INTERVIEW WITH ARDEN UHLIR BY JIM BARR 1

December 18, 2013

1	MR. BARR: This is Jim Barr. It's December $18^{ ext{th}}$,
2	2013. I'm west of Verdigre, talking to Arden Uhlir.
3	Arden, do you want to give us a little background
4	on yourself?
5	MR. UHLIR: Well, you mean presently?
6	MR. BARR: Well, up to present, maybe. Where you
7	started, I mean, where you came from and
8	MR. UHLIR: Well, I grew up in the Verdigre area.
9	Actually, some of the land that we operate was homesteaded
10	by my great-grandfather. And to date, some of that land has
11	been in the family name since 137 years, which was kind of
12	typical of this area. There were a lot of families,
13	homesteaded families that lived here for quite a while,
14	until about the '80s and then we saw a change in that. I
15	guess, you know, I had an FFA background, got interested in
16	farming and always wanted to be in agriculture. And the old
17	ag teacher that I had actually was very interested in soil
18	conservation. And when I left the FFA my senior year, then
19	he went on and went into Soil Conservation Service. So, he
20	kind of gave us a background with soil conservation through
21	FFA. So, we kind of created an interest in it.
22	And I guess I can even go back further than that.
23	My dad back I can remember riding with him when the
24	well, instead of the NRCS, it was actually done with local
25	producers in each township had a representative went

1 around with conservation and encouraged people to get 2 involved in it. And I went with my dad and measured -- I 3 was the tape guy. I went and was on the end of the tape, so I had an experience with him going around. 4 That was before 5 they went to the county system. MR. BARR: Was he the person for that township? 6 7 MR. UHLIR: Yes. Yeah, he did, and he was on that 8 for quite a few years. So, I went with him then and rode around. And, of course, they just dealt with people in your 9 10 township at that time. MR. BARR: When did you get involved or learn 11 12 about the NRDs? 13 That was about, I think, in about 1962 MR. UHLIR: 14 or '3. At that time, this NRD was going about a year or so, 15 and --16 MR. BARR: Probably '72 or '3, wasn't it? 17 MR. UHLIR: You might be right, yeah. Anyway, 18 they were looking for younger producers to get involved and 19 they came around, and that's how I got on. And then, I was 20 on there, like I said, about, oh, guessing, approximately 21 about eight to ten years, and then I went off the board for 22 a period of time. And then in about eight years after that, 23 I got a chance to go back on. I was asked if I wanted to go 24 back on. So, I did, and I've been on since. And during the 25 time that I was -- when I first went on, I was really an

1 I was secretary, and then vice-president, and then officer. president during that time. And I always -- now, the second 2 3 time when I went on, I said, I'll let somebody else do that, 4 and I did. And so, since that time, I've kind of let the 5 younger guys or other guys do that. 6 MR. BARR: You would have been there when they 7 more or less got the district going. 8 MR. UHLIR: Yeah, they were formed and then 9 basically, the formation was done and then, like I said, 10 they were looking for these -- get some younger producers, 11 and that's how -- but as far as the forming and all that, 12 that was done prior to the time --13 MR. BARR: But you were on the first elected 14 board. 15 MR. UHLIR: Yeah, approximately, in that area, 16 yeah. 17 MR. BARR: Who was your first manager? 18 MR. UHLIR: Keith Drury was actually the first 19 manager that we had at that time. 20 MR. BARR: Did he come on before the elected 21 boards took over? 22 MR. UHLIR: He was on at the time I was, Keith. 23 Yeah, he could fill you in on that. I exactly don't 24 know -- in other words, he was hired before I come on. 25 MR. BARR: What were some of the projects or

1 programs that you worked with to begin with? 2 MR. UHLIR: Well, basically, during that time, the 3 major thing, and we talked about that, is, you know, shelter 4 belts was a big issue, some grass seeding, but at that time, 5 compared to what we're involved with today and the decisions you have to make, they're more complicated and more 6 7 demanding today, by far. Yeah, it wouldn't even be the 8 same. 9 MR. BARR: When did they get involved with the 10 rural water districts? 11 MR. UHLIR: Rural water district was about -- the 12 time I went off, that's about when they were starting on 13 this project. And so, I was not involved in the formation 14 of that. I did really, you know, get involved in it as far 15 as a customer, and I did that because one of the guys on the 16 board at that time told me -- he was involved with the rural 17 water system and he said, "If that ever goes by your place," 18 he said, "make sure you hook it up." He said, "That's the 19 smartest thing you'll ever do, you know, for you and for" --20 he said, "That's a good investment." And so we did. But as 21 far as even the formation of that, I wasn't on at the time 22 they did it. 23 MR. BARR: Well, you missed out on other 24 interesting activities in that period, didn't you? 25 MR. UHLIR: Yeah, during that time, yes. But then

