George Varra Interview
Cache la Poudre Oral History Project
Fort Collins, Colorado
March 6, 2003

Sabra Maas (**SM**): Well, now it's going. All right, well how about we just go ahead and keep going from where we were and then we'll backtrack just a bit.
George Varra (**GV**): Ok.
SM: Uh, phone calls and drought situations.
GV: Ok, yeah. The last three years, 2000, 2001, 2002 have been the driest three years since the '50s. When I was cutting ditches in water year 2000, these were cuts that haven't been made since 1977. So I was getting a lot of phone calls from individuals questioning why I was cutting their decrees, why they weren't getting water down their ditch, they'd always gotten water, and so I spent water year 2000 talking on the phone a lot to various ditches that I had cut. 2001 was just kind of a follow-up, 2002 I was making cuts that I'd made in 2000, and so the phone calls were not as intense as they were in 2000. I got more calls in 2002 just asking what is the situation? When am I going to be able to get back on? It there a chance that I can get my ditch back on? How much water can I take if I can get my ditch back on? And so that's kind of the phone call situation.
SM: Now, if it's a personal farm, and the water's kind of…it's trickled down to practically nothing for their ditch, even though perhaps someone else has rights to water, if that farm is going to go down because it doesn't get any water, does that change the situation at all, or do you have to pretty much follow the letter of the law?
GV: Well, you have to follow the letter of the decrees. You can't feel sorry for them because they've got a farm that's kind of burning up, but at the same time they're not entitled to that water, but yet the next ditch down is entitled to it. So you really can't cut much slack. If a ditch downstream is entitled to the water, and they're calling for it, