

NRD ORAL HISTORY PROJECT

INTERVIEW:

MILVERN NOFFKE BY JIM BARR
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MR. BARR: This is Jim Barr, it is August 12, 2013 and I'm visiting with Mel Noffke near Hampton, Nebraska. Mel, would you like to start this off with a little bit about your background and that sort of thing, where you came from?

1 MR. NOFFKE: Sure, Jim. I grew up on a farm just
2 Northwest of Grand Island, Nebraska and I graduated from
3 Grand Island High School in 1950. At that time I was called
4 for taking a physical to go to the Army because the Korean
5 war was going on and I guess luckily for me, I had had a
6 injury on my left leg and so I flunked my physical. So then
7 for three years I worked on the farm at home and then I got
8 called again for a physical and I did pass. I volunteered
9 for going to a radio school and I went to micro-radio school
10 in New Jersey for six months and then I went over to Taiwan,
11 or Formosa as it was called at that time, with the Military
12 Assistance Advisory Group. I was there probably about a
13 year and a half, roughly. I came back and went to the
14 atomic bomb test. I went through about seven or eight
15 atomic bomb tests in Nevada. Luckily I went into the Army
16 early enough that I got in on the Korean War GI Bill. I
17 then enrolled at the University of Nebraska and graduated in
18 February of 1962, with a Bachelor of Science degree in
19 agriculture.

20 After leaving the University I then took a job

1 with the U.S. Department of Agriculture, Soil Conservation
2 Service and I was at Spalding, Nebraska, for about a year
3 and a half and then I went as a soil conservationist at
4 North Platte, Nebraska, for four years. Then after that, I
5 went to Holdrege, Nebraska, as district conservationist for
6 six years. While I was at Holdrege, I got involved a little
7 bit with Paul Fischbach's irrigation systems and working
8 with Bob Mulliner, primarily. I guess that was the
9 predecessor to the surge irrigation. Bob told me, "You know
10 there are some groundwater districts over at York, Nebraska.
11 They're looking for a manager." And he said, they asked me
12 to be their manager, but I would lose about \$60,000 in
13 retirement money if I took the job, so, I recommended you.
14 At that time Ted Regier was President of the Association of
15 Groundwater Districts. I was then hired and in the
16 meantime, my wife Betty had just graduated from Kearney with
17 a degree in home economics. Then we moved to York and after
18 a year she got a job teaching at Bradshaw High School.
19 That's basically 1973, when I went with the Groundwater
20 Districts in York.

21 MR. BARR: Just as kind of a side thing, that we
22 thought maybe about tying in a little bit with the proposed
23 Korean oral history project. Did you have any particular
24 experiences with the atomic tests that you would like
25 comment on?

1 MR. NOFFKE: Well, there was a situation where I
2 guess I feel like I'm lucky I'm here. We had gone through a
3 test and there was this real dark purple cloud coming toward
4 us and our normal procedure was that we -- what we were
5 doing, incidentally was to provide communications to ground
6 zero. Normally, we would get authority to take our
7 equipment down and get out of there. It didn't come. We
8 sat there and our Sargent wouldn't do anything on his own
9 without permission, so we sat there and sat there and then
10 all of a sudden here come a bunch of squad cars. There were
11 colonels and generals and I don't know what else were in
12 there and they said, "What are you guys doing here?" Then
13 our Sargent said, "Well, we haven't been given authority to
14 break up." Then they said, "How long will it take you?" We
15 said, "Fifteen minutes.", one guy said, "Double that.", next
16 guy said, "Triple that.", next guy said, "Jump in the car.".
17 So we got to ride with the brass back. That was my closest
18 call. If those guys hadn't been there, I probably
19 wouldn't be here.

20 MR. BARR: What would have happened? Was it the
21 explosion, or was it the --

22 MR. NOFFKE: The radiation cloud.

23 MR. BARR: Radiation cloud.

24 MR. NOFFKE: The other one was the smoky. We were
25 about 17 miles from ground zero on that one, but that's one

1 that had Marines in the trenches about two or three miles
2 from ground zero on that one and a lot of them got covered
3 up and I don't know what all happened there. There was even
4 a tornado in the mushroom cloud.

