?

JOHN THORBURN: [01:04:15] Well, I don't know if I want to use the term subsidize. We cost-share. We try to help them to become more efficient irrigators and adopt more efficient irrigation methods to utilize things like soil moisture sensors that help them identify when it's appropriate to irrigate and how much to irrigate. Find those ways to use water more efficiently and more effectively.

MOSER: [01:04:40] Are those cost-share projects annual expenses, or something you do once as a

project and then it's forever then effective going forward? Or--

JOHN THORBURN: [01:04:55] In dealing with individual landowners, these projects are a defined period of time. As for instance, you're putting new nozzles on a center pivot system to make them more efficient. Then the landowner has that work done, we reimburse them for a portion of cost, usually about half. And they're required to maintain that efficiency improvement for 10 years. So there is a term to that when they're required to maintain that. But the need, of course, over in my case, half-a-million acres of irrigated property in the Tri-Basin NRD, is continual among all those irrigators. So we can only work with a small fraction of them from one year to the next.

MOSER: [01:05:40] Do you buy property to take it out of production?

JOHN THORBURN: [01:05:43] Some NRDs have done that. Not necessarily bought the land outright, but bought easements which put restrictions on the use of the land so that it can only be used as dryland, cropland. The further west you go, the more restricting that is on the farmer. I mean, Tri-Basin NRD is kind of on that borderline, the magical hundredth meridian where beyond which you basically have to rely on irrigation to get a crop and east of the hundredth meridian you can grow corn at least on average half the time or so without irrigation. But the further west you go, the more impact that has on property values when you do that. And, as I'm sure Larry and other farmers would tell you, we just can't predict the future. And we know that the world population is growing, we know the world looks to the United States to provide their food supply in many cases. And to take land off the table or to reduce the productivity of land can have consequences down the road for not just Nebraska but the United States and the world.

MOSER: [01:06:55] Thank you.

BOSTELMAN: [01:06:57] Senator Geist.

GEIST: [01:06:58] Yeah, I just have one quick question. And maybe you're not the one to answer it. and you can just tell me someone's coming behind you that could. But I--

JOHN THORBURN: [01:07:05] I don't see anybody behind me, Senator, so I'm the best shot you have.

GEIST: [01:07:08] OK. I would ask you the same thing. How long does it take to evaluate the water supply versus water use? Because when you use the water, it doesn't show up right away, right?

JOHN THORBURN: [01:07:20] Right.

GEIST: [01:07:21] So how long does that take?

JOHN THORBURN: [01:07:22] OK. And this goes back to that computer modeling process, where you're correct. When a groundwater irrigator pumps water to irrigate his crop, that will eventually have some impact on the amount of water that seeps into a stream. That effect could happen over, if you're very close to the stream, a matter of months; if you're several miles away, a matter of decades. We know, in areas where we have flow meters, we know with some precision how much water has been pumped out of the ground. In areas where we don't have flow meters, we can still estimate pretty closely based on studies that the university has done about crop water consumption. And really, that is the key, is how much water has been consumed, not necessarily how much water has been pumped. If you're very efficient as an irrigator, your consumption will match very closely to your pumpage. But less efficient irrigators sometimes will-- we'd say wasting

water, but it's water that's just not used and in many cases returns to the stream. So the amount of water used, the amount of water that's pumped, that is known to us, the supply of surface water is known to us. The groundwater supplies are estimated and then we look at changes in groundwater levels to look at the impacts on, on stream flows. But a lot of it is computer estimations. Some of these things you just can't directly measure.

GEIST: [01:08:49] OK. So if we with this bill change the designation of overappropriated to fully appropriated, is that just a definitional change? Or is it, is it changing in such a way as we'll never regain that-- I don't even know how to ask this question. Regain that difference again?

JOHN THORBURN: [01:09:19] Well, Senator in my opinion, yes, it is a change in a somewhat arbitrary definition. NRDs already have an obligation to get water, or groundwater use impacts down to 1997 levels in the Platte Basin. That is specified in the law, that's a goal that my district has already achieved and other districts are working toward achieving. We know that at that 1997 level of use, in the vast majority of years all water users will have adequate supplies. We know though in multi-year droughts, extreme drought situations, that there will be shortages of water. And we need to do a better job of planning and managing for those more extreme situations. So that is an ongoing obligation we will have, regardless of whether we're considered over or fully appropriated. We still have that obligation to protect impacts to 1997 levels regardless. We still have an obligation as NRDs to protect groundwater supplies for their, the benefit of our own constituents and the benefit of the state overall. And so that indirectly also protects in groundwater contributions.

GEIST: [01:10:37] So it sounds like it doesn't really matter if you're designated as overappropriated or fully. You, you have the same obligation no matter what. Is that, am I hearing that correctly?

JOHN THORBURN: [01:10:48] Well, it matters in the sense that we know, we know where the finish line is and we know the standard that will be held to. And as I say, it's, it's very difficult to at least reach a number that everybody can agree is an appropriate difference between over and fully appropriated. And to distinguish between human impacts and natural variability is also a challenge that we have to consider when we're trying to figure out those, those differences and those targets.

BOSTELMAN: [01:11:28] Senator Halloran.

HALLORAN: [01:11:30] Thank you, Senator Bostelman. Again, I think it's Mr. Reynolds main comment that he thought that the, the terms overappropriated and fully appropriated were poorly defined or ill-defined or arbitrary.

JOHN THORBURN: [01:11:44] Or variable.

HALLORAN: [01:11:44] Or variable. Well, variable. All of the above kind of is bothersome to me. I mean, when we're trying to define things by law here and we're using terms. But if they're not well-defined, then it's hard to make good laws or enforce good laws. So can you help me with that a little bit?

JOHN THORBURN: [01:12:03] I'll do my best, Senator. As I said, and as Senator Hughes described, the criteria for fully appropriated is pretty well understood. That's that balance between use and supply. The conceptual definition of overappropriated is simply an imbalance. In fact, in LB962 I think it's much more specific than just simply the Platte Basin above the Kearney Canal, or for practical matter in my district, west of Highway 183, is just simply decreed or designated as overappropriated, without defining to what extent or what the, what the parameters are of that overappropriation. So that's the difficulty. First of all, having a standard of overappropriation that

we can all agree on, and identifying the difference between the current situation and what we would consider a balanced situation. Is, is the problem we've been wrestling with for a decade, and the uncertainty that hangs over not only NRDs but our constituents.

HALLORAN: [01:13:13] Another quick question, and that's it centers around something being arbitrary: 1997 is the benchmark. Why was 1997, that's when the law passed?

JOHN THORBURN: [01:13:28] That no, actually, LB962 passed in 2004. But the Platte River Cooperative Agreement between Nebraska, Wyoming, Colorado, and the federal government was signed on July 1, 1997.

HALLORAN: [01:13:41] So, the circumstance, and that's the water table basically and water flow in the rivers? What's the--

JOHN THORBURN: [01:13:48] Right. We're, we're looking at the level of impact to stream flows by groundwater development at that point in time.

HALLORAN: [01:13:55] OK. Well, again, I mean, you have to set a benchmark somewhere. I understand that. But a lot of things can happen in and around that time, drought-wise, development activity, and so forth. And I guess and we're not going to change that here. But to me, that's-- there were a lot of variables there that were centered around that point in time. That may have been, you know, it could have been a drought. I don't know. Or it could have been plentiful rain, rain during that period of time. But that's the benchmark that we're, that we're living with, right?

JOHN THORBURN: [01:14:42] Correct.

HALLORAN: [01:14:42] So there's a lot of things that aren't under our control, and you mentioned them all. The weather is a big one. My grand granddad always said there was two rains in Nebraska you can depend on: one too late for the wheat and one too late for the corn. But that being said, you can't control that. None of us can control that. But can we control, and I'm going to make a statement more than a question, unless you differ with it, but can-- we also can't control the geology underneath the surface, right? And that varies throughout all the water basins. We have shallow areas of aquifer. We have very deep level areas of water-bearing gravel aquifer. And that's unchangeable. So it's what God gave us was a great gift. So it's the best one arguably in the whole world as an aquifer, but we can't control that either. So say the junior rights, you mentioned the junior right holders, they're downstream typically?

JOHN THORBURN: [01:15:47] Not necessarily. And let's make clear that when we talk about junior and senior, we're talking about surface water rights. In the groundwater system, we all share in the shortage. In the surface water system, the oldest rights have the ability to use whatever water they need. The next oldest right gets its share and on down the line until the most junior, most recent water rights that are issued.

HALLORAN: [01:16:08] OK, thank you.

BOSTELMAN: [01:16:14] Senator Gragert.

GRAGERT: [01:16:15] Thank you, Senator Bostelman. I just had a couple questions, fully-- OK, we're back to fully appropriate, overappropriated. You're required an irrigation management plan, correct, as an NRD.

JOHN THORBURN: [01:16:28] What, integrated water management plan, yeah, the IMP term.

GRAGERT: [01:16:31] Oh, thank you. Integrated water management-- so within that then, does that, does all individuals that are irrigating, do they have an irrigation water management.

JOHN THORBURN: [01:16:41] No. These are plans that are developed by the NRD and the state, and they define or identify projects, programs, regulations that we can use to meet the goals of reducing impacts to stream flows. And so we could choose to divide that up, divide up that offset requirement among our individual irrigators. Probably not the most efficient way to attack the problem, but certainly you could argue a fair way. But no, because we, especially in my district, haven't had to rely on regulations heavily or allocation limitations on pumping, we've just chosen to try to avoid the need for regulation by working on these retiming projects. And to give you an example, we've worked with the Central Nebraska Public Power and Irrigation District and the State Department of Natural Resources to look for those opportunities when Platte River flows are above the levels needed for existing water rights and above the levels needed for the endangered species targets. Take some of that excess flow, divert it into the central canal system. We've put it in the Elwood reservoir, we've run it into the canals. Most recently now we're working on a project to enable that water to be diverted into some federally owned wetlands, and let that water seep back into the ground, recharge the groundwater supplies. That has local benefits, but then also, by raising the water table, the groundwater table, you're also increasing the contribution of the groundwater table to surface streams. So that's the approach that our district has taken. Other districts don't have that fortunate circumstance of having a big irrigation district, so they've had to rely more on regulation.

GRAGERT: [01:18:38] OK, so the three-cent, up to three-cent levy you have, then what-- so those are the type of projects that you would ever levy any kind of those moneys to do? Not necessarily conservation practices in on the individual?

JOHN THORBURN: [01:18:57] Oh, it's the whole range. Certainly that's been the emphasis in my district, is paying Central Public Power to divert these excess flows. That's been our biggest project. We have also, as I described with the other senators, we've done these cost-share projects, help our irrigators become more efficient. And we're looking at some new opportunities in that respect as well. But, yeah, we've, we've looked at probably these larger scale projects because, in terms of cost per acre-foot, the cost, the benefit cost ratio is probably a little more, more positive, and you don't have quite as much administrative cost that way.

GRAGERT: [01:19:38] So you feel we have enough reservoirs in on this, on this system, drainage system on the Platte, like the lakes. Give me, you mentioned one, but we have plenty of lakes to store this water?

JOHN THORBURN: [01:19:49] Oh, sure. There's a number of them. Well, there's always opportunities. There's sites for additional small reservoirs for reregulation, I think, that could be developed. But I think, yeah, clearly the big reservoir projects are something of the past for a number of reasons. And probably most of those potential sites are fully developed already. And we try to, try to use them for different purposes now. You know, we're trying to make more widespread beneficial use of those.

GRAGERT: [01:20:23] Thanks.

BOSTELMAN: [01:20:26] Other questions? Senator Halloran.

HALLORAN: [01:20:29] Thank you, Vice Chair Bostelman. This is probably not germane to this bill, but since you're the answer man here, you answer this question for me. On this map, are you

familiar with this map?

JOHN THORBURN: [01:20:38] Yes.

HALLORAN: [01:20:39] It, it shows the overappropriated and fully appropriated districts or areas, but there's 14 NRDs that show no indication or of being fully or overappropriated. What would you classify those as?

JOHN THORBURN: [01:20:59] Well, they're not fully appropriated. They're-- I guess I'm not sure what terminology is appropriate. But they're not reached that threshold of being fully appropriated.

HALLORAN: [01:21:11] OK. So they're not in jeopardy of being in a, in a, in a situation where the water supply is at risk of--

JOHN THORBURN: [01:21:22] Well, I guess it depends on how you want to look at the situation. They're, they're not in danger of having junior water right holders be denied their ability to divert on a regular basis. But there are places in the state, including part of my district, where we've seen groundwater declines in areas where there just aren't any flowing streams. And so, you're not affecting stream flows, but we have in my district, generally, a situation where, because of the Central Public Power Irrigation District and them diverting water out of the Platte, water has seeped out of their canals over the years. And that's provided groundwater recharge, just as an incidental benefit. And so, groundwater levels in much of my district are actually higher than when we started irrigating. But I have a couple pockets in southern Gosper County and in southeast Kearney County that, as you say, they're not blessed with as thick or as well-structured of an aquifer, they don't have that available supply where we've seen groundwater declines. And so we've had to manage and

even to limit their pumping to address those localized problems.

HALLORAN: [01:22:37] Is it possible to really help those, in those kind of areas that you describe, that have a poor geological structure, and they're all different? I mean, it varies, but can-- is there practically anything you can really do? I mean, they're, they're at risk of losing, when the wells start pumping, they're, they're almost annually at risk of having some issues with domestic wells or livestock wells and so forth? Is there, I mean, you can't change the geological structure so is there practically much you can do with that and facilitate that?

JOHN THORBURN: [01:23:14] Well, we can help farmers figure out how to live with those limitations and become as efficient as they can be with the water that they have available. In some cases, depending on the geology, you can bring in water from other areas to provide additional groundwater recharge to help try to bring things back to a balance. But yeah, there are some areas that were, even though maybe not heavily developed in relation to the areas around them, developed beyond their point of balance in terms of supply versus demand. And we'll just have to dial that demand back because we can't change the supply or the availability of groundwater.

HALLORAN: [01:23:57] OK, thank you.

BOSTELMAN: [01:24:04] Any other questions from committee members? Seeing none, thank you, Mr. Thorburn, for your testimony. Next proponent for LB368, please. Any other proponents for LB368 like to speak? If not, we'll go to opponents, opponents for LB368. Good afternoon.

MIKE DRAIN: [01:24:50] Good afternoon. Thank you, Vice Chair, all members of the committee. My name is Mike Drain, M-i-k-e D-r-a-i-n. I am here to testify in opposition LB368 on behalf of the Central Nebraska Public Power and Irrigation District. I'm going to be addressing three

categories the, of the legislation. One has been talked about a lot, that's the elimination of the overappropriated components of the legislation, legislation. I'll also be talking about two items not discussed so far. One is an unequal treatment of surface water versus groundwater in changes to, to management controls. And another is part of the legislation that deals with changing restrictions or adding restrictions on reservoirs. I have more detailed points than what I will give in my verbal testimony that is being passed out to you. LB962 was something almost unheard of in Nebraska water law, and that is it was a change, a dramatic change in water management policy in statute which was universally supported. It was, it received the unanimous support of surface water users and groundwater users of our district, of natural resource districts in trying to find ways to address our problems with our conjunctive groundwater and surface water issues. To be clear, nobody got everything they wanted. There was a lot of compromise. But this was what, what everybody, what everybody agreed to. That includes the overappropriated basin status. We've heard a lot about the overappropriated basin in the Platte and the linkage to the Platte River Recovery Program or 1997 levels of use. But we also heard that that comes from a Nebraska new depletion plan, which is part of an interstate agreement that will be met, will be complied with, regardless of whether there is an overappropriated designation or not. The real issue with the overappropriated designation and why it's so important to Central and why it was so important in the development of LB962 is that it goes beyond getting to just 1997 levels of use and satisfying our interstate requirements, and goes toward trying to achieve a balance of use between groundwater and surface water uses to resolve conflicts that existed prior to LB962. And these conflicts were significant. Before we had LB962, we had ineffective and contentious administrative procedures, we had ineffective and contentious legal proceedings that were trying to resolve the conflicts between groundwater and surface water users, that the overappropriated requirements in LB962 are attempting over multi decades to resolve. We understand the difficulties that come with not always having the funding sources that you'd like to have, but the importance of properly manage our managing our conjunctive system of groundwater or surface water, and the importance of working to resolve over a long period of time these

conflicts, outweigh the, the three or four-cent levy that is at issue here we believe. One other item that has not been addressed in the testimony so far. There are specific changes proposed in terms of the controls to be used in integrated management plans. There are controls authorized by on surface water by the Department of Natural Resources to use, and there are controls that can be imposed on groundwater use by the natural resource districts. Those controls are listed in statute. And right now, the integrated management plans are required to include at least one control for groundwater and at least one control for surface water. There is, there is an unequal treatment in a proposed change to the statute that would say now in integrated management plans you must have at least one control from the list of controls available to groundwater, but you must include all controls that would apply to surface water. This is problematic, one, in that it seems to be just an unjust treatment between the two types of users; and secondly, it removes the discretion of the Department of Natural Resources to be able to figure out which controls make sense. The final item I'd like to address is that there is included in LB, my apologies, LB368, some new language regarding reservoirs. And in particular, our concerns with respect to Lake McConaughy, Central's reservoir, and largest reservoir in state of Nebraska. This reservoir was built for and is used for storing water for irrigators. And if the state of Nebraska were to impose restrictions on storing the water in that reservoir so it can instead be used for flood control purposes, it will be going the opposite direction of our intents of integrated management. By losing some of our storage water supply that is supposed to get us through future dry years, we will be adding to the conflicts and adding to the shortage, rather than going the other way around. There is also concern about whether or not this would be a state taking of the water rights that are granted under the state constitution for us to store water in that reservoir. And finally, I would point out Lake McConaughy is managed as a federal energy regulatory commission project under the Federal Power Act, and we believe that this would be in violation of federal law. I apologize for going over. I'd be glad to take any questions.

BOSTELMAN: [01:30:22] Thank you, Mr. Drain. Are there questions from the committee

members? Senator Halloran.

HALLORAN: [01:30:31] Vice Chair, thank you, Vice Chair Bostelman. You don't have the bill in front of you.

MIKE DRAIN: [01:30:36] I do not.

HALLORAN: [01:30:36] Sorry. What you're referring to is on page 46, lines 2 through 9, which deals with, with such structures, namely Lake McConaughy, not exceeding 80 percent capacity prior to March 1st within a year, so that such structures are capable of capturing spring snow mountain runoff. Would you be okay with this bill if, if there was an amendment taking that out?

MIKE DRAIN: [01:31:07] We, we oppose all three of the areas that I've mentioned. We are opposed to the elimination of the overappropriated basin designation because we believe that that was put in to try to resolve the conflicts to address the water losses that surface water users have experienced as a result of long-term groundwater development. We also oppose, as I mentioned, those unequal listing of controls between the surface water, groundwater, and we would like to see. So we, our preference would be that this this bill not pass in any component of this form.

HALLORAN: [01:31:45] Thank you.

BOSTELMAN: [01:31:51] Other questions? Senator Geist.

GEIST: [01:31:52] I'll ask one. So if this did pass, would you think that this would end up in court?

MIKE DRAIN: [01:32:01] I think it would depend, Senator, on-- well, what you mean by it would

end up in court. I can certainly tell you that we, we were in court before the LB962 passed to try to find other ways to address the conflicts. So I don't know that that legislate, that the legislation would end up in court so much as the consequence would be a lot of parties would get back into court. With regard to the Lake McConaughy measure, I'm sorry I should have jumped to that one first then. With regard to the Lake McConaughy measure, I expect it would depend on what position the state took with regard to the interpretation of the Federal Power Act and whether the state felt like they could apply this particular complete-- piece of legislation to Lake McConaughy. I believe if the state tried to apply that, we would be in court.

GEIST: [01:32:56] OK. Thank you.

BOSTELMAN: [01:33:00] Other questions? Senator Quick.

QUICK: [01:33:02] Thanks, Vice Chair Bostelman. So like if, so if we don't have some type of legislation, what, what would you see as solutions for like the NRDs and for the, for the [INAUDIBLE]?

MIKE DRAIN: [01:33:17] That's a very, that's a very good question. My understanding, while there's not a direct link in the state, in the statutes, the primary issue seems to be being driven by the funding issue. Central has supported efforts to provide funding for NRDs for integrated management the past. We are on record in this current legislative session supporting the tax levy authority again. However, the, it is our understanding also that some of the NRDs that have exercised that levy in the past still have room underneath their existing other levy authorities. We also know that there are, that there are require-- or it's not requirements. There are funds available from other sources. It was mentioned some funds that are, for example, from the Environmental Trust. There are various state set-up funds that the Department of Natural Resources administers

and those are still available. It was also mentioned by I think the preceding testifier that they have as NRDs regulatory authorities. It is not always the preferred option, and certainly we think that it would be better if there was funding available so that you can use voluntary options or a larger term, larger type projects rather than imposing individual regulations. But the individual regulations are an option available to the NRDs. Nobody likes to be regulated but the water users who are otherwise hurt, who have their water otherwise taken away as a consequence of the uses by others, have no other remedy to go to either. The surface water users, certainly a number of junior surface water users, whether it's by regulation or whether it's by someone else's use, they are already stuck with the consequence. If regulation is needed to try to, to achieve a better balance, then we would suggest that, that that could be done. Again, not the preference. We would support the funding. But as between the choice, funding is needed to do management and you don't do the management without it, we say you do the management.

BOSTELMAN: [01:35:30] Other questions? Are you primarily groundwater irrigators then?

MIKE DRAIN: [01:35:37] The Central Nebraska Public Power and Irrigation District is a political subdivision of the state of Nebraska. We deliver irrigation water to approximately 100,000 surface water irrigated acres directly. Central is not a surface water irrigator itself. We provide the service, we provide the facilities. We also generate hydropower production. In addition to the 100,000 acres that we serve directly, we also provide water out of Lake McConaughy for other irrigation districts as well.

