

## NRD ORAL HISTORY PROJECT

## INTERVIEW:

LOYD FISCHER BY JIM BARR,  
July 9, 2013

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PROCEEDINGS, July 9, 2013:

1           MR. BARR: This is Jim Barr. It's July 9<sup>th</sup> and  
2 I'm in Lincoln, Nebraska, with Dr. Loyd Fischer. And one of  
3 the things we usually do is get a little background of the  
4 person to start off with, so if you would like to do that.

5           DR. FISCHER: I am a native of Nebraska. But like  
6 many Nebraskans my age, I am pretty recent because my father  
7 was brought here as a child and both of my parents had  
8 German as their first language. And my father ended up --  
9 well, my mother's parents were so-called Germans from Russia  
10 and they homesteaded in eastern Colorado. And then my  
11 father later, his parents, my paternal grandparents were  
12 immigrants from Germany. And they came to Harlan County,  
13 Nebraska, if you know where that is --

14           MR. BARR: Sure.

15           DR. FISCHER: -- down by the Republican River. In  
16 fact, our address was Republican City. And they didn't  
17 homestead. They did what a lot of them did. They took over  
18 a homestead that was abandoned. But then later my father  
19 and his brother went from Nebraska and they homesteaded in  
20 eastern Colorado under the enlarged Homestead Act. They  
21 each got a half section. It wasn't too far from where my  
22 wife's grandparents, Germans from Russian so-called, had  
23 homesteaded and it was rather remarkable. My father was  
24 eight years old when his parents brought him here. And you

1 wonder -- I wonder, in retrospect quite often, he spoke  
2 English without accent. And, you know, his first language  
3 obviously eight years old was German, and they didn't have  
4 English as a second language in those days. You know, and  
5 he went to school out in a country school which didn't have  
6 a real sophisticated curriculum, as you might imagine. And  
7 you wonder how he acquired his English, you know. I have  
8 lived in foreign countries and I know how difficult it is to  
9 acquire that.

10 But then equally surprising after he and his  
11 brother homesteaded out in eastern Colorado he acquired a  
12 steam engine and a threshing machine and breaking plow. I  
13 am only partially so much chagrined or embarrassed by the  
14 fact that since my field is -- academic field is natural  
15 resources, you know, I know that he broke up a lot of sod  
16 out there in Colorado which never should have been plowed,  
17 you know, we know in retrospect.

18 MR. BARR: Sure.

19 DR. FISCHER: They were fed a line by the railroad  
20 and so on about, you know, the rain follows the plow and all  
21 that crap and so anyway I come from a big family. But my  
22 father died then of stomach cancer when I was only eight  
23 years old and left my widowed mother, his widow, with nine  
24 children, including basically a baby. By that time they had  
25 moved back to Nebraska in -- I don't know if you know those

1 counties, but Franklin County is where my paternal  
2 grandparents had settled. So they moved back then and  
3 turned up to, I mentioned, Republican City, which was Harlan  
4 County and acquired a farm there, although they had been  
5 elsewhere. These old German families don't tell kids much,  
6 but it seemed obvious that my father's health was failing  
7 and he ended up going to the Mayo Clinic twice. The first  
8 time they diagnosed his stomach ulcers and the second time  
9 stomach cancer. And he died and left my mother.

10 Then she lost the farm because not only was that a  
11 family tragedy but also that was the midst of not only the  
12 Great Depression but also dust storms, you know, the dust  
13 bowls. We had those God awful dust storms which is part of  
14 the reason probably that I became interested in natural  
15 resources. That was kind of my background. I grew up  
16 amongst those dust storms and my mother then took the family  
17 and we migrated to northeast Nebraska, which -- Thurston  
18 County, the Winnebago Indian Reservation. The fact is, we  
19 farmed some Indian land which again we also rented other  
20 land and really land that had been very severely abused.  
21 You know, the erosion and all the rest. And I often said,  
22 you know, my relatives that are still on the farm, they have  
23 no-till farming and so on. And, of course, people like to  
24 talk about how the family farmer protected the soil. The  
25 fact of the matter is that we ravaged the soil.

1           But we didn't -- one, we didn't know any better.  
2           But the other thing is we didn't have equipment that, one,  
3           could control weeds without tillage and the other thing is  
4           we couldn't leave the crop residue on the surface. I spent  
5           plenty of time when I was a young guy, you know,  
6           particularly the bull board plow which farmers don't even  
7           have any more, digging the doggone stuff out from under that  
8           plow. The fact is, when we were in northeast Nebraska our  
9           crop for conservation was sweet clover, which you probably  
10          know is a biennial and we would leave it two years and let  
11          it grow up, and by that time that old sweet clover would  
12          have died the second winter -- was at least five feet tall.  
13          And you go in there and try to plow the doggone stuff and it  
14          would clog up under the plow.

15                 Anyway, it's not trying to rationalize the way we  
16          farmed then. It's just kind of explaining it. And part of  
17          it -- at least part of it was we had -- but, anyway, that  
18          farm that we rented up in northeast Nebraska was fouled by -  
19          - had quite a lot of bind weed on it. It had cockleburrs  
20          and sunflowers. And bindweed was a mean doggone weed. It  
21          had two characteristics that were bad. One of them, it's  
22          kind of a vine, you know, and you had the old shovels. They  
23          would move out in front of the shovel and it wouldn't cut  
24          them off, you know. And so basically we had a bunch of  
25          boys, we farmed that doggone -- we had 200 acres of corn and

1 we farmed with a hoe. We hoed the cockleburs and sunflowers  
2 out of those farm fields.

3 And cockleburs had another characteristic. I  
4 doubt there's very many people who ever fought that sucker  
5 who knew it. Each of those burrs had two seeds in it. And  
6 one of those seeds would germinate one year and the other  
7 one would wait and germinate the next year. So if you  
8 killed every cockeyed cockaburr in the field, you had just  
9 as big a crop the next year as you did the year before.  
10 Well, mother nature had devised that system for survival of  
11 that plant and it was a good one but it didn't make it easy.

12 What I'm telling you is that I grew up at a time  
13 down south. Central Nebraska, we had the God awful dust  
14 storms and so on. In northeast Nebraska, because the only  
15 land available when we moved up there -- we didn't know  
16 anybody -- was a farm that was in very bad shape. So I have  
17 personal history of what now would most assuredly be called  
18 very bad husbandry, soil husbandry and so on, and I have  
19 always kind of chuckled when people talk about how the  
20 family farmer protected the soil. We wouldn't have had  
21 those dust storms if that soil had been protected, you know.

22 Anyway, that's more than you probably wanted to  
23 know but --

24 MR. BARR: No, that's very interesting.

25 DR. FISCHER: But it does tell you something of

1 the kind of background. I'll be 93 next month in August so  
2 I go back a ways. And people don't realize how new we are.  
3 When I was born, I was the first one in the family born  
4 after my parents had moved back down to Harlan County, and  
5 the reason they did that is my father actually -- they had  
6 gone to a store. They should have stayed there in Melmo,  
7 Nebraska, although again it seems kind of interesting how a  
8 kid that was brought here in a German-speaking family, how  
9 he even would have the capacity to have a general store.  
10 But his health continued to fail and most of his relatives,  
11 he had three brothers and two sisters and his mother all  
12 lived in that area of Harlan County and Franklin County and  
13 so on. And so in retrospect, obviously, his health has  
14 continued to fail and just went back there to be near the  
15 family. So, anyway, that's probably more history than you  
16 wanted to know.

17 MR. BARR: Well, that kind of explains why you may  
18 not have farmed all your life.

19 DR. FISCHER: Well, you're right. It wasn't quite  
20 as bad then as it is now, but it was pretty tough if you  
21 didn't come -- if you come from a non-farm or with a fairly  
22 ambiguous family to get established in farming. It wasn't  
23 as heavily capitalized as it is now, but still the lending  
24 system and so on, the bank and whatnot was worse than it is  
25 now. Consequently, it wasn't easy for a young guy to --

1 MR. BARR: Yeah.

2 DR. FISCHER: Although that also was heavily  
3 influenced by the fact that I was, you know -- second World  
4 War came along and they were going to -- they meaning the  
5 draft board was going to draft my one brother who was  
6 already farming and had a wife and kids. And my other  
7 brother was already started on his own, but he had lost an  
8 eye in an accident on the farm and so he wouldn't have been  
9 drafted. But then my next older brother and myself, they  
10 were going to draft all of us. And so Frances, my next  
11 oldest brother and I -- and all that left was a younger  
12 brother, a teenager, and there was no way that I don't think  
13 that mom could have survived the farm if they had taken all  
14 of us. So we went to the draft board and propositioned that  
15 if you will allow Lawrence, the next older brother who was  
16 married and had a child already to come back and we moved a  
17 house on the farm where mom was, even though it was a rental  
18 farm, and so he and his wife and basically baby moved back.  
19 And then Mel, the next -- was 17 and the two of them could  
20 take over this farm. And Frances, my next oldest brother,  
21 enlisted in the Marine Corps and I enlisted in the V5  
22 program in the Navy because I had completed high school.

23 None of my older siblings had even gone to high  
24 school. I was the first one that went to high school. So  
25 that was the minimum education requirement for the V5



1 program, so I became a Navy pilot and that's how I spent the  
2 second World War. And then I ended up in active duty.  
3 After the war ended I went to Pensacola, Florida, and was a  
4 flight instructor for a while. But then I became  
5 disenchanted with the peace time military but I stayed in  
6 the Reserves and I flew. I was a carrier-based pilot while  
7 I was on active duty, but I went into the Reserves and I  
8 continued to fly the torpedo bomb. As a matter of fact, I  
9 stayed in the Reserves and I retired. I'm a lieutenant  
10 commander, USNR Retired. So -- which, by the way, is a very  
11 nice benefit with health insurance and so on.

12 MR. BARR: Sure, sure.

13 DR. FISCHER: I don't think I was thinking of that  
14 very much at that time. Pretty hard for a 25-year-old to  
15 think much of retirement.

16 MR. BARR: Sure, sure.

17 DR. FISCHER: But anyway I did it and it worked  
18 out. So, anyway, that's a good -- by the way, I ended up  
19 then I got out of active duty and had the GI Bill. You had  
20 48 months of GI Bill and I came back, actually went into the  
21 auto repair business with a brother-in-law but I got to  
22 thinking, you know, that's really pretty stupid to turn down  
23 that 48-month GI Bill. And so I did get 28 credits at the  
24 University for the education I had in the Navy. But then I  
25 went rather rapidly, I went to the University of Nebraska,

1 College of Agriculture. My first major was actually  
2 agronomy. But then I decided ag econ seemed more attractive  
3 to me at that time so I got a double major. I got ag  
4 economics and I got my bachelor's and master's here at the  
5 University of Nebraska. Got the master's degree in 1952 and  
6 went over to Iowa State. I had a fellowship there and  
7 actually I even became an instructor. In 1955 I got my  
8 Ph.D. from Iowa State and I wrote my dissertation on the  
9 soil and water conservation districts of Iowa. So that has  
10 been my introduction to this. And I had a double minor,  
11 economics and what they call government. Most places they  
12 call it political science. At Iowa State they called it  
13 government. And so those were my minors. And I got --  
14 well, I shouldn't say that because economics, of course, was  
15 my major.

16 I got my Ph.D. in 1955 from Iowa State and then I  
17 came back to the University of Nebraska, on the faculty here  
18 in '55 and I had my whole career, although I spent time,  
19 some time out of the country in the University programs,  
20 including two years in Columbia, South America. An  
21 interesting thing, this may sound a bit pretentious but it  
22 was true, that I could identify with the peasant farmers in  
23 Columbia a heck of a lot better than the well off Colombians  
24 who were running things, you know, including the colleges,  
25 including the ag college, because after all I grew up, we

1       farmed with horses, you know, and we didn't have electricity  
2       or running water. My life wasn't an awfully lot different  
3       when I was growing up than that peasant in Columbia. And so  
4       I could identify with him a heck of a lot better than that  
5       wealthy Colombian who was running the university, you know.  
6       I understood their life. I knew where they were coming  
7       from. We had no electricity, no running water, no tractors  
8       or anything else.

9                 We got our first tractor when we moved to  
10       northeast Nebraska in 1936. We got a -- well, actually '35,  
11       winter of '35. But then we did get a tractor, my mother did  
12       when we moved to northeast Nebraska. And so life changed.  
13       So in many ways I have two agricultural lives, the one prior  
14       to our move up to northeast Nebraska and I have often said  
15       that my younger siblings who weren't old enough to really  
16       appreciate it, they don't really comprehend the life we  
17       lived before we had electricity, before we had tractors and  
18       so on. Life was very different.

19                MR. BARR: What other things -- you said you had  
20       worked your dissertation on soil and water. Did you have  
21       any particular conclusions or -- on that paper or --

22                DR. FISCHER: Yes. As a matter of fact, what I  
23       did is I really appraised the soil and water conservation  
24       program of Iowa and I was quite proud of it. And the head  
25       of the soil conservation service there wasn't -- he wasn't

1 happy with what I wrote because, well, for one thing, I said  
2 they called the so-called conservation practice that they  
3 spent far and away more money on than anything else. The  
4 fact is, more the other things was tiling. I said, well, I  
5 contended that tiling, I don't know how you call  
6 that -- you know, that's -- it was conservation, wasn't  
7 going anyway.

8 MR. BARR: Yeah.

9 DR. FISCHER: And, furthermore, the basic error  
10 which was that they -- on purpose is that each time they  
11 established a practice on any of the farms they had in the  
12 program they counted those acres. They never subtracted any  
13 acres. You know, that rental farm would change operators  
14 and they would go out and plow down the terraces or whatever  
15 or put the -- there was never any subtraction.

16 MR. BARR: So it was always additive.

17 DR. FISCHER: Always adding.

18 MR. BARR: Interesting.

19 DR. FISCHER: So after a while they had more acres  
20 in a county in their program than there were acres in the  
21 county.

22 MR. BARR: Interesting.

23 DR. FISCHER: And they weren't damn happy when I  
24 was pointing out, that that was fictitious, you know, there  
25 was some real fiction there. But, fortunately, my major

1 professor over at Iowa State, you know, basically challenged  
2 them to point out any errors, see if you can tell me what's  
3 wrong in this publication about so-called soil conservation.  
4 Most of what they were paying for would not meet any real  
5 definition of conservation, you know. They weren't very  
6 happy with that.

7 MR. BARR: -- was tiling, I take it.

8 DR. FISCHER: Yeah, well, that's what they spent  
9 the big money on. They spent more federal money on tiling  
10 than all other practices. But also a lot of what was set up  
11 on contour, rented farms, the next tenant --

12 MR. BARR: Would take them out?

13 DR. FISCHER: -- would take them out, yeah. And,  
14 you know, those terraces, early on they weren't very well  
15 designed. And if you got a big rain that took out some of  
16 those terraces you would get worse erosion than you would  
17 have if they had never been terraced. It just concentrated  
18 the water to really take it. So I was -- my dissertation  
19 was pretty doggone critical of --

20 MR. BARR: What about the organization of how they  
21 implemented the conservation districts and how they were run  
22 and that sort of thing?

23 DR. FISCHER: Yeah, well, I thought they did a  
24 pretty good job. By the way, they just did counties. A  
25 county was a district.

1 MR. BARR: Yeah.

2 DR. FISCHER: Now that's not what I proposed in  
3 Nebraska but I didn't propose what they did. But the  
4 organization I thought was better than what we had in  
5 Nebraska. Of course then I came to Nebraska and that's when  
6 we started organizing. Two standing arguments I had with  
7 Vince Driesen, one of them was the notion of trying to cut  
8 the state up in terms of watersheds, was really pretty  
9 silly. The implicit assumption was made that the only  
10 resource that the soil and water conservation districts were  
11 deemed with was surface water, which was silly on the face  
12 of it. And as a matter of fact, quite early we ran into  
13 pretty severe problem right here in this country, not very  
14 far south from Lincoln. There are some areas with poor  
15 groundwater. They don't have decent aquifers. Sometimes  
16 there just aren't any aquifers down there but sand.

17 Also, sometimes there are -- problems. And I  
18 don't know if you remember, but actually they did something.  
19 They put some rural water districts in.

20 MR. BARR: Yes, yes.

21 DR. FISCHER: And I did some work on that, too,  
22 and I didn't argue with the rural water districts except it  
23 was a whole lot more costly if there was a decent aquifer in  
24 terms of -- I'm not talking about irrigation. There wasn't  
25 much irrigation. But I'm talking about just stock wells and

1       so on. If there was water, decent quality water there, it  
2       was much less expensive to develop a farm water system than  
3       to put in one of those. I did some research on that and  
4       just come out all the time that these water districts --  
5       now, if you didn't have decent water there, good water is  
6       good even for just a farmstead, you know. Particularly  
7       there were some places where they had iron in the water and  
8       other things that you know about.

9               MR. BARR: Yeah, sure.

10              DR. FISCHER: So I never quarreled with those  
11       rural water districts where they didn't have decent water.  
12       But I had one graduate student do some research on the cost,  
13       and any time you had a decent aquifer, decent both in terms  
14       of yield and --

15              MR. BARR: Quality.

16              DR. FISCHER: -- quality, that was the way to go.

17              MR. BARR: Yeah. One of your students must have  
18       looked at special purpose districts. And, in fact, part of  
19       this project we heard that maybe that seminar that Clayton  
20       Yeutter held might have even got Warren Fairchild thinking  
21       about the idea of a national resource multipurpose --  
22       combining multipurpose districts into natural resource  
23       districts.

24              DR. FISCHER: Warren was a heck of a lot easier to  
25       deal with than Dreisen, you know. I used to -- one of the

1 things that I kept promoting, without success, was the  
2 notion that we limit the withdrawal of groundwater from a  
3 sustainable yield. And I remember at least two different  
4 times on a panel discussion and Vince Driesen would come,  
5 you know, well, that's impossible. And I said, you know,  
6 it's not only possible, it's also ultimately inevitable,  
7 that any time you exhaust the groundwater resource, then in  
8 terms of the stored water in there, you are going to be on a  
9 sustainable basis because that's all you can get out of it,  
10 what comes in. And you would think he would shut up about  
11 it then because, you know, that was -- it wasn't something  
12 you needed to argue about because that's just the way it  
13 was. You could withdraw more water than was being charged  
14 as long as there was some water there in storage. But  
15 finally you're ending up sucking the water off the bottom of  
16 the aquifer, which is a very inefficient way to do it.

17 MR. BARR: Now we have, of course, and have had  
18 all along a separate system of legal rights for surface  
19 water and groundwater. And at the current time we have a  
20 different entity overseeing the surface water and then a  
21 different entity overseeing the groundwater. Do you have  
22 any thoughts on that general situation?

23 DR. FISCHER: I clearly think we ought to manage  
24 the water as an entity, you know. You really can't sensibly  
25 divide ground and surface. That was another thing that



1 Vince Driesen, you know, was just dead wrong on when I would  
2 contend that you ought to manage your water if you got  
3 recharge, you ought to manage it in terms of what you could  
4 sustain, that it doesn't make any sense to exhaust that  
5 stored groundwater and then try to manage it in terms of  
6 just what comes in but also Vince's -- the State of Nebraska  
7 got in deep trouble with Kansas. And finally even the  
8 judges understood that the withdrawal of groundwater is  
9 going to impact the flow of surface water. And, you see,  
10 part of the reason again -- the one good thing we had about  
11 our farm down in Harlan County, we were just about a mile  
12 and a half from the Republican River, but we -- I don't know  
13 whether you know that area at all but Medicine Creek, the  
14 fact is there is a Medicine Creek campground on the Harlan  
15 County reservoir. The creek ran right through our  
16 farmstead. And we would have had a hell of a lot harder  
17 time making it through there had we not had that spring fed  
18 creek coming right through our farmstead so that -- and it  
19 had a fairly large floodplain there. And, by the way, it  
20 never quit flowing all through the '30s.

21 MR. BARR: Is that right?

22 DR. FISCHER: That creek didn't dry up. And we  
23 had -- down on the floodplain we had a big orchard and then  
24 the floodplain was -- you know, a kid's notion of size, but  
25 it was maybe as much as five acres. And down in the

1 floodplain, in addition to the big orchard we had which, you  
2 know, those trees were totally indifferent to rainfall  
3 because the water table below those trees wasn't more than  
4 10 feet, so those trees didn't have any problem growing up.

5 MR. BARR: Sure, sure.

6 DR. FISCHER: But we used to also, as  
7 differentiated from her garden, because we could farm that  
8 with a walking plow and so on and horses, we had our  
9 potatoes, our sweet corn, melons and cantaloupe and so on  
10 all grown down there on that. Now we had a garden up on the  
11 second bottom where the house was, but, you know, the  
12 tomatoes and all the rest which we watered from the old hand  
13 pump and buckets, you know. We would carry the water there.  
14 And, of course, we had plenty of labor around with all the  
15 boys. So we always -- and never did we have any -- well,  
16 for one thing, we simply didn't have the capacity to  
17 overdraw that aquifer, you know.

18 So even though there wasn't much rain back in  
19 those days, I don't think -- we, unlike others, we always  
20 had drilled wells. We always had two, one up by the house,  
21 you know, with casing and so on, which meant I think that we  
22 had better quality water than a lot of those people getting  
23 their water out of dug wells.

24 MR. BARR: Sure.

25 DR. FISCHER: But it was only about 20 feet down

1 to water. That is all the further we would have to go down  
2 to drill down and put in a casing. And we had one well down  
3 by the corral, we called it, and down there we did have, you  
4 know, a little one and a half horsepower Briggs & Stratton  
5 engine on a pump jack. We never had a windmill because we  
6 were down in the bottom and --

7 MR. BARR: No wind, probably.

8 DR. FISCHER: -- trees and so on, we just didn't  
9 get any wind down there. So we used to envy people up on  
10 the hill.

11 MR. BARR: Yeah. Well, they didn't have water  
12 either probably for --

13 DR. FISCHER: Yeah, but they had a heck of a lot  
14 harder time getting the water.

15 MR. BARR: Exactly.

16 DR. FISCHER: So, anyway --

17 MR. BARR: One of the things I was going to ask  
18 you about is in the mid '60s when, among other things, the  
19 natural resource district legislation was acted upon. What  
20 were some of the other natural resource related issues that  
21 were going on then and --

22 DR. FISCHER: Well, it is true, much of -- I  
23 guess, you know, that I advised not only Clayton Yeutter but  
24 two other, Norm Thorson and Doug Nelson, for Ph.D.'s. And  
25 Clayton Yeutter and I were classmates and he went back to

1 the farm out at Eustis and he came -- after I was on the  
2 faculty he came to see me and he said, you know, one thing  
3 Clayton never suffered from was lack of ego. But it was  
4 true. He came, you know, and he said, I just don't believe  
5 that my talents are being well used out there driving a  
6 tractor. And who could argue with that? But so all three  
7 of them wrote their dissertations on western water law. And  
8 Doug Nelson is still working with water down in Phoenix,  
9 Arizona. And, of course, the shame was Norm Thorson died  
10 fairly soon which is -- because Norm, in my view, was the  
11 best student I advised in all my academic career. He really  
12 was an exceptional student and it caused me a great deal of  
13 grief when he died so young.

14 But in Nebraska, you're in natural resources,  
15 you're almost, by definition, you're in water.

16 MR. BARR: Yeah, yeah.

17 DR. FISCHER: And so now we are starting to get  
18 some of these exotic materials developed. We haven't gone  
19 very far in Nebraska, but -- not as much as other states.  
20 But natural resources in Nebraska is soil and water really.  
21 That's what it comes down to. And so how much would you  
22 organize? I guess I think our potential, at least from  
23 anything we have found so far, is such that how that is  
24 organized publicly is probably not a great moment. I think  
25 basically we dang sure, you know -- this issue with Kansas,

1       which of course you are familiar with, that they took us to  
2       court and the court decided, they couldn't decide otherwise,  
3       that when we continued to put high capacity wells,  
4       particularly down in a floodplain, we were going to diminish  
5       the flow of surface water. You know, you had to be a dummy  
6       to even argue against that notion.

7               MR. BARR: How much -- Kansas has a different  
8       water system in that both the ground and surface water are  
9       on an appropriation system, whereas we are correlative  
10      rights and appropriation on the ground and surface water.  
11      Is that an issue of any significance here or has that been  
12      part of the problem or not?

13             DR. FISCHER: Well, it is true that we did not,  
14      when we started getting high capacity wells and so on, you  
15      know, the old appropriation doctrine worked pretty good  
16      until we started getting high capacity wells. My own  
17      parents, they had moved -- when they moved back from  
18      Colorado they moved up into Holt County, a hay farm up  
19      there. And they had an artisan well on that which flowed  
20      all the time. And those people with artisan wells, when  
21      they started getting the high capacity wells in, boy those  
22      artisan wells would just go dry very quickly.

23             MR. BARR: Sure.

24             DR. FISCHER: So we didn't really have -- ahead of  
25      time we didn't really have a property system which handled

1       that. We really didn't. And it should have been managed --  
2       the ground and surface water ought to have been managed as  
3       one entity. Logic would say that. But it's hard to back  
4       up.

5               MR. BARR: Oh, yes, yes.

6               DR. FISCHER: It's very difficult.

7               MR. BARR: Is the market any potential role in  
8       those or --

9               DR. FISCHER: Well, Clayton had a lot of -- more  
10       faith in the market than I did. It's a pretty complex  
11       market because the interrelationship between the ground and  
12       surface water isn't that clear, you know. And you would  
13       have to have very good data to do an adequate job of  
14       managing it as one entity. But we should have been doing  
15       it. Unlike Vince Driesen, you know, just impossible. Can't  
16       take into account the impact on the flow of streams from the  
17       diminishing of groundwater aquifers, you know. That was his  
18       position. And, dammit, the legislature listened to him. It  
19       really was very difficult, as far as I was concerned, to get  
20       any sensible water law in Nebraska as long as the  
21       legislature was listening to Vince Driesen. You know, the  
22       very notion that -- well, he never even accepted -- at least  
23       he didn't admit to accepting, although it seemed logic that  
24       he really had to -- that there was any impact on spring flow  
25       off withdrawing water from -- with particularly these high

1 capacity wells from groundwater aquifers. He never really  
2 conceded that. And he just simply insisted that you can't  
3 manage it as an entity. He used to actually say that. And  
4 when we were in panels and whatnot, there's no way that can  
5 be managed on a sustainable yield basis. He would say that.  
6 And, of course, my response was, which maybe wasn't a very  
7 good one, is that what I said before is not only will we --  
8 not only is it ultimately going to be managed that way if we  
9 overdraft, overdraw our groundwater aquifers, but we won't  
10 have any choice. When you start getting rid of any surplus  
11 that is down there you're going to have to limit your  
12 withdrawal to whatever the recharge is during whatever time  
13 period you're talking about. Until you are willing to  
14 accept reality, you weren't very apt to come up with a  
15 sensible way to manage it. And I contended, of course, that  
16 all good sense would be you ought to be managing those  
17 groundwater aquifers while there was still substantial  
18 storage there.

19 MR. BARR: There seems to be a fair amount of  
20 interest in continuing to think about doing that at this  
21 point. How would you suggest that it might -- looking at  
22 how we have been over the last 50 years and so, how -- and  
23 granting that we've got certain things set up and probably  
24 can't back up on all that.

25 DR. FISCHER: Well, some of these aquifers are

1 already depleted to the point --

2 MR. BARR: Yeah.

3 DR. FISCHER: It doesn't help a heck of a lot to  
4 say it ought to be done, you know, before you exhaust it --

5 MR. BARR: You can't really back up and do it.

6 DR. FISCHER: Yeah, and so the property system, I  
7 don't know but what -- we're probably doing about as well as  
8 -- because of the law, at least managing the water in the  
9 Republican watershed. I think we're probably doing about as  
10 well. We got saved by the fact that the compacts that  
11 divided up the water never mentioned groundwater. And,  
12 consequently, when the Court held that we've got to start  
13 taking into account the depletion of stream flows as a  
14 consequence of exploiting the groundwater, they also said  
15 but we don't have to go back. Nebraska doesn't have to make  
16 whole what we have already done, I guess, because the early  
17 compacts never said anything about this interrelationship.  
18 Well, you know, I can't argue with that. I thought I knew  
19 something about the groundwater law. I almost had to learn  
20 it after three Ph.D. candidates all writing their  
21 dissertations on western water law, and all three of them  
22 did.

23 So you're asking me questions that there isn't a  
24 good answer to. It isn't helpful to say that, you know, we  
25 should have started out that way. We should have taken that



1       into account when we were doing -- even though that's true,  
2       but it isn't very helpful. You don't get to start history  
3       over again. You have to go from where you are. But I still  
4       think that we ought to strive to wherever we are. There is  
5       no excuse. Nebraska is in better shape than a heck of a lot  
6       of other states. There is no excuse to pretend any longer  
7       that there isn't an interrelationship between groundwater  
8       and surface water.

9               MR. BARR: Should it be more -- is there -- I  
10       guess one of the things that I have been curious about is  
11       you have a completely different philosophical basis for  
12       surface and groundwater.

13              DR. FISCHER: That's true.

14              MR. BARR: How do you --

15              DR. FISCHER: Marry the two? How do you marry the  
16       two?

17              MR. BARR: -- construct a system with that kind of  
18       dichotomy? That's --

19              DR. FISCHER: To a certain extent I think we're  
20       kind of playing with that along the Republican River under  
21       the duress of law, the changing law in the sense that we no  
22       longer can pretend that withdrawal of water from streams --  
23       excuse me, withdrawal of water from groundwater aquifers  
24       doesn't affect the flow of streams, you know. We can't even  
25       kid ourselves any longer like Vince Driesen managed to do

1 his whole life, professional life. And to a certain extent,  
2 under the onus of court orders, we are integrating the  
3 management of surface water and groundwater, at least along  
4 the Republican River. That isn't a very satisfactory  
5 answer.

6 MR. BARR: Well, and that --

7 DR. FISCHER: You know, it's not very helpful to  
8 state the obvious. We should have done it, you know, going  
9 in. And it wasn't -- you know, it wasn't a great mystery.  
10 I was just a dumb farm kid but I knew very well that  
11 groundwater withdrawal, even when we had the modest  
12 withdrawals that we had when I was growing up, but you start  
13 getting these thousand gallons a minute water wells and then  
14 you just can't pretend any longer that, well, we'll just  
15 muck our way through, you know, but that's what we tried to  
16 do.

17 MR. BARR: Looking just back at the formation of  
18 the natural resource districts and how they were intended at  
19 the time originally, I guess, merging the soil and water  
20 conservation districts and some flood control and some other  
21 things, how have they worked out over time either in  
22 relation to what was expected at the beginning or just in  
23 general?

24 DR. FISCHER: Well, one thing I have to admit. I  
25 had an ulterior motive I didn't push very hard because it

1       wasn't popular. But when we started this, that we got a  
2       bunch of counties that are public entities that make no  
3       sense. You know, dammit, we don't have to have the county  
4       seat within the distance that you can drive to in a horse  
5       drawn wagon any more. We don't need that. And I worked a  
6       little bit -- at one time I was on a committee that was  
7       looking at the merger of Lincoln and Lancaster County  
8       because -- the governance, because it doesn't make any  
9       sense. Why should each of these have their own motor pool?  
10      So we then, by default, went to what we call functional  
11      merger. Rather than merging everything, just certain  
12      functions that -- there's no reason why there has to be a  
13      county sheriff in Lancaster County and a police for the city  
14      of Lincoln, but we still have them.

15                But we have merged a few things. We've merged the  
16      assessment of property and there's some other things, have  
17      merged the motor pools and some other things. Now that's a  
18      long way around what I was going to -- I had in mind that if  
19      we made these natural resource districts clusters of  
20      counties, that it would be a lot easier for those clusters  
21      of counties, they already would have a mechanism for merging  
22      these functions. They wouldn't have to try to have a county  
23      engineer in each of these little piddly -- you know, some  
24      farmer that went broke and you could really have for the  
25      whole district -- you could have one office of engineering

1       which would take over the functions for the counties that  
2       are merged. So I wanted very much for those districts to be  
3       clusters of counties. It just seemed to make so much sense.  
4       And got around this, to a considerable extent, this notion  
5       that each of these little towns, each of these little  
6       counties was an independent entity, because you already had  
7       joined together in this natural resource district and you  
8       were already addressing the problems jointly associated with  
9       the natural resources, particularly water. And, by the way,  
10      there isn't anything that said you couldn't handle, you  
11      know, minerals and so on by the same mechanism. And it just  
12      made so much sense to me that why do we want to kid  
13      ourselves, go out here and have these natural resource  
14      districts cut counties in two, which, of course, they did.

15               MR. BARR: Would you think that's one of the  
16      reasons it's not caught on in other states, is that sort of  
17      thing? Or in a more general sense, why did it pass here in  
18      Nebraska and no place else?

19               DR. FISCHER: Vince Driesen. The notion, it was  
20      terribly frustrating to me that the notion -- for one thing,  
21      the notion was that we have what they call natural resource  
22      districts which doesn't say water districts, but they are  
23      organized around the notion of surface water. But then  
24      that's all screwed up, too, because inevitably, like I say,  
25      the whole State of Nebraska is in one water shed so you're

1 going to cut up water sheds. No damn way you can keep from  
2 doing it. You're going to cut up water sheds and state  
3 lines applicable to the Republican is a classic case. But  
4 on the other hand, it -- to me, it became a lot more  
5 practical to deal with water as an entity as differentiated  
6 from groundwater or surface water. If you think you  
7 recognize at the start that you simply were handling water,  
8 you weren't handling groundwater and surface water, you  
9 simply were managing your water, dang it, water is water.  
10 But I don't know if there's any damn way we can back up and  
11 redo it.

12 MR. BARR: Well, probably not.

13 DR. FISCHER: Even back up and redo our counties,  
14 you know. They just make no sense at all when you look at  
15 them.

16 MR. BARR: Doesn't seem to be very popular at the  
17 local level to advocate --

18 DR. FISCHER: No, people have an emotional  
19 attachment, you know. It didn't mean a dang thing to me.  
20 When we moved up to northeast Nebraska, we were in Thurston  
21 County but we went in the boundary between Thurston and  
22 Wayne and Dixon County all when we went to town, all of  
23 them, you know. And that just seemed so silly.

24 MR. BARR: Sure.

25 DR. FISCHER: We had to go all -- well, my brother

1 did, had to go all over Ponca. We went to Pender, you know,  
2 and then others went to Wayne. And so those counties just  
3 didn't make any sense then and they make even less sense  
4 now.

5 MR. BARR: Was there ever an issue with the  
6 reservation when you were there?

7 DR. FISCHER: No. They hadn't really established  
8 -- the reservations were autonomous, you know, governed  
9 themselves, which they didn't really do, but we played games  
10 with that, too. But the Indians haven't been given enough  
11 power. They can screw things up very bad. But, yeah, you  
12 know, Winnebago was, of course, the reservation, which is in  
13 Thurston County, and, of course, we didn't go very far  
14 south. Then you were in Omaha and you had Macy. And if you  
15 went north, although you didn't have a reservation up there  
16 at that time, you had the Poncas and so on. So they had  
17 kind of a screwed up system, too.

18 And, by the way, the Bureau of Indian Affairs did  
19 a miserable job of managing that Indian land. It was  
20 pitiful. It just shows how -- when we rented that Indian  
21 land, which we always did, and for all practical purposes in  
22 those days you just automatically -- the lease was renewed,  
23 cash rent. Well, then the -- I think it's different now.  
24 I'm sure it's different now. I haven't been close enough to  
25 it to follow it. But the Bureau of Indian Affairs had a

1 shift in management. I didn't follow it very closely. I  
2 wasn't any longer around there.

3 But you're probably aware that they decided that  
4 they were going to have basically bidding for lease on the  
5 Indian land. But the only problem was with that, back in  
6 those days, which is no longer true -- you know, my nephew  
7 farming up in northeast Nebraska, he farms land that is  
8 strung out over 20 miles, and it's no longer your neighbor.  
9 But it used to be that tract we had of Indian land, none of  
10 our neighbors were going to bid against us. I mean, that  
11 just wasn't the custom in those days. You just simply do  
12 it.

13 MR. BARR: Yeah, yeah.

14 DR. FISCHER: And so theoretically they were  
15 creating a market for leases on Indian land. In reality it  
16 didn't work in those days. And even after -- well, they  
17 didn't even pretend. For years we just automatically signed  
18 up these. But when they went through the rigamarole of  
19 making people bid to it, none of our neighbors were going to  
20 bid against us for that land. So we continued to cheat the  
21 Indians.

22 So you always have to deal with people and what  
23 people think. But that is all the more reason. If you can  
24 avoid it, you have a lock in the system that doesn't fit the  
25 world and that's the way we did with water law. We had one

1 water law for groundwater and another one for surface water  
2 and they simply didn't mesh. And, boy, it's hard to this  
3 day to do much about it. The federal government kind of  
4 intervened in that when they started dealing with the  
5 Republican River in Colorado, Nebraska and Kansas and so on.  
6 But they have plenty of problems there, too.

7 MR. BARR: Yeah. Well, is there anything else in  
8 the general natural resource area that you would like to  
9 comment on?

10 DR. FISCHER: Not that I can think of offhand.  
11 You recognize that I am retired not only from the University  
12 but also military and so I have had a lot of interests that  
13 aren't basically natural resources for a good many years.

14 MR. BARR: Sure, sure.

15 DR. FISCHER: Now I still get letters regularly  
16 from Clayton Yeutter. I talk to Doug Nelson down in Phoenix  
17 every so often. I have even visited him down there and he  
18 has visited me because his sister still lives in Lincoln.

19 MR. BARR: Okay.

20 DR. FISCHER: And now Norm, I never really got to  
21 know his wife. I just saw her in the paper yesterday that  
22 she is a juvenile judge, you know. But I never have any  
23 occasion to see her or talk to her. She is a very nice lady  
24 and I was exceeding fond of Norm Thorson. I think you're  
25 aware that toward the end of my tenure at the University I



1 did some teaching, joint teaching in the law school.

2 MR. BARR: Right.

3 DR. FISCHER: Primarily because of Dick  
4 Harnsberger.

5 MR. BARR: Yeah, yeah.

6 DR. FISCHER: Now I think the University did a  
7 good thing and I do believe that overall their service to  
8 the University and to the state has been positive. I think  
9 he has handled that about as well as he could. But anyway,  
10 that's life.

11 MR. BARR: Well, I don't want to overdo this, but  
12 I appreciate you taking some time and talking about some of  
13 these things. Is there any one last shot you want to make  
14 on anything or --

15 DR. FISCHER: No, I don't think so. I haven't --  
16 I guess I feel one modest satisfaction, mixed up with  
17 frustration, but I don't believe that I was guilty of  
18 attempting to take the state down a prim rose path, you  
19 know. I haven't had to -- too stubborn. I haven't had to  
20 eat many of the principles that I think I tried to live by  
21 when I was on the faculty, and that might just be ego  
22 talking. Undoubtedly there would be people, certainly Vince  
23 Driesen, if he were still alive, would be among them who  
24 thought I was wrong.

25 MR. BARR: Well, thank you very much.