5 MR. BARR: Unless there's anything else, sorry for
6 diverging on that, but we have talked with so many people
7 where I've had other people volunteer some stuff. We had
8 another person who was even closer to one of those
9 explosions and he had to walk into the -- towards ground
10 zero. I think he was one of the earliest ones.

11 MR. NOFFKE: Yeah.

12 MR. BARR: Back to the Natural Resources
13 Districts. Do you remember much about the formation of the
14 Natural Resource Districts and any comments you had at the
15 time or anybody you worked with and the thoughts that they
16 might have had? You were probably with the Soil
17 Conservation Service at that point.

18 MR. NOFFKE: No, I think -- I can't say that I
19 really recall too much about the formation of it. I do
20 remember people talking that, they were scared of the
21 authority that these Natural Resources Districts would have.
22 Of course, I'm sure a lot of them were concerned about the
23 taxing powers they would have. On the other hand, I think
24 there were good thoughts about merging a lot of these
25 special purpose districts. I think their biggest question

1 was, which ones to put in and which ones not. At that time,
2 they didn't put the Soil Conservation Districts in there, as
3 I recall.

4 MR. BARR: You were in the Holdrege area maybe
5 about that time?

6 MR. NOFFKE: Yes.

7 MR. BARR: Of course, Tri-County was concerned
8 about how that was going to play out.

9 MR. NOFFKE: Yeah, with the irrigation district.

10 MR. BARR: I don't know if you remember anything
11 about that, in particular.

12 MR. NOFFKE: I think they had pretty good
13 lobbyists.

14 MR. BARR: Well said.

15 MR. NOFFKE: There was concern at that time, but
16 I'm sure --

17 MR. BARR: In fact, I'm sure it affected the
18 boundaries of the district and things like that out there.

19 MR. NOFFKE: The water district there in Holdrege
20 overlapped several different drainage areas so that entered
21 into it, too.

22 MR. BARR: They were kind of the exception to the
23 idea of drainage areas being in the district.

24 MR. NOFFKE: At that time the Central Nebraska
25 Public Power and Irrigation District was a pretty strong

1 organization. A lot stronger than what I think they are
2 now.

3 MR. BARR: Unless there's something else in that
4 area, I kind of like to have you go over your experiences in
5 the groundwater districts and how that played out.

6 MR. NOFFKE: My experience with the Soil
7 Conservation Service was working a lot with reuse pits,
8 also, the predecessor to surge irrigation with the Fischbach
9 systems. Probably one of the reasons I was hired by the
10 groundwater districts, was the fact that they were concerned
11 about all the runoff occurring and they wanted to stop the
12 excess irrigation and runoff going down the Mississippi
13 River. One of the things the groundwater districts had
14 started doing, they were working with the U. S. Geological
15 Survey and were doing a little bit of measuring. Nobody had
16 a handle on what was being used for irrigation. I remember
17 one of the board members from down in Clay County, they
18 measured his water and he had put on 60 inches and he had
19 half mile runs and these were some of the things that we
20 were really concerned about. I think they wanted to promote
21 irrigation reuse systems, but after a year probably, we
22 started looking at the possibility of needing to go to
23 allocation. We didn't know when, but we thought that this
24 might be a need for the future. So, we established in 1975
25 an irrigation management program called the Benedict

1 Project. I have a, I guess this is my one and only
2 literature, but it's a pretty lengthy report of the whole
3 project and there's a lot of really good information in
4 here, as far as I'm concerned. Looking back at it, one of
5 the recommendations in there was irrigation efficiency, and
6 we did mention center pivots. There's probably been more
7 irrigation efficiency achieved because of the center pivot
8 irrigation systems.

9 MR. BARR: Thank you for contributing that to the
10 cause, here.

11 MR. NOFFKE: Luckily, I had a couple of extra
12 copies.

13 MR. BARR: What sort of data on groundwater
14 availability and use was available when you started and as
15 you progressed through the job? What, if anything changed?