BOSTELMAN: [01:36:05] So how much of the water is for hydropower in this equation?

MIKE DRAIN: [01:36:10] Very little. What you'll, you'll find-- so I've heard this before, hey, do we have a large shortage of water for hydropower production? That is true if you look at the natural

hydrograph. There's, there was, not even at the time that our, our facilities were built, to expect that the hydropower plants would be able to run all the time. However, in addition to whatever natural variability there is in the supply, our estimate is that there is approximately over 100,000 acre-feet of water already lost to Lake McConaughy from upstream development, and potentially maybe around 200,000 and growing when you, by the time you get to North Platte, which is where our main diversion for our canal is. To the extent that that's additional water lost to us, that that is, that is a problem and that's part of what the overappropriated basin is supposed to try to get at. But our system is set up very specifically to take advantage of water going to irrigation on its-- to, to develop the hydropower along the way. So our focus has always been first and foremost to preserve enough water supply for irrigation, to keep enough water in Lake McConaughy to get us through a long-term drought for irrigation. And we will always, and we always have sacrificed, hydropower production in order to keep the water for irrigation. We do believe that if someone is taking water that we would irrigate with, that is something to be addressed under the overappropriated basin requirements. It doesn't mean we get it all back. Central has never proposed that we get everything, and certainly we don't propose that groundwater users should make up for the consequences of natural drought. But we do think that when water users are interfering with each other you need to try to work to try to find a balance and not just say, well, we're going to hold the line where we are, and whatever harm you've got, you're stuck with.

BOSTELMAN: [01:38:18] OK. Senator Moser.

MOSER: [01:38:19] Do you know what year Lake McConaughy was built?

MIKE DRAIN: [01:38:21] Lake McConaughy was constructed through the 1930s. I believe it started filling in 1941, is my recollection.

MOSER: [01:38:31] So long ago that the presence or absence of it really doesn't affect the current discussions so much. I mean, there is no data of what happened before we had it and what damage there was or what--

MIKE DRAIN: [01:38:44] Damage.

MOSER: [01:38:44] What has it done for us, I guess?

MIKE DRAIN: [01:38:46] I believe that Lake McConaughy has provided tremendous benefit to the state of Nebraska, not only to our, to our own irrigators that we directly provide. The, the preceding testifier pointed out that the groundwater uses in his three-county area significantly benefit from the recharge that comes from our project. Our-- we deliver water to over 200,000 acres of surface water irrigated land, but then we recharge a number of areas that are that are, are irrigated by even a greater number of groundwater irrigators. Our project provides, the recharge from our project in the three-county area provides some of the water that is flowing toward the Republican Basin, where the Tri-Basin, where the Tri-Basin Natural Resources District sits. The water that we apply, in that area, some of it returns back to the Platte as return flows in basin flows to the Platte. Some of it flows south to the Republican and its tributaries, and Nebraska actually gets a significant credit for toward the, toward the Republican River Compact for the water that is imported to the Republican as a result of our operations. That's less water that Nebraska then has to make for, make up under that compact.

MOSER: [01:40:03] How much water is stored in McConaughy? I mean, is it equal to a year's flow or do you have an opinion on?

MIKE DRAIN: [01:40:11] Yes, Lake McConaughy, when it is full, stores approximately 1.7

million acre-feet of water. The, the normal flow for the Platte, for the North Platte River, this sits on the North Platte River at that location. I recall, as I recall, is somewhere around 900,000 acre-feet of water.

MOSER: [01:40:31] So about 20 years?

MIKE DRAIN: [01:40:31] It's now actually closer to 800,000 acre-feet because of depletions over time

MOSER: [01:40:36] So a couple years?

MIKE DRAIN: [01:40:36] Yes. Now, we don't we don't need all of a year's worth of water for a season's worth of irrigation. So we typically think that Lake McConaughy stores about five years' worth of irrigation supply for us to use.

MOSER: [01:40:49] So you wouldn't drain it in a year.

MIKE DRAIN: [01:40:50] Yeah, that's correct. Yeah. It doesn't take 1.7 million to irrigate. Yeah.

MOSER: [01:40:55] Well, thanks for the tutorial.

MIKE DRAIN: [01:40:57] Sure.

MOSER: [01:40:58] Some of us need a little help.

MIKE DRAIN: [01:40:59] I recognize this is a very complex issue.

MOSER: [01:41:01] I was even looking at Google Earth here, and I was looking at Lake McConaughy and all the little circles around it where they're being irrigated.

BOSTELMAN: [01:41:11] Senator Quick.

QUICK: [01:41:13] Thank you, Vice Chair Bostelman. So, but they also need water for like environmental issues and like endangered species, they control the flows. And that's what the reservoirs are there as well, right?

MIKE DRAIN: [01:41:24] Yes. So, so McConaughy was, its primary purpose is store water first for irrigation and then for power production. But we do have other uses that have come along over time. We have an account of water in Lake McConaughy that is set up for, to, to be released down the Platte River for in-stream flows for, for endangered species, threatened an endangered species. We do have recreational uses that are associated with it. We do have Central-- while Central owns and operates Lake McConaughy, we also have an agreement with the Nebraska Public Power District where they put some of their storage water in Lake McConaughy for their uses for irrigation. And then the largest power plant in this, I believe it's the largest power plant, someone from NPPD will be testifying, they can correct me if I'm wrong. But the largest power plant in the state of Nebraska, Gerald Gentlemen Station is located below Lake McConaughy on a canal that comes off just below McConaughy because the cool water in Lake McConaughy is able to cool that power plant so that it can operate more efficiently. So we have, there are multiple uses for Lake McConaughy.

QUICK: [01:42:32] One other question. How many reservoirs are along, would be along the Platte in that?

MIKE DRAIN: [01:42:38] On-river reservoirs, McConaughy is it.

QUICK: [01:42:41] That's it.

MIKE DRAIN: [01:42:43] That's it. In the state of Nebraska, that's what you have. There are on-river reservoirs on tributaries to the Platte, downstream of the overappropriated area on, on like the Loup system, for example. And there are reservoirs, on-river reservoirs in the Republican Basin. But on the Platte system, it's Lake McConaughy.

BOSTELMAN: [01:43:06] Other questions? Seeing none, thank you, Mr. Drain for your testimony.

MIKE DRAIN: [01:43:10] Thank you very much.

BOSTELMAN: [01:43:11] Next opponent, please. Good afternoon.