1 I got a chance to go back on. That was -- when I went back 2 on, that's when the waste site was right up in that area. 3 Boy, that took a lot of --4 MR. BARR: What was the stage of that when you went back on? 5 6 MR. UHLIR: It must have been going for a year or 7 two, because it was -- there was a lot of controversy up 8 there. And, yeah, it was the major issue, it was the major 9 issue that was -- people in that area were concerned about. 10 I mean, that was the most important. 11 MR. BARR: What was some of their main concerns? 12 MR. UHLIR: Putting up with the -- there was a 13 high, claimed to be a high water table. Transportation was 14 an issue, bringing stuff like that in, storing it. You 15 know, it -- there was a real concern, you know, with the 16 river close enough, you know, that they could contaminate. 17 So, yeah, there were some real concerns. 18 MR. BARR: Was there a specific role that the NRD 19 had --20 MR. UHLIR: Well, the NR- -- not necessarily, and 21 I think that goes back -- and you'd have to get more 22 information here from the manager at that time, but it 23 seemed like when it kind of started, the -- maybe the NRD 24 took a more proactive position. And then as it kind of went 25 along, the community got more and more concerned. And so

1 that created differences of opinion. And the board kind of 2 changed. And so, they kind of went from pro or neutral to 3 negative. So there was a lot of people (indiscernible). 4 MR. BARR: Did they have to make any sort of 5 approval or take any sort of action as involved with that? 6 MR. UHLIR: Well, as it went along, they took a 7 position to be strongly opposed to it. But --8 MR. BARR: In terms of an approval or disapproval for any permits, there was nothing like that? 9 MR. UHLIR: No, not to my knowledge, no. 10 11 MR. BARR: And they weren't asked to do a program 12 or a project to help? 13 MR. UHLIR: Not as far as I know. 14 MR. BARR: I couldn't remember. 15 MR. UHLIR: I can't either. Anything when I was 16 involved, they were -- you know, the Board was -- took a 17 position that they were opposed to that project. A lot of 18 people spent a lot of time on that. 19 Sure. What kind of other projects and MR. BARR: 20 programs, when you went back on the second time, what sort 21 of things were --22 That really -- at first it seemed like MR. UHLIR: 23 we spent an awful lot of time on the dump site. And then 24 the rural water system in Verdigre or that area, in Knox 25 County, was going and there was involvement in that. Now,

1 there are two other rural water systems up in that area. 2 And when they came on, apparently, they were given the 3 option -- they started early enough that they would not have 4 to be involved with the NRDs unless they wanted to. And at 5 that time, they took the position that they were getting 6 along, and so there was a period of time that -- and that was kind of when I wasn't on there, so I can't take credit 7 8 for that, but where they spent a lot of time on this rural 9 water system. Because, we went back through the minutes to get some background, because we're working on this regional 10 11 water system, or looking into it, and trying to get some 12 real knowledgeable background. So, we went back through the 13 minutes and followed up on some of those meetings. And 14 there was a lot of time went into that, the guys that were 15 involved with that, there was a lot of time. 16 MR. BARR: Just to be clear, where was the 17 district the NRD helped with and where were the, roughly, 18 where were the independent ones? 19 MR. UHLIR: The independent ones tended to be in 20 Boyd County. They had started earlier and the one where the 21 involvement with the NRD occurred after those two and there

was a year -- a certain period of time when -- and then, so

It was in this general area?

the -- when I say last winter, the third one in this area

was strictly under the rural water -- or the NRD.

MR. BARR:

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1 MR. UHLIR: This would be in the general area of 2 mostly western Knox County. MR. BARR: Where does your -- does your district 3 4 come up against the water district, I think it's probably in 5 the Lewis and Clark area? MR. UHLIR: Yeah, in fact, we overlap some. 6 We 7 are actually providing some services into Lewis and Clark 8 right now. There's an addition to the rural water system. 9 I think it was for 16 customers, all Natives. And that was just lately they're working on that. And that actually goes 10 11 into Lewis and Clark. 12 MR. BARR: You're one of the few NRDs with a 13 tribal presence. Anything different that you run into with 14 that or --15 MR. UHLIR: Well, this one you'd better -- there's 16 looking into the possible expansion of Santee, one of the 17 communities that are included in this regional system along 18 with Niobrara and Center, and we're getting resistance from 19 people in the area of sending water out of our district. 20 The people that are close to where the wells are, they're strongly opposed to that. 21 22 MR. BARR: The wells are off the reservation? 23 MR. UHLIR: Yes. They're actually in the --24 almost to the southern edge of our district. Now, that area 25 around there has expanded quite a bit of irrigation, and