16 MR. NOFFKE: There was very minimal, as far as I
17 can remember, very minimal measurement being done. They,
18 U.S.G.S. had put out a few water meters here and there and
19 looking back I even question the accuracy of the meters that
20 were put on, how they were put on, whether they really had
21 been calibrated properly. These were all things that we
22 looked into and found out later on that some of the
23 measurement we did earlier may not have been correct, we
24 installed water meters in the Benedict Project. There were
25 three different kinds; there was a small Rockwell one and

1 there were McCrometer and Sparling. We found out that the
2 Sparling's and the McCrometer's had been calibrated pretty
3 much properly, where the Rockwell's they had been calibrated
4 for iron pipe size and were put in OD pipe size and were
5 probably 15 percent off, at least, maybe 18. These were
6 things that were happening, so how could you judge with what
7 was put on? Did the guy actually put on the 60 inches down
8 there? We don't know for sure. But, he still put on a lot.

9 MR. BARR: As you continued on the job, what sort
10 of changes in data collection or --

11 MR. NOFFKE: Especially with the groundwater with
12 the Benedict Project. That was a very detailed, very, very
13 detailed study. We established more points to make waer
14 level decline measurements and measurements were taken
15 Spring and Fall, so that way you could get an idea of the
16 recharge between the Summer use and Spring recovery.

17 Something else we did with all the Groundwater
18 Districts, including those which weren't tied to the
19 Benedict Project, but we put out moisture blocks, soil
20 moisture blocks to determine moisture levels in the root
21 profile. We put the moisture blocks at 12 inches, 18 inches
22 and 24 inches to measure what the soil moisture was at those
23 different depths. Then irrigation recommendations were made
24 on the readings. There were selected fields in the
25 different groundwater districts. Bob Mulliner was pretty

1 much in charge of this and we had students that would go out
2 and read the soil moisture blocks and then Bob would come up
3 with the recommendations on what to irrigate or how much.

4 MR. BARR: Was this just in the Benedict Project?
5 Or was it throughout the five county districts?

6 MR. NOFFKE: No, this was more around different
7 counties in addition to all of the Benedict Project fields.

8 MR. BARR: They were getting measurements in all
9 of the counties on declines in the soil moisture?

10 MR. NOFFKE: Yeah, not a whole lot in each county.

11 MR. BARR: A few representatives in each county?

12 MR. NOFFKE: Yeah. One of the interesting things
13 is, one of the students that was reading the moisture blocks
14 didn't like the cornstalks around the moisture blocks, so he
15 chopped them off. It is just an interesting sidelight, we
16 couldn't figure out why the moisture blocks weren't dropping
17 and so Bob Mulliner tracked this down and went out there and
18 looked and found out that this kid had chopped the corn
19 stalks down. Boy, I'll tell you, the University of Nebraska
20 was researching their insurance policy real quick after that
21 one. Luckily, most farmers know better when something isn't
22 right. Luckily, nothing happened there. This is just one
23 of the interesting sidelights.

24 MR. BARR: What do you think were some of the
25 major -- you kind of alluded to the accomplishments of the

1 Groundwater Association of the Districts. Would you
2 summarize some of the achievements that you saw over the
3 period of time you were there?

4 MR. NOFFKE: First of all, we created an awareness
5 of how much to irrigate and how often. The Benedict
6 Project, our goal was 15 inches and we achieved that by
7 actually -- in our fields that we set up for the test, every
8 farmer in that area -- this was an area it's well explained
9 in the book here. They would try to irrigate according to
10 the recommendations of Bob Mulliner, irrigation engineer
11 from Hastings. We achieved that by using 13.2 inches. We
12 put out rain gauges. We put out five different rain gauges
13 around that area just to get an idea of the rainfall. I
14 know there are places in there where -- there is one
15 recording in there where Bob wrote this farmer and he says,
16 "You need to get to watering. You're playing catch-up,
17 right now, so we don't want you to get too far behind."

18 One of the primary things is awareness of how much
19 to irrigate. Secondly, length of runs is important when you
20 had a lot -- this is almost 40 years ago. We had a lot of
21 quarter mile runs, which we still probably have some of
22 that, but most of those fields now have pivots on them. By
23 surge irrigation, by center pivot irrigation and whatever.