JEFF SHAFER: [01:43:28] Vice Chairman Bostelman, members of the committee, my name's Jeff Shafer, J-e-f-f S-h-a-f-e-r. I'm a water resources advisor for the Nebraska Public Power District, I've been in this position since 2006. Prior to that, I worked six years for the Nebraska Department of Natural Resources, holding the position of state hydrologist assistant and interstate streams engineer. Today, I'm testifying in opposition to LB368. As part of the handout you're receiving, there are additional information on definitions and some of the Water Policy Task Force information. There's the abstract from the report that was made to the Legislature. In addition, Ann Bleed, who, a former director of the Department of Natural Resources, wrote a summary for a journal and that is included as well. A sufficient and reliable Platte River water supply is necessary

for NPPD to continue to produce low-cost and reliable power. Approximately 50 percent of NPPD's total generation capacity is located in overappropriated area of the Upper Platte River Basin. NPPD uses Platte River water for hydropower generation and to cool thermal generating facilities. In 2003, the Water Policy Task Force took on the major issue of how to deal with the hardships caused in basins which were overappropriated. Those are basins where the water supply was insufficient to meet the total water demand. In that abstract it, it says that the lack of the sufficient supply was especially hard on surface water users, and it led to the conflict that led to the lawsuits that Mr. Drain testified to. The result of the Water Policy Task Force was LB962, which provided the remedies to balance supplies and demands which would ultimately produce conflict. And we're not talking about just a little bit of difference between water supply and water demand. During the second increment of the basinwide plan for the Upper Platte basin, the Department of Natural Resources provided information that showed that on average water demand exceeded the water supply in the Upper Platte River Basin by over 1 million acre-feet annually. If the Upper Platte basin was no longer designated as overappropriated, there would be no statutory process for that base and incrementally return to a balanced supply and demand, and we'd be back to where we were prior to the Water Policy Task Force and LB962, with water users suing each other and suing water regulators. But beyond the change of removing the overappropriated designation, the proposed changes to 46-716, the surface water control sections, will increase conflict between surface water and groundwater users and do nothing to balance water supplies and water demands. First, requiring that all surface water controls be implemented does not allow DNR to choose and implement controls which are consistent with the goals and objectives of the integrated management plan. Second, the inclusion of subsection (1)(e) [SIC] in that section, as only a surface water control can be interpreted as requiring surface water users to bear the whole burden of compliance with the Platte River program. If that is the correct interpretation, and I hope it's not, an unfair burden would be placed on surface water users and conflict between surface water and groundwater users would increase significantly. Finally, the subsection (3), which requires reservoirs to be operated for flood

control, is Likely in direct conflict what, with what an integrated management plan is trying to do, which is balance water supplies and water uses. If the supplies are already insufficient, why would the state of Nebraska further reduce the supply by reducing the amount of water in the reservoirs which is stored for drought protection? Taken as a whole, LB368 would reverse the progress that the NRDs and state of Nebraska have made in balancing water supplies and demands and increase conflict between surface water and groundwater users. For that reason, we request that the committee not advance LB368.

BOSTELMAN: [01:48:51] Thank you, Mr. Shafer. Are there questions? Senator Moser.

MOSER: [01:48:57] The quote that you gave, 1 million acre-feet of overappropriation is what percentage? I mean, is 20 percent--

JEFF SHAFER: [01:49:09] I don't have it right off the top of my head, but I believe that the total supply was just around 2 million acre-feet and the total demands around 3 million acre-feet. And that's for the total overappropriated basin, which is Elm Creek to the state lines.

MOSER: [01:49:32] So it's 50 percent off?

JEFF SHAFER: [01:49:34] I believe that is what I remember. I can get that information and provide it to you.

MOSER: [01:49:41] That's, well, it's a big percentage. That's what I was trying to-- is that 5 percent, 10 percent?

JEFF SHAFER: [01:49:47] It's significant.

MOSER: [01:49:48] Thank you.

BOSTELMAN: [01:49:50] Other questions from committee members? Could you tell me approximately how much water is required for Gerald Gentlemen?

JEFF SHAFER: [01:50:02] NPD has water rights for we have two generation units that we cool air. I believe each unit uses approximately 760 CFS, so total that would be about 1,500 CFS. But that water is not solely for GGS, it is water that is going through the system for irrigation, for hydropower, and other uses as well. So it's built upon the existing water rights that are for other purposes as well.

BOSTELMAN: [01:50:44] OK, thank you. Other questions? Senator Quick.

QUICK: [01:50:48] Thank you, Vice Chair Bostelman. So, and you may not be able to answer this question, but I know, so the Central Platte NRD, they would have some major cities in their NRDs, along with what's-- like the city of Grand Island has their own power plant. So do you know, does that power plant, are they, they have water rights as well, the city of Grand Island? Because they would have drinking water, they have their well filled, and they would have the water they need for their, for their generating land.

JEFF SHAFER: [01:51:15] I, I don't know what they have. I can't answer it, sorry.

QUICK: [01:51:19] OK. Thank you.

BOSTELMAN: [01:51:22] Any other questions? Seeing none, thank you, Mr. Shafer, for your

testimony. Next opponent, please. Is there anyone else wish to testify in opposition to LB368?

Good afternoon.

SCOTT OLSON: [01:51:51] Good afternoon. I am Scott Olson, S-c-o-t-t O-l-s-o-n. I am here today to represent the Central District Water Users. I emailed you a copy of this last night, I hope you all-- and I didn't bring a copy today, I'm sorry about that. But anyway. Central District Water Users is a water users group or, some say, a bunch of farmers. The association of the irrigation customers served by Central, Central Nebraska Public Power Irrigation District, our water supply for our irrigation comes from the Platte River and Lake McConaughy, the Central storage reservoir. Central District Water Users oppose the elimination of overappropriated designations through the Platte River. Groundwater pumping in the Platte River Basin has significantly diminished the amount of water available in storage in Lake McConaughy. During the drought of the 2000s, Central's irrigation customers received only a partial delivery of contracted amount of water, while Central tried to conserve storage water in Lake McConaughy. The drought was a factor, but so were stream flow depletions above the reservoir. Past efforts to address the problem, including administrative actions, lawsuits, are costly and contentious, ineffective. To better address this problem, surface water and groundwater interests agreed to implement the integrated management, management requirements in LB60-- LB962, I should say. Including designated portions of Platte River to overappropriated with the overappropriated basin requirements-- if the overappropriated basin requirements are eliminated, the promise of restoring stream flow and resolving conflict will be lost. The surface water appropriation will again suffer the effects of stream flow depreciations without remedy. Central Nebraska Water Users also oppose the proposed restrictions on storing water in Lake McConaughy. Because of the junior status of our water rights and the need to be able to ensure multi-year droughts as we continue to work toward restoring historic stream flows, it is very important that Lake McConaughy store as much water as possible which is available. By placing restrictions on the Lake McConaughy's ability to store water, the proposed bill would

basically be taking water from Central irrigation and violating our appropriations rights held on behalf of Central. Thank you for your time and the opportunity to oppose this bill.

BOSTELMAN: [01:55:20] Thank you, Mr. Olson, for your testimony. Are there questions from the committee members? My question would be, are you primarily surface or groundwater irrigators?

SCOTT OLSON: [01:55:35] Central District Water Users is a group of surface water irrigators. All of them have groundwater also. I don't think we have anyone who doesn't have both.

BOSTELMAN: [01:55:48] OK. Thank you, sir. Other questions? Senator Moser.

MOSER: [01:55:53] Just a quick one. If your, the surface or groundwater designation, is based on where the water comes from, doesn't mean that you necessarily use gravity irrigation? I mean, you still would have pivots or some other way to--

SCOTT OLSON: [01:56:09] If we would lose our surface water irrigation, if I may tell you a story, might take a little bit of time.

MOSER: [01:56:17] Well, listen, I don't know if we want to go there because I wanted to make it a quick question.

SCOTT OLSON: [01:56:20] One minute.

MOSER: [01:56:22] So the water you take out of the canal, are you delivering that to the field with a center pivot?

SCOTT OLSON: [01:56:27] Yes.

MOSER: [01:56:27] OK. So it's not gravity and--

SCOTT OLSON: [01:56:30] No, there's very few ditches left. One time I had two truckloads of tubes, now I have one, two.