1 there's changes in the nitrate level have increased since 2 the irrigation. So, there's concerns by a lot of the people 3 there in the --4 MR. BARR: What sort of quality issues have you had in the district over the years, water quality issues? 5 MR. UHLIR: Well, we've got Phase 2 areas. 6 MR. BARR: Just for the record, what is a Phase 2 7 8 area? 9 MR. UHLIR: A Phase 2 area is where you would be over 10 parts per million nitrate level. 10 The entire 11 district was in Phase 1, and then when you found these more 12 critical areas, they became Phase 2, and they've been in 13 Phase 2 for quite a while. And, you know, it seems a little 14 bit like those areas are still increasing nitrate levels. 15 And now there's an area down in -- that's a combination with 16 the other three NRDs that this Bazile Management Area. And 17 that kind of stems from the Bazile Triangle and it goes --18 so it involves the four NRDs that join right there. 19 MR. BARR: That'd be the Lower Elkhorn --20 MR. UHLIR: Yeah, Lower Elkhorn, Upper Elkhorn, 21 Lewis and Clark, and ours. And they're involved in that. 22 MR. BARR: Where you have several NRDs working on 23 a thing together, what kind of interrelationship do you 24 have? 25 MR. UHLIR: Yeah, they work together. I believe,

1 in this case, the Upper Elkhorn is the, like, everything 2 funnels through there. 3 MR. BARR: Do you have an interlocal cooperation 4 agreement with the others? 5 MR. UHLIR: Yes, there's people that are on that 6 committee. 7 MR. BARR: But then the staffing --8 MR. UHLIR: Yeah, they're actually -- in that 9 case, I think they're looking for someone to -- down the 10 road, they're going to look for something just for that 11 But it's a -- when it really started, that's -- the area. 12 town of Creighton is really affected by that high nitrate 13 level, and they have to have water treatments and --14 MR. BARR: Where does Creighton sit in relation to 15 where the four come together? 16 MR. UHLIR: They would be in Lewis and Clark, I 17 They're just in the very corner. I think within a think. 18 few miles south of them it's the Lower Elkhorn, just 19 right --20 MR. BARR: Well, that's kind of interesting as far 21 as our interviews. This is one of the few that I've seen 22 where you've got multiple --23 MR. UHLIR: Yeah, and I think if you're -- you can 24 do followup on this and talk to Dennis at Upper Elkhorn, and 25 he would be the one to really give you the details on that.

1 But that's kind of an interesting situation, I mean, where 2 you got the NRDs basically working together. 3 MR. BARR: When did the effort to do some 4 regulatory work on the water quality start, roughly? Ι 5 mean, you don't have to -- five years, 10 years, 20 years 6 ago? 7 MR. UHLIR: The way time goes, Jim --8 (Laughter.) 9 MR. BARR: We all remember the mid-'80s, so it 10 would have been after that. 11 MR. UHLIR: Yeah, it was -- wait, the water 12 quantity -- or quality was an issue long before we thought 13 quantity was. In fact, we -- especially the NRD I was in. 14 We kind of thought we were sitting in a spot where quantity 15 wasn't an issue. And quality was needed to address. And 16 just kind of put quantity on the background, because we 17 thought we had a surplus of water. And until really last 18 year probably kind of come to realize that maybe you didn't. 19 MR. BARR: Did some wells go out or --20 MR. UHLIR: We've had wells that were affected 21 by -- and what we've seen were probably the most in the 22 fringe areas where people were adding helper wells. That 23 was a big thing, where, you know, if you were kind of 24 running a little short, the guys were adding helper wells. 25 And that's probably where you noticed it the most, that,

1 boy, you saw a lot of guys trying to develop. And there was 2 some nozzling down, too. You know, they said different 3 guys, that one outfit, how many different systems they nozzled down. But, yeah, we ran into that, but really, we 4 5 were kind of -- quantity wasn't really an issue, or we 6 didn't think so. 7 MR. BARR: Is there a point where there's some 8 concern about new wells? 9 MR. UHLIR: Yeah, we're in a --10 MR. BARR: Regula- --11 MR. UHLIR: Yeah, we're -- we have a --12 MR. BARR: Stoppage area? 13 MR. UHLIR: Yeah. 14 MR. BARR: All of the district or just --15 MR. UHLIR: Yeah, the entire district. 16 MR. BARR: Did that just go in? 17 MR. UHLIR: It went in -- started, yeah, it -- in 18 fact, we're not out of it, won't come out of it until --19 actually working on the IMP right now and stuff, but I think 20 it'll be about -- if they started in November, I'm thinking, 21 put the freeze on, somewhere's in there. 22 MR. BARR: Is there thought you're going to -- may 23 have to go to some sort of allocation system? 24 MR. UHLIR: Yeah. They really need to get the 25 data together to find out -- and try to find these critical

