

Perry Bunderson
Moore Ditch
January 9, 2001

Interviewer: Kathleen Truman
Present: Dori Beals (Video Camera)
Location: On site Moore, Utah

Tape #1 Side A

Perry: Yea, you need a level and a ditcher, a couple pieces of equipment up there, a blade. He was actually going to do some dry land farming up there I guess. There's quite an opening up on top of there all surrounded by trees. When you get caught up on all your gaddin' you ought to walk up on there sometime. There is probably a herd of elk up there right now.

Kathleen: Is that where elk would normally winter up there on those benches?

Perry: Um...probably pre-settlement times. I've only heard about elk coming down the muddy in the early times. I never seen an elk out to Moore til they started coming down a few years ago by the droves. Yea, this was all be elk winter range I suppose and deer.

Kathleen: Well when did they first come out to Moore?

Perry: Seven, eight, or nine years ago. Their numbers just kept building and then we got 4-wheeled chasing them around not just people on horses and foot and they started bailing off that mountain. This starts the Moore canal, but the water is diverted out of the creek from both the Emery and Moore canal and on up further. I guess we just as well start here. I am starting to get the two hour idea.

Kathleen: What we are, it is January 9, 2001 and we are here interviewing Perry Bunderson about the beginning of the irrigation off the Muddy Canal, the Muddy River. And I am Kathleen Truman and I have Dori Beals here working the video camera.

Perry: Fine with me as long as I do not have to say anything. This is the structure that actually brought the water from the Muddy into the canal. This first diversion carries all the water for Moore and Emery. Down stream a little farther we'll see where that water is divided and some goes to Moore and some goes to Emery. You can see in the background down the canal a little ways there another concrete structure. That's used to spill the gravel and sand after a flood or in the spring when the water is high with gravel and sand and debris. I have no idea when this was built for sure. It looks like it has been repaired a few times, I suspect that this was probably a product of the 30's . . . 20's maybe. If you want to save your film for a minute we can look for a date.

Kathleen: Is this a good place to catch that?

Perry: Yea, if you can pick up the old ditch line on the side of the hill there. Just below us here there was an orchard at one time. There is really nothing there to show that it existed, but there was an orchard down there just a quarter of a mile. I am not sure how big that ditch was. It may have been used even after this was the main diversion. Anyway certainly water was taken out of the muddy higher than this structure.

Kathleen: (inaudible)

Perry: I know for sure the first diversion was made out of rock. You can tell the difference in the concrete in this newer spillway compared to the older construction. The iron rails are to keep trees and so on from going into the canal during big floods.

Kathleen: Now this is the source of Emery's culinary water as well as its irrigation water, isn't it?

Perry: Yes, as well as Moore's.

Kathleen: As well as Moore, but going off in that direction. So does it flow all the time, I mean we can hear it flowing now, but does it ever freeze all the way through?

Perry: Only if there is a break or something in the canal. Yea this flows all winter long through the Emery canal. We shut ours off in the winter sometimes to help with the seepage problem what we get out of the canal. It's out of the canal right now, not necessary because of the seepage, we are still doing work on the project.

Kathleen: So this is the place that it diverts and takes what 2/3 or 3/4 of the water to Emery? How much of the water goes to Emery?

Perry: Well, that is where we are heading now.

Kathleen: Oh, this isn't where it diverts to Emery?

Perry: No, no, that diverts water for Emery and Moore. Then down here a little ways it is divided it goes to Emery and some goes to Moore. This makes more sense you can see it now. Get right over here and look in before we are all through here. We are about a half, maybe you can't even hear me cause of the water running. We are about a half mile down stream from the first structure up there. Prior to this divider right here, up stream, the stream contains all the water for Emery and Moore. In 1954, I think it was, Emery and Moore were consolidated and the Muddy Creek Irrigation Company was born. Moore had some water and some reservoirs on the mountain and Emery had most of the water. But anyway they divided it up and decided that Moore would get 20% and Emery would get 80%, so that is how it is divided here. After that a lot of us took shares, bought shares from Emery and took them to Moore. There is another head gate on down a little farther where those shares are divided and sent to Moore also. If you want to come over here Dorie you can show the people a close up of how this water is divided. This is the 20% side and that side goes to Emery. That side goes to Moore.

Kathleen: Now you talk about this was done in 1954, but there was irrigation out to Moore starting turn of the century.

Perry: Oh, yea, but we are talking about when the Muddy Creek Irrigation Company was formed which is the time when Moore canal people and Emery canal people, the Emery farmers and Moore farmers got together and consolidate. Made this Muddy Creek Irrigation Company. And then it made the legal description of the water division more practical and understandable and easier to manage.

Kathleen: So was this built in 1954 when that agreement was made?

Perry: Did I say '54, I think it was '64. Yeah, no I am not sure now. I should have written.....

Kathleen: Okay do you know how it was diverted between Emery and Moore before then? Prior to that?

Perry: Prior to that? I think it was something similar, I am sure it was.

Kathleen: I mean just physically, the physical how you channel off Emery's water and how you channel off Moore's water. They must have had it, well we'll have to get Paul Crawford out.

Perry: Yes you will. This became a permanent fixture when the two companies were consolidated. I am sure it was something similar it may have even been the same structure prior to that. This has been here as long as I can remember. Get back from there!! farther than that!! farther than that!! here, right here where I can hold on to you. She is back there about 50 yards, anyway the water that comes out of that diversion up there, the divider, goes back into the Muddy Creek then it is re-diverted here into the Moore canal. That way during high water we can pick up excess water that Emery's canal can't handle and we have a big canal full of water. I think this thing has a date on it, do you want to.....?

Kathleen: No, just a minute now. It is divided up there 80/20 and then what happens?

Perry: Then the 20% water goes back into the creek.

Kathleen: Oh into the creek. The creek which was still running parallel down away from the first diversion of the water.

Perry: Right. So in the spring time when there is water flowing over the first one, back into the creek, where we were at, it ends up down here and we can take as much of that as we can handle.

Kathleen: Oh, Okay. Now what is the division here as opposed to how much Moore can take as opposed to how much continues down the Muddy? Is there a rule?

Perry: Oh yeah. I think the re-adjudication process took place in the mid or late 60's. They

came and measured the water that the canal could hold and kind of did some calculations. Moore was re-adjudicated for 60 second foot of water and that is about all our canal can hold. So we can take up to that amount. Over and above that though remember that we still have shares coming out of the Emery series coming back into here. So theoretically we could probably take more than 60 foot of water out of here.

Kathleen: That is quite a bit.

Perry: Yeah, this was the proposed dam site when Mountain Fuel was thinking about building a reservoir up here and having the coal gasification plant down there by Castle Valley Ranch. They did their core drilling, those roads were used to get the drills up on the side hill to take samples of the materials in the sides. The dam would have covered nearly everything between here and where we started up there.

Kathleen: It would have been covered in water?

Perry: Yeah.

(later)

Perry: Yeah. Okay this is where we wash more of the sand and gravel that comes down the creek in early spring. The gate you can barely see down there in the bottom of the old sand gate, probably six feet below normal canal level. And it sluices the mud and the sand and whatever out and we open that and just use the water to wash the sand out. They built a new one cause this one about eroded away in the bottom in the channel where the water goes through to go on out. The metal gate's shot and it is not real safe with that handyman jack to raise them down. I think I am the only one living that knows how to do it anyway. But anyway that is our new sand washing facility there. We don't have our new head gates here yet to put on it but, the same purpose, just a new face.

Kathleen: Okay so then this is the ditch, the Moore ditch here and when you divert it, that diverts over and joins up with the Muddy again?

Perry: Yeah, this in modern terms, none of us knew what a sluice box was until we got started on this project. But most people call them sluicing structures with just amounts to sucking sediment off the bottom of the ditch. I was telling your mom, Dori, that you look back that way, there is the normal canal level bottom, the ice has fallen onto the bottom of the canal there. Look back this way, this has all been washed out and in the springtime, that big "Grand Canyon" will fill up level and the canal will all be the same level on the bottom. This happens once a day, nearly every day when the water is muddy. We come up, we open that for an hour, wash all that mud out so as the water passes by it drops a lot of the heavy sand and stuff out so it doesn't end filling the canal up down farther.

Kathleen: Do you think that was an old mill?

Perry: I think so. I used to think it was an merely a sluice box because of the low spot in it but I was reading in that history book that somebody up here had a mill. I really don't know but it is kind of interesting.

Kathleen: Now is this an old road line?

Perry: No that is the old ditch line. The same one I showed you way up there.

Kathleen: Oh, okay.

Perry: It is so bad in a flood after a thunderstorm. I mean the water comes down here and it will be running and covering this road all the way to the bridge. There is a huge pipe there and it can't carry it all. I bet it was just to clean the canal out, or that ditch out, after these floods. They probably just opened that.

Kathleen: Okay, now where are we now?

Perry: Where are we? Ah, at one time the old canal came on this side of that cut and this is merely another sluicing structure. As I was telling you up there the really bad floods come down that canyon. Sometimes they still fill our canal full. I thought that thing had a date on it but I can put you in touch with somebody that, Ray's daughter.....

Kathleen: Ray Larsen, from Ferron?

Perry: Yeah, he did a lot of work on this kind of stuff out here in fact I think he built that old house down there. You really need to talk to his daughter because there is a lot of history behind Ray Larsen.