MOSER: [01:56:39] And in your story you were going to tell, what's it about?

SCOTT OLSON: [01:56:43] My grandfather dug a well in 1952, that well pumped 900 gallons, but a deep well.

MOSER: [01:56:52] Yeah, that's a good well.

SCOTT OLSON: [01:56:53] In 1992, after 40 years of surface water irrigation, in 40-- in '52 it pumped 900 gallons, in '92 it pumped 1,100 gallons. In '42, the water level was 90 feet, in 92 it was 40. So the, the difference in that pumping level is a huge economic benefit for us.

MOSER: [01:57:21] From surface water.

SCOTT OLSON: [01:57:22] From surface water. Now, even if you don't use that surface water, it affects the aquifer in our area. It affects everyone in our area.

MOSER: [01:57:33] Thank you.

SCOTT OLSON: [01:57:33] Municipalities.

MOSER: [01:57:33] Thank you very much.

BOSTELMAN: [01:57:37] Other questions from the committee members? Seeing none, thank you, Mr. Olson, for your testimony.

SCOTT OLSON: [01:57:43] Thank you.

BOSTELMAN: [01:57:44] Next opponents, please. Good afternoon, Director Fassett.

JEFF FASSETT: [01:58:09] Good afternoon. Thank you, Mr. Vice Chairman. Chairman Hughes, members of the committee, I'm Jeff Fassett, J-e-f-f, Fassett, F-a-s-s-e-t-t. I am the director of the Department of Natural Resources, and I am here, although staring at that gavel, I am here in opposition to LB368. The natural resource districts, as you've heard, and as all you know, play a really important role in the overall water management since their creation over 45 years ago. Certainly during my short tenure as director of the state, the NRDs have worked cooperatively and proactively and, importantly, incrementally, advancing the challenges of the long-term goals that were set out by the Legislature in water use and management and for the goal of meeting our compact, interstate compact obligations and other agreements that you've heard about today. Since 2004, when LB962 was created, the goal of the state has been to develop an incremental approach to balancing the existing water uses against the sustainable water supply. And under LB962, that was to be done in an integrated manner between surface and groundwater. The problem took a long time to be created and it's going to take a long time to undo it, if you will, to reach the balance that the goal was. But when you look at LB368 and the effect it has on LB962, it's a pretty dramatic change. Simply stated, I believe the LB962 law is working and working quite well just the way it is.

Not only do you have the districts that are the topic today in the over and fully appropriated areas, but as we sit here today in 2019, every single natural resource district, all 23 of them, have either voluntarily or been required and have entered into integrated management planning. They have all achieved and recognized the benefits of working together with the supply that is together. Our law in 2004 was simply catching up with the physical realities that existed in this state for eons, bringing those horses together and managing those horses together was the goal, and it was a good goal. So while I understand the bill was brought primarily to discuss other challenges that are before the districts and meeting these obligations, certainly as the state agency with the jurisdiction and responsibilities over the beneficial use of the surface waters, I simply have to oppose this bill as it represents a fundamental shift away from the very carefully crafted approach to water management policy that was achieved in 2004 after years of effort by all of the parties involved. As drafted, LB368 is simply an oversimplified approach to a very highly complex area that you've been hearing about all afternoon of our water laws. The language creates some ambiguities. You can't simply in a shotgun approach take out the word "over," that has different effects in different places of this law. And that in places, you will see it creates ambiguities, it contains a number of technical changes that I've got contained in the, in the handout, and that really would go beyond the time that we have today. But you've been hearing about from others. It was a unique set of laws in this state where surface and groundwater were separate for most of each eternity, and this is the way we put those sets of laws together through this cooperative integrated management process. The resulting regulatory structure you heard really burdens of surface water side, where the balance was to be achieved under the laws of regular-- laws initial obligations. As you've heard a couple of times, the Platte in itself is unique. It has a separate obligation under the Nebraska New Depletions Plan that was driven by the Endangered Species Interstate Agreement, that has a separate target from the pure OAFAs, as it's called, obligations. But those obligations are important and you've heard from some of the primary surface water users about the protections and the negotiated compromise that LB962 brought to everybody. The removal, in my opinion, of the requirements for the collaborative,

coordinated state and natural resource district basinwide planning over 10 year increments, which sounds horribly slow, but that is the only way to effectively manage this cooperative source. You can't shock this system by with the numbers you've just heard about trying to undo a million acre-foot potential shortfall overnight. We are sneaking up on that and sneaking up on that with good information and good data as we go, and we do it together. That's what LB962 says, it puts everybody at the table. Everybody's involved with how that's being worked out, whether it's the computer modeling or the ultimate management decisions or the controls that either my agency does or the natural resource does. This law provided that foundation to work on these districts together. As several folks have already mentioned, separate from the OA and the FA, the fully and over issues, there were some real surprising details in this law that I just have to mention briefly. Clearly, Section 12 of the bill, which talks about this giving my agency the authority to take operational control over all of the on-stream reservoirs is significant. While Lake McConaughy is the, the big prize, if you will, in the basin, there's actually over 800 on-stream reservoirs, when you look at the tributaries to the Platte River system that the language in this bill would affect. I know I'm out of time. I'll just briefly mention that other resources have been made available, certainly in 2015, since I've been here working with the Governor, we've made significant available, resources available through my budgets, through the creation of the water and the funding of the Water Sustainability Fund and the Water Resources Act, the Water Resources Cash Fund, which is the primary tool that we use in cooperating with the natural resource districts in the fully and overappropriated areas. I appreciate your attention today. I apologize for going over. I did provide a handout that just gives you a little more background from the state's perspective on the history of how we got to where we are and the potential effects and the real policy shift that LB368 will bring before you that we think it is not necessary.

BOSTELMAN: [02:04:55] Thank you, Director Fassett. What questions does committee members have? Senator Quick.

QUICK: [02:05:01] Thank you, Vice Chair Bostelman. So I know a, you know, know each NRD has their own challenges to face. And, and so I know a lot more about the Central Platte because I live there so, and I know they have to supply, they have a lot of larger communities that they have that-- so they've got to make sure that they have drinking one of those communities too but. So with this bill, and I guess I'm kind of going off of that, what do you see as a solution to some of the issues that they face in some of the-- how they could address some of those needs that they have to make sure that they can do what they need to do for the water users?

JEFF FASSETT: [02:05:40] Yeah. Mr. Chairman, Senator Quick, the-- I, we're working on those issues now. I mean, I think that's, if I'm, if I appear frustrated it's that we think this bill is working and it's working in an incremental manner. The Central Platte NRD is both in the fully and the overappropriated areas. When you look at the designated areas, they are required to have an IMP. We are working with them literally this year in working on the update to their IMP, and that it will bring in the needs of both the municipalities as well as the irrigators and the effects that they have on the river. I think they believe they're in a strong position to meet their obligations, as several people have testified that the needs have gone up as we gain more data, as we gain for information, as we've refined the computer models. And this isn't something we're doing in isolation, we're doing this with a roomful of people and technical people from across the spectrum of natural resource districts and water users and the state. Collectively, we have come to the conclusion that the better information indicates that there is a higher obligation to put more water back into the stream to effectuate the offset requirements that are necessary. That will include offsets for municipal uses as well. But I've never seen yet a problem where that has risen to a crisis of not enough water as, as Mr. Thorburn and others have testified today, there's a variety of different projects: the water leasing arrangements, the water timing projects. There's a lot of different projects that are being worked on in a, in an incentive-based manner that can help avoid the regulatory options which are

in law but which no one likes to use, which aren't received well by the water users. And I think I think those options are out there for the Central Platte NRD.

QUICK: [02:07:33] OK, thank you. Just one more, and it's more comment than it is, you know, I know, and this isn't about the three-cent levy but I know that some of the NRDs were able to use that to help address some of those issues, and it was an important tool for them to have. And I don't know if you have any input on that or even want to stay away from that.

JEFF FASSETT: [02:07:51] Well, I I went on record on behalf of the administration opposing LB134. That, that's been the position. I think the Governor's desire is to not place additional property tax burden on the citizens of this state. But I think he remains open to talk about what other funding mechanisms might be available to assist. Right now, there are substantial state dollars in the budget that you will have before you shortly that flow through my agency. Many of those have a matching cost-share requirement. I know some of the district use this levy, but they've used other levies, other occupation tax, other authorities to come up with the match that is required in order to implement the projects and to implement them jointly with funding that we provide.

QUICK: [02:08:40] Thank you.

BOSTELMAN: [02:08:43] Other questions? Senator Albrecht.

ALBRECHT: [02:08:45] Thank you, Vice Chair. So, Director Fassett, you referred to Section 12. Is that on page 41 of the bill, where they talk a lot about the integrated management plan? Is that something that the NRDs bring to you and you review with them subject to availability of funds? Is it something that your department sits down with them?

JEFF FASSETT: [02:09:16] Yeah, a couple of questions there. I think the Section 12 was dealing with the reservoir issue.

ALBRECHT: [02:09:20] And was that--

JEFF FASSETT: [02:09:21] That's not the IMP issue.

ALBRECHT: [02:09:22] So where-- OK. I guess that's a question for me on these but--

JEFF FASSETT: [02:09:25] It's on page 46.

ALBRECHT: [02:09:27] Forty-six.

JEFF FASSETT: [02:09:28] Top of page 46.

ALBRECHT: [02:09:29] It's the top of it, OK. But can you answer these other--

JEFF FASSETT: [02:09:31] But IMPs are a, are a, are a document that is jointly developed by the natural resource and the state department. And we both review it and we both have to approve it.

ALBRECHT: [02:09:42] So in this bill, would they would be completely doing away with that section?

JEFF FASSETT: [02:09:46] It would not. It there, there is still a requirement for IMP work is required in fully appropriated basins. It isn't just over. So they're, we're still going to be doing some IMPs with, with all of the-- and the natural resource districts, even with even with the elimination of

the word "over."

ALBRECHT: [02:10:05] And like on page 43, it says during the 10 years following the adoption of an integrated management plan. So like is there a time frame that they have to take care of these plans within?

JEFF FASSETT: [02:10:20] What we've done in the Platte River Basin, in the Upper Platte, the overappropriated areas, is we, we first have a basinwide plan put together. And that was done back in 2008 and '09. And from that basinwide sets of goals and objectives then, each of the individual natural resource districts develop a unique integrated management plan that fits their district within the overall goals that are set out across the entire basin. And that plan was put in place and approved for 10 years, from '09 to '19. The basinwide plan and all of those integrated plans are all being updated right now as we speak. In fact, we had some nervousness about it with this past what happens to what we're involved with at the moment. But that's sort of a separate issue. So we've been using this incremental approach, setting out goals that, that again, are, are negotiated or developed cooperatively about what can be achieved in the next 10 years. What's realistic? You're not going to put a million acre-feet of river water back into a river in a very long time. I mean, I don't, I don't know where that number came from, but I'm just saying it takes a long time to develop these projects. So the incremental approach and the planning approach in both the basin planning in the IMPs, we believe is the right way to do that. And we do that cooperatively.

ALBRECHT: [02:11:45] Because when they talk about needing \$4 million just to continue to operate some of these plans they've implemented, I mean, when do you go back to the table and review some of those to see if they're doing what they're supposed to be doing?

JEFF FASSETT: [02:11:59] We do. There's an annual reporting obligations every year. We report

on how much progress has been paid, whether projects were working. Some that are temporary, they may stop and do something else. You might substitute one project, one management control for a different one. There's really quite a bit of flexibility in the integrated management planning process as we learn and we try things out. There's been a number of projects proposed that ultimately never went forward because a better, less expensive project came along. So you don't want to get too locked in with these kinds of very expensive investments but you're talking about backing up the train, you're trying to undo this overuse of water. And to do that in a manner that also meets the, the financial and, and the stability of our agricultural economy at the same time, you can't shock that system very quickly.

ALBRECHT: [02:12:54] OK. So on page 46, this will be my last question, Section 3, this is all new. So if it were to come out, you're looking at flood control structures to protect lives and property, obviously: Such structures shall not exceed 80 percent of the capacity prior to March 1 of any year so that the structures are capable of capturing spring snow melt and runoff. The department shall develop a management plan for state structures, which what you're saying is are you doing that with--

JEFF FASSETT: [02:13:26] Well, we're not doing that at all.

ALBRECHT: [02:13:28] Not doing that, but you're working with them to, to manage, to--

JEFF FASSETT: [02:13:32] To manage the overappropriated, fully appropriated. We have nothing to do with this. This is brand new language, brand new obligations. Which, as several people have already told you, will likely not be possible, are probably, maybe illegal. But it's a new obligation, asking my department to tell every reservoir owner how to manage their reservoir for flood control purposes. And all those water rights, all those reservoirs have been permitted for other

things. McConaughy is the big poster child example, but there's many, like I said, we did a count.

There's over 800 reservoirs, that this would tell us we have to go to those owners and somehow under this authority somehow tell those owners they have to operate their reservoir differently for a flood control benefit, even though it was built for irrigation or maybe it was built for stock watering or maybe for recreation. Whatever it was built for and permitted for. This new language was very surprising and we're not sure how this language, quite honestly, fits with anything else in this bill.

ALBRECHT: [02:14:36] OK, thank you.

BOSTELMAN: [02:14:40] Other questions? Senator Gragert.

GRAGERT: [02:14:42] Thank you, Senator Bostelman. I'm just interested, how's the Corps of Engineers play into your whole scheme of things here?

JEFF FASSETT: [02:14:48] Very little. They have flood control management authority over a couple of reservoirs, but the biggest federal player in reservoirs is the Bureau of Reclamation, not the Corps of Engineers.

GRAGERT: [02:15:01] Thank you.

JEFF FASSETT: [02:15:01] Corps of Engineers influences primarily a main stem Missouri River issue, is where we work with them.

GRAGERT: [02:15:07] All right, thank you.

BOSTELMAN: [02:15:09] Other questions? Two questions I have for you, director. One is, is this

primarily driven by the feds? In other words for environmental reasons. Endangered species, whatever, is a big part of what we're talking about driven from the federal level?

JEFF FASSETT: [02:15:28] I think only, only partially you clearly have the endangered species issues, which are in the Central Platte. You have the three state federal government negotiated program to resolve that federal regulatory conflict by having a cooperative program that the federal government and the states and the water users all participate in. And that has certain obligations, primarily funded by the federal government, so that that Platte River Recovery Program is something that, as several have already said, is going to continue to be an obligation that we have to address as a state. I think most of the overappropriated, LB962 wasn't created to deal with that issue. It really was created to deal with the overall conflicts that Mr. Drain and Mr. Shafer were talking about: the loss of surface water flows to senior surface water rights that were accruing to the river as a result of groundwater pumping. That had created an enormous amount of litigation historically, well before I got here. LB962 was driven to solve that problem and was carefully negotiated over multiple years. It really wasn't driven by the Endangered Species Act itself, it was an in-state Nebraska issue of well development coming along later, affecting stream flows that were affecting prior surface water right holders.

BOSTELMAN: [02:17:01] How much does new developments along the Platte Basin of open water, excuse me. Does it affect any at all so sand pits? Big areas that are being developed now, now we're putting houses up around him because people want to be around a sand pit, be around the lake. How much effect does that have, if at all?

JEFF FASSETT: [02:17:23] It clearly has some effect. The issue is it's, it's you have to look at the difference. What was the land use before--

BOSTELMAN: [02:17:31] Right.

JEFF FASSETT: [02:17:32] --versus the land use after the pit was created. But clearly, you're creating a new open water surface. It's in direct connection with the surface rivers. So there's a new depletion, but before the reservoir was there, there may have been some depletions as well from of vegetation, things of that nature. So the differential is a depletion that we have to account for and track in the overappropriated areas.

BOSTELMAN: [02:17:57] Something we've talked about before, and maybe for some of the committee members, we've talked about, that have been on the committee before, about cities, new developments. I know it was mentioned before, we're working, in a sense, we've got a greater population maybe moving into certain areas: Kearney, Grand Island. Right where we have more manufacturing moving in there. So how much more of a play does the cities need to take in this as you look at the overall plan? Because if they continue to grow, continue to add on, continue to increase their water use, how does that affect what we're talking about?

JEFF FASSETT: [02:18:32] It, it could have an effect, but it is being captured and being factored in. And municipalities actually are invited to participate in the open stakeholder meeting processes. In both our basin plan and the IMP processes, members of the public and stakeholders, which are often municipalities, can participate directly to, to bring their interests in. What you have sometimes is, in those growing metropolitan areas, they're also growing in and onto lands that were once irrigated. So there may not be just a pure net increase. Again, it may be an offset. It used to be growing corn, now that field is a manufacturing plant which is using water by hooking up to the municipality. So you have to look at these differential changes in the before and after consideration to see what net effect that type of growth may have on the river.

BOSTELMAN: [02:19:22] Sure. OK, thank you. Are there any other questions from the committee? Seeing none, thank you, Director Fassett.

JEFF FASSETT: [02:19:29] Thank you very much.

BOSTELMAN: [02:19:31] Other opponents who wish to testify on LB368? Other opponents on LB368? Seeing none, anyone would wish to testify in a neutral capacity? Seeing none, we do have letters of proponents from a David Fisher from Gering, Nebraska. Opponents from Steven Smith, North Platte Valley Irrigators Association; Lee Orton, Nebraska State Irrigators Association; Jeff Buettner, Central Nebraska Public Power and Irrigation District; Kristal Stoner, the Audubon Nebraska; Scott Olson, Central District Water Users; Jeff Shafer, Nebraska Public Power District; Steve Nelson, Nebraska, Nebraska Farm Bureau Federation. With that, we have Senator Hughes to please close on LB368.

HUGHES: [02:20:26] Thank you, Mr. Vice Chairman. Thank you, members of the committee. As you have learned, water in Nebraska is very complicated. You know, one of the most interesting things about being on this committee is we deal with water. We heard the other day about the issue of too much water in the Pappio NRD, and looking to have additional funding authority to mitigate that issue. Today, we're talking about the other end of the state, the west end of the state. About the lack of water and making sure that we maximize the water that we are given. And the challenges of from one end of the state to the other, moving downhill from the Wyoming and Colorado borders for us. There is a very delicate balance that has been struck, and I am very grateful to everybody that testified today to help this committee and the Legislature understand of the wars, and I do mean wars, that have been fought over water in Nebraska prior to us sitting in these seats. And try to impress upon all of us the, any change we make in the area of water specifically has potential to reopen wounds, you know, to scratch off those scabs. I mean, we, it-- there's a good reason why we

are where we are today and making changes, you know, and specifically getting rid of that three-cent levy for fully and overappropriated is part of what we're talking about today. The challenges of being fully and overappropriated can't fully be appreciated until we understand how we got there. And I think today we learned part of it. But we still, there's still a lot more to go. But it does give us the, a better understanding of the width and the breadth of the challenges between surface water and groundwater in the western end of the state. The NRD system that we have in Nebraska is the envy in the United States. The foresight that this Legislature put in place to have a system like that to regulate not only water, but other things, is the envy. The NRDs do benefit all the citizens. You know, this three-cent levy that everybody is paying, it's to the benefit of everybody within that district because it does stabilize values, real estate values. It does stabilize the population, if you, especially if you're irrigating, you know? You make sure the land is more productive, the farmers buy more inputs, there's more crop production. You know, that, that is stabilizing. Plus, the other point is, that Senator Bostelman touched on just, just now, the any development that's going on in our communities, that has to be offset, you know, from the available water. There was an ethanol plant that got built in Madrid, Nebraska. You know, they had to buy two or three or four center pivots in order to have enough water allocation in order to build that plant. So those offsets have to come out of the local economy. Our NRDs are locally elected. You know, they are our neighbors that run those, and they're the, they're the ones who are paying that tax as well. To Senator Albrecht's point, you know, the ongoing projects, they're not, they're not-- we're not building dams and reservoirs. You know, that that time has passed. I wish we could. I wish we had the ability, we had the places to do that. You know, you know, there's 3 million acre-feet of water flow into Nebraska and 9 and 12 million acre-feet flow out of Nebraska. So there's 9 million acre-feet of water every year that we are losing, that we should be trying to store somewhere. You know, for future generations. But the ongoing projects are spending money on technology to make us more efficient with the water we have, so we can stretch the life of our aquifer. To stretch the ability to irrigate up our surface acres in dry years. You know, that technology takes, takes money. We have

water sensors that control how much water we put on and when we put on, so we're not overapplying. But changing the sprinkler packages on our center pivots, you know, we've gone, we cut our water use tremendously just because the center pivot irrigation from flood to center pivot. Depending on how you apply the water from, whether it's on the top of the pipe, shooting up in the air, or whether the closer it is to the ground, you use less evaporation. We're getting into the technology now where we apply different amounts, different sections, be depending on soil type and population. You know, all that costs money. But that does make us more efficient in our water, but it also makes us more productive. You know, producing more revenue to support our communities. The last point I want to make, you know, Senator Geist, I think it's very, you know, it's been said before and it really means saying today: whiskey is for drinking and water's for fighting. You know, we got just a little bit of that today of the delicate balance that LB962 has given us. And this was a very good exercise for the committee to understand, you know, the challenges that we have in Nebraska. We haven't solved all the problems and Director Fassett is doing a fantastic job in his position of keeping, keeping the forces at bay. But there's been a lot of work has gone on in these chairs before we ever got here. And so any changes that we make in water policy should be taken very slowly, very deliberately, and very cautiously. So I'll be happy to answer any questions.

BOSTELMAN: [02:27:32] Thank you, Senator Hughes. Committee members, do you have any questions? Seeing none, thank you, Senator Hughes.

HUGHES: [02:27:40] Thank you.

BOSTELMAN: [02:27:41] This will close the hearing on LB368. Would like to thank
[RECORDER MALFUNCTION].