1 And there are -- and that's the one thing that's, areas. 2 you know, we have areas that we got 1,200-gallon wells that haven't changed in 40 years. And then you've got some of 3 these wells in certain areas that are affected by each time 4 a -- as you expanded, why, man, it changed the -- I know we 5 have guys saying that they had no problems and now they're 6 7 pumping air as things expanded. But my theory with that 8 and, you know, the NRD's position -- and people, they 9 don't -- you know, nobody wants restrictions or controls put 10 on them, but my theory on that is we're not restricting, 11 we're not controlling. We need to manage the water. And if 12 everyone looks at that, you know, it's not trying to take it 13 away from anybody or -- it's to use it wisely. And we've 14 seen changes in -- and the guys were talking about it just 15 the other day, just actually, you know, the plants how much 16 less water they can require. And they're finding that, you 17 know, we don't need to put as much water on. Of course, you 18 also run into that, too, you know, such a variance in soil. 19 We have a lot of that, where some places, you know, they 20 have to keep -- sprinkle a little water all the time. In 21 other cases, you could really manage and not put as much on. 22 MR. BARR: What sort of quality actions did you 23 take? 24 MR. UHLIR: Quality is, like I say, we got areas 25 in Phase 2, and they're supposed to be educating people, and

1 they're sending in reports. And I guess I would say, that 2 hasn't been very successful. 3 MR. BARR: Do they do anything on, like, 4 preventing early fertilization in the fall? 5 MR. UHLIR: We haven't. Unless -- they don't encourage in the Phase 2 areas, I know. 6 7 MR. BARR: What proportion, just roughly, is in a 8 Phase 2 in this district? 9 MR. UHLIR: Yeah, I got the map someplace. 10 MR. BARR: Would it be a guarter or a half? 11 It seems like the areas that are in MR. UHLIR: 12 Phase 2 right now and have been there for quite a while, 13 really, were some of the first areas developed. And we 14 have -- I can remember going, Jim, when I was in high school 15 and the ag teacher, we went out -- we had a foreign exchange 16 student and we went out to a system somewhere's around 17 Atkinson as one of the first irrigation systems put up, and 18 now those areas, those early areas tend to be the higher 19 concentration nitrate. Kind of goes with where the first 20 irrigation was developed and expanded. That seems to be where the highest nitrate level is. 21 22 MR. BARR: Is there any other programs the NRD is 23 involved in that's not specifically related to water? Ι 24 mean, conservation programs or recreation or --25 MR. UHLIR: In this area, we probably -- we don't

1 deal with the recreation that they do in a lot of areas, 2 because we've got the lakes border our NRD. We've got a lot 3 of natural areas that probably real fortunate to me. So, as 4 far as a recreation area development, no. We haven't --5 this NRD hasn't, and basically, that's why, you know, 6 because of the two lakes, both Yankton and Pickstown. And 7 there's a lot of, you know, along the Missouri River there's 8 a lot of cabin development along there, and, of course, they all were flooded last year. 9 10 MR. BARR: That's what I was going to ask you. 11 MR. UHLIR: Yeah, they were, and a lot of the 12 people are rebuilding. 13 MR. BARR: In addition to flooding, you've got the 14 water table rising along the river. 15 MR. UHLIR: Yeah, and they're --16 MR. BARR: Pure shale all along there. 17 MR. UHLIR: Right, and they're -- people are going 18 right back to -- in places that you would be a mile away 19 from the river, you know, it was just nothing but water, and 20 people are going back. And they're building --21 MR. BARR: They aren't building them on pontoons, 22 are they? 23 (Laughter.) 24 MR. UHLIR: I think now they got, though, what is 25 it, the flood plain or something, which you kind of got that

1 figure. You got to build them a little bit different. But, 2 yeah, I was surprised how many went back to build. A lot of 3 them did.

MR. BARR: At this point, I just -- you've been on pretty much since the beginning. And one of the things we generally ask is, looking back over the 40 years or so, how has the NRDs developed in relation to maybe what you thought when you started?