Kathleen: So up here to the left...so this is where the old canal came?

Perry: If you probably can step up a little higher, you can see the real old ditch line and then the current one and then this one, I am sure it was because of that cut there and they avoided going on the other side of this whole hill. So the canal went right through here, but this isn't much different in elevation as where it is at now. I think this is just one small section that was in a different place that where it is at now.

Kathleen: So there has really been a lot of changes.

Perry: Yeah. The first time they built the Moore canal, it didn't have any cuts. They just went wherever the, no cuts or fills. I'll show you a couple of big fills. It followed the hills, the contour.....

Kathleen: Followed the contour of the hills, huh?

Perry: I cleaned this last spring with a big track hoe, I mean it was a gigantic thing and that

is about twice the size has we have had in the past for the canal. The Castle Valley was talking about bringing more water out to Moore and we had that big piece of machine here so I decided to clean the heck out of it. From here that way anyway, we needed a bigger better bank for a road to get equipment in and out.

Kathleen: So this is just still where the ditch is, this isn't where you have started to put any pipe in?

Perry: Nope. That is a piece of the Moore canal that still lives.

Kathleen: Well, we have seen that there is lots of different tracks? but this is pretty much....

Perry: This is it in it's permanent place now. We used to clean this with a big ditcher. We would have a cat on either side of the canal, excuse me 2 cats on the same side, it was just one big ditcher that laid the mud out. I'll show you that old ditcher when we get back, when we get through here, if you will remind me.

Kathleen: Okay, and then what you have got is what is called L.C.'s property over there?

Perry: No, that is the Jacobson's. J.C. Jacobson's. The Jacobson's lived in that little log house when I was a kid. I think they lived up there til around, I don't know, '55 or somewhere around there.

Kathleen: What we have along here is the ditch but then you have dug it wider and deeper and piled up everything over here and built the road, from now on there is a that road parallels out?

Perry: There always has been a road here but some places it was so narrow that if you didn't know exactly where to drive and you would drop in a big hole or you would go in the canal. That was prior to starting this project.

Kathleen: When you say starting this project, will you tell us what project this is?

Perry: This is called the Moore Group project. It is just....it is part of the western states salinity program and Bureau of Reclamation takes care of the off farm like the canal. And we were granted the money to put a lot of this canal in pipe. The canal used to be named the Independent canal but every body refers to it as the Moore canal. From the canal going into this pond, we call this the Hinkins pond because there will be a pipeline coming from it and going down to some of the Hinkins property, the old J.C. property. And they are planning on putting a pivot in down there that will be run by a generator, I guess.

Kathleen: So you want this other side Doris?

Perry: Well stop right up here. There is another one of those spots where there is a little squiggle in the canal. Canal used to come through that cut, right where the sunshine goes

right up over there. And where this pond sits there was a canal bank that was completely removed, the old canal bank and of course behind the trees there, there is the existing canal. We will be able to divert water out of the canal into this big pond when the water is really bad with silt so we can get rid of some more of it before it goes into the pipeline. Once it goes into the pipeline, that it, that is the water we get. And if it is too sandy, or too muddy, it wears out the sprinklers and can even cover the crops with mud to the extent that it affects the growth.

Kathleen: So do you have an estimation how long this pond is going to last before it starts silting up, or do you have a plan to clean it out?

Perry: I think this pond here will probably last 10 years and then whether we clean it or just move down farther and build another one, we'll have to have a look at it when the time comes. If the pond is deep that's full of silt, it will take years to dry out before you can clean it. You can breach the dam, you know, if it drains or something through it, drain the water out of that muck. But it would take years to dry that thing out before you could clean it. A couple of years. The water can be in over there and goes back into the canal here. We'll have a little structure up there so we can divert how ever much is needed in to here and clean water will go back to the canal right there. Oh and by the way, in the background, you can see the old ditch line again.

Perry: If I leave that, running does that charge your battery?

Dori: Yeah,

Perry: Then ladies and gentlemen, is where the pipeline starts.

Kathleen: Take your lens cap off.....we're all getting a little tired here. Oh, this is where the pipeline starts?

Perry: This is where the pipeline starts. We have one last sluice structure right there. You can see that concrete gate. And then from here the water will go into one or all these four these pipes or we have a line going back into the small pond and back into this bigger pond and that will help the fluctuation in the flow. During the day and the night there is a lot of difference in how big the stream is in the springtime and early summer. It will stabilize it a little bit and let water run back up into these ponds and will help stabilize the water flow. Now just to prove that I am an environmentalist, I told them not to take that tree out. And there it sits. The ole eagles can sit up there and pluck my fish out of this pond.