24 MR. BARR: You kind of encourage some of these
25 alternative methods. Probably when you started there were

1 still ditch and tube. Was gated pipe already used?

2 MR. NOFFKE: Pretty much all gated --

3 MR. BARR: When we started, of course we had ditch
4 and tubes. I remember that second summer when the
5 electrical system was overloaded, by brother and I stayed
6 out on the porch and about every twenty minutes, or so, we'd
7 have to go start the engine again and reset all those tubes.

8 What kind of relationship did you have with the
9 Natural Resource District while you were with the
10 Groundwater District?

11 MR. NOFFKE: I think I probably had as good of
12 relationship as you could expect. There were several
13 instances of where, for example, one of the board members
14 down in Clay County was, and Clay County has some areas
15 where there is -- where they can't get water. So there was
16 some transportation several miles of water, this one board
17 member would just pump into the road ditch and run it
18 several miles, maybe a mile and a half to another field and
19 then pump out and irrigate. There was a little bit of
20 concern by some of the board member in the other counties
21 whether he really should be doing something like this.
22 Irrigation run off was one of the situations where we
23 watched really closely and this doesn't pertain to the
24 Benedict Project, but this pertains to the Groundwater
25 Districts. I believe there were some actions filed against

1 several irrigators because of what appeared to be very
2 excessive run off.

3 MR. BARR: At some point, now I can't remember
4 when exactly, the groundwater districts merged into the
5 Natural Resource Districts. Were you involved at all in
6 that or leading up to it?

7 MR. NOFFKE: Kind of leading up to it, in fact I
8 had, I can't remember how long I had been with the
9 Groundwater Districts and maybe only two years or two and a
10 half years and I think there was talk about the merger. At
11 that time, I believe Floyd Marsh was still the manager at
12 York. There was a question in my mind, will Marsh be there
13 if we got merged with the Natural Resources District, maybe
14 I would become the manager, I mean that was a thought.
15 Also, at the same time, Kansas for forming groundwater
16 conservation districts and they have five that were being
17 formed. I interviewed at two different locations and
18 finally accepted a job down at St. John, Kansas with the
19 groundwater management district there. Several things
20 happened that I changed my mind at the last minute and then
21 stayed a little longer with the Groundwater Districts. At
22 that time, I was already getting vibrations from this meter
23 company in California that was going to put a plant in
24 Aurora. It was pretty obvious that I was going to get that
25 job and that's exactly what happened. I stayed another year

1 or two with the Groundwater Districts and ended up plant
2 manager with McCrometer in Aurora, Nebraska in 1977.

3 MR. BARR: That was kind of a little bit of an
4 extension on some of the work you'd done ahead of time. Do
5 you want to talk a little bit about your experiences at the
6 plant? You were there a long time, weren't you?

7 MR. NOFFKE: In 1977, or somewhere in that
8 neighborhood, when Carter was President, there were a lot of
9 monies taken away from the Western irrigation districts, the
10 water districts and there was a lot of backlash on that. So
11 they passed an emergency act of some sort, just made some
12 federal monies available. Nebraska decided that they would
13 cost share on flow meters. So, McCrometer, in California,
14 got so many orders they didn't know what to do, they
15 couldn't even keep up. All of a sudden they were running
16 three shifts a day and then they decided to put this plant
17 in at Aurora and asked me to manage that. There were some -
18 - because of the vastness of how this all developed, there
19 were probably some poor calibrations on some of the
20 McCrometer meters too, as far as that goes. Later on we
21 tried to correct all that. It was just one of those things,
22 you know. That's what happens if you try to do too much too
23 fast.

24 I recall talking to one of the NRD board members
25 here just the other night and he said, "Well, if we drop in

1 next year, can you furnish so many thousands of meters here?
2 We're probably at 40 percent metered now." That's
3 ridiculous to decide to have everything all at once. You
4 have to phase into this thing, otherwise you lose control of
5 quality. Installation is just as important as the
6 calibration of meters to start out with.

7 MR. BARR: Was most of your market area around the
8 center part of the country?

9 MR. NOFFKE: Actually, from Canada to Mexico.

10 MR. BARR: Well, that's center, I guess.

11 MR. NOFFKE: We ended up with 17 states that we
12 represented with McCrometers. Of course, the majority of
13 the metering business was probably Nebraska, Kansas and
14 Colorado. Texas was a big state, but Texas is a little
15 different than anybody else. Every time the state makes a
16 regulation, they file a lawsuit and they stop it. It's just
17 one of those things. It's a real interesting work for me,
18 working with these different states because each state has
19 different laws, each state has different water problems and
20 so that's been really interesting. Naturally, I got to do a
21 lot of traveling around these states, not always the most
22 fun.

23 MR. BARR: One of the questions that we've had
24 over the years was, Nebraska developed their Natural
25 Resource Districts and they saw that it was generally a good

1 idea, but it has generally not caught on anywhere else.
2 You've been kind of involved in a lot of these states and I
3 guess, two questions; one, how does this compare with how
4 somewhat similar programs are handled in other states and;
5 two, why might it have happened in Nebraska and not
6 elsewhere?

7 MR. NOFFKE: I don't know. I guess I can see
8 problems on both sides, but the Natural Resources Districts
9 are locally run and a lot of times the local people refuse
10 to do something. It's hard for these board members to make
11 some of these tough decisions when their neighbor doesn't
12 like them, if they make that decision. That's probably the
13 down side to the Natural Resources District. In where other
14 states, they still have the Special Purpose Districts, well
15 that's sort of local, too and hey still have the same
16 problem, but on the other hand, a lot of those the state
17 still has the trump card. I'm to the point to where I don't
18 follow that real closely, anymore, so I don't know how
19 things are going.

20 MR. BARR: Do you have any, just general thoughts
21 on how the Natural Resource District is developed and
22 performed over the years?

23 MR. NOFFKE: I think they've -- I don't know,
24 let's take the York District, for example. It seems like
25 they're awfully overloaded with technicians, do they need

1 all those technicians? Is it all that important? What are
2 they all doing? I guess sometimes I have questions on that.
3 But I don't follow it that closely so that I really know
4 exactly what they are doing.

5 One of the other concerns I have right now with
6 the NRD at York is the fact that they farm out this meter
7 repair business and I don't know whether this would
8 be -- but, one of the guys they hired was a former employee
9 of mine and I don't -- I question whether he's doing stuff
10 that needs to be done. If he's got full reign of whether a
11 meter needs repaired, or not, 'Oh, let's repair this thing,
12 that's more money for me.' This is a concern of mine
13 because they repaired one of my meters, well I wish I would
14 have checked it ahead of time, I didn't. They just come on
15 the place, took the meter and all of a sudden here they're
16 one day, they're working on it. I don't know whether it
17 needed repair, or not. I question whether it did. I got
18 the meter repaired, I guess the NRD paid for it, why -- you
19 see what I'm getting at here?

20 MR. BARR: Yeah.

21 MR. NOFFKE: It's something that they should look
22 at, anyway.

23 MR. BARR: Do you have any other things that you
24 would like to contribute to this? This is just kind of a
25 general discussion at this point.

1 MR. NOFFKE: Like I say, I'm getting old, my
2 memory's getting bad and -- but it's been an interesting 20,
3 30 years for me, 40 years I guess now. It will be 40 years,
4 this year, since I started with the Groundwater Districts,
5 next month. Time flies when you're having fun.

6 MR. BARR: Unless there's something else, I really
7 thank you for doing this.

8 MR. NOFFKE: I don't know as I -- I hope I added
9 something.

10 MR. BARR: You've got a perspective that different
11 from most people and I think it's been useful.

12 MR. NOFFKE: Of course, Larry Moore, you know.

13 MR. BARR: Larry's one of my potential
14 interviewees.

15 MR. NOFFKE: He was a fraternity brother of mine.

16 MR. BARR: Is that right?

17 MR. NOFFKE: Yeah.

18 MR. BARR: Okay. He's on the list to do him, we
19 haven't done him, yet.

20 MR. NOFFKE: You'll get a load there.

21 MR. BARR: Actually, I was getting ready to call
22 him and I found out why he didn't answer. They went up to
23 Alaska.

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