9 MR. UHLIR: Oh, it's -- as we're moving along, 10 it's getting much more involved in -- especially in the 11 area, you know, water both in quantity and quality than we 12 ever did before. And I think there's a need for -- to be 13 more involved. I think it's going to be a major issue. And 14 probably, as I look back, probably all the NRDs should have 15 been a little bit more active, pushing a lot harder years 16 I know that's a criticism I get from quite a few aqo. 17 And they kind of, you know, the NRDs are involved people. 18 with it, and they said, "Why hasn't something been done 20 19 years ago?"

20 MR. BARR: How have people's attitudes about 21 natural resource issues, water in particular, changed at all 22 over that time period?

23 MR. UHLIR: Oh, it's changed. There's a lot more 24 concern, much more concern than there was 20 years ago. I 25 mean, now -- and of course, after 2012, I think that

1 really -- and there's a lot more concern on water quality 2 than anybody thought about before. You know, just like, 3 when I was growing up, we had wells, and they were in the same -- the feed lot. And now, you know, those same people 4 now are buying bottled water. They don't do that. 5 MR. BARR: Have you had quality problems other 6 7 than nitrate? I went to a meeting in York last night and 8 they were TCE and PCE. 9 MR. UHLIR: Yeah. I would say we had communities 10 that were definitely -- Niobrara's in that issue right now, 11 and Verdigre was prior to the time of getting into the rural 12 water system that I am aware of. And, yeah, at one time, 13 Verdigre -- and that was a long time ago, they were actually 14 pumping the water out of the Verdigre Creek, and I talked to 15 some people just not too long ago, because I was trying to 16 get some clarification on that, and they said, then they 17 went to wells and then they had this high magnesium and high 18 iron content. And they said, "Really, we had better water 19 pumping out of the creek," if you can believe that. That 20 was a deal, I was -- I stayed in town and the family I 21 stayed with old Rudy Teush (phonetic) and his wife, and Rudy 22 was the water commissioner for the town, and I remember 23 going with him. They pumped out of the creek into a kind of a cement little pit, and right above the pit, he had a 24 25 Clorox bottle and he had a hole poked in it, and it dripped

1	down into the thing, and that was their water system.
2	MR. BARR: Their treatment system.
3	MR. UHLIR: That was the treatment system.
4	(Laughter.)
5	So, maybe we've advanced some.
6	MR. BARR: That is an interesting comment.
7	MR. UHLIR: I remember going with him. Yeah, they
8	were pumping right out of the creek into this little cement
9	thing, you know, and he'd adjust his Clorox bottle so it
10	kept dripping.
11	MR. BARR: Well, at this point, pretty much, if
12	you have anything at all that you'd like to offer about how
13	the NRDs have functioned or anything related to it
14	MR. UHLIR: I think the NRDs are important in the
15	sense that it gives us in the state where actually, you
16	know, with the Unicameral the way it is and the one man, one
17	vote, so technically, we're basically like the house of
18	representatives, your NRDs tend to give you a local input on
19	issues, especially conservation, you know, water and but
20	probably more so that. Concerns within a certain area that,
21	you know, might be lost without. And that's a concern, so
22	that the NRDs have an important role in that, being kind of
23	a local entity concerned about that, especially in this
24	state where it kind of gives you that.
25	MR. BARR: We were, apparently, the only state

1 that's adopted this. And any thoughts on why it might have 2 happened here and not anywhere else? 3 MR. UHLIR: No, that I really don't know. I know, 4 compared -- talking to some people in South Dakota, you 5 know, that they still have the districts and they marvel at 6 this, actually. 7 MR. BARR: How do they handle issues? Well, maybe 8 they don't have them, like water quality. 9 MR. UHLIR: Well, I suppose they handled it just 10 on the -- more of a county basis. I know we worked with the 11 Recreation River, you know, there were people representing 12 South Dakota, and basically, they were similar to the NRDS. 13 So, they have the same concerns, probably. Not so much as a 14 basin concern, probably more of a local concern. 15 MR. BARR: You brought up the river. What impact 16 has that designation had, if any, on the county or the 17 district? 18 MR. UHLIR: Well, I think it -- I would say it 19 probably helped the county as far as -- you know, we've got 20 an awful lot of -- as a lot of those cabins are up along 21 there. I think probably the most important thing was the 22 bridge. If you want to pick one thing --23 MR. BARR: What has that had --24 MR. UHLIR: That has a big impact on this county, 25 not only there's a tremendous amount of grain comes across

that out of South Dakota. There's cattle from this area goes across into Dakota to be fed. There's job opportunities I know that people from Verdigre cross that and go into working in, say, prison and in Springfield. And yeah, of anything, the bridge probably was a big factor, it really was. That was important to this county. MR. BARR: Well, at this point, if you have any other comments on anything at all. MR. UHLIR: I'll probably think of something later. MR. BARR: I really appreciate you doing this, and thank you, again.