Kathleen: I was just thinking, this is a wonderful wildlife viewing area. You have just created a wonderful thing here.

Perry: The trouble with planting fish in this one is that it's not made to stay deep. It will go up and down. When we need the water, there will be a little bit left in the bottom, but I don't know if it will be enough for the fish to survive in.

Kathleen: No, this

Ferry: It was once an historic accomplishment can you hold those pictures out there, can she see those? That picture tells it all. They used dynamite on the side you can see the thickness in those layers of rock. We've had a real struggle through this whole thing. We have had different problems crop up because this has been kind of a unique situation. Most irrigation companies take their water out of a reservoir, it's controlled, the flows controlled and all that. Our engineers would get lost a time or two, this is a screen box, what we call our screen box, there are two huge screens sitting down inside there and the water passes through it and it screens out any trash so we don't get them in our sprinklers. You can't sprinkle trash, you can only sprinkle water. Anyways, I was told that we would be able to back flush those screens to clean them and we wouldn't have to clean them by hand. Well, I was busy doing other things and I just let them build this thing and when they got through to back flush those huge screens it has a 16 inch pipe. And you couldn't, I mean, well, without going into a lot of detail that was ridiculous. So we come back and cut 30 inch holes, put digs and now we have got to go under all these existing pipe because it just wasn't engineered with everything in mind to start with. It wasn't engineered right.

Anyway this is the big pipe there goes back into another big pond here. From this box on down to the end of the project, the end of the pipe that replaces the canal, there's two 48 inch pipes. That is a 48 inch pipe there. We have a 30, two 36's and another 30 that goes from here up to that other box we came from. We got to here and they said, "Oh, we can't produce the pipe fast enough for ya", and so we had a conference and they had this 30 and 36 already made and so we adapted to that. It took nearly twice as much time to install this pipe than it did the big pipe. It was a big slower downer.

Anyway, you can get our other little pond in?

Kathleen: So where does the water for this pond come from?

Ferry: Okay, it comes through that big pipe you can see sticking this side. It enters the pond right there, can't see the pipe, you can see where it dumps in. The top of this box is the same elevation as the first box we went to. So we can back water up as high as that box and the water will be the same height in this pond.

Kathleen: You already have willows or was this part of the ditch bank or what is happening?

Ferry: Ah, these are probably from existing roots, or even little pieces of willow. Willow did cover this corner right here, part of what we call the "Big Fill".

Kathleen: Oh this is the Big Fill. Can you tell us what the Big Fill is?

Ferry: Yes I can. This drainage originally was looking down off that way. It is really quite deep going through here and they had to build a dike, a berm, a road, whatever to get this water across this big wash. So they did and they just let it fill in over the years the mud and stuff that had washed off the hills filled in behind the canal and it all filled in level. Went over here and dug off of that side, widened it and filled in the canal mad a road out of it and then

we came back and started digging for the pipe.

Kathleen: Well....

Perry: The end of the pipe portion that replaces the Moore canal top of this structure is the same elevation as the other structure, it would build up that much pressure to here, going off, call this the manifold box, go off with different lines going different directions. These two will be feeding the Castle Valley Ranch. The next two, well, let's see, the two bigger ones actually three of them I guess, will by pass the pump station, you can see it in just a minute when we get up a little higher. Another line will go to the pump station. Water will be pumped for the area that is to high in elevation to be sprinkled with gravity out of here. If you want to walk right up there you can see where the Moore canal, old Moore canal there compare it's size and everything and get a glimpse of it, how it has been and how it still is. Big head gate coming into this box we can turn the water into the canal which we will have to do this spring because we aren't set up for sprinklers on a lot of it. We won't be pumping the upper country, so all the upper country will have to be watered out of the canal again. We can use the pipeline some what, but they will still be using the canal this year. The concrete part of this, the forming and pouring of this box was about \$60,000 and the pipe, I am not sure how much it cost. But the concrete itself, the building of the forms for the pouring was \$60,000.00.

Kathleen: Just for this one box here and then you have the other boxes on up above. So how much was the whole project?

Perry: We were allocated 4.3 million dollars for everything. That included a million point two for above ground for sprinklers on the farms and everything. We have put in, we have like 24 miles, I think of underground pipe on the farms, on farm sites, the pipe that replaces the canal Kathleen: And is there any idea when you are going to get that in. What is it NRCF money to do the above ground?

Perry: Yeah, NRCS does the planning. EQIP program is where the funds come through. There is a project in Beaver that is number one in the state this year and all the funds will be sent there. Moore is number two on the state list, but they have a local work group that prioritizes, makes recommendations, we sit last on their list this year, sixth out of six. I don't know what will happen next year. Rightfully, we should be getting some money to get started. But I am not sure we will make it for the next year, maybe the next.

End of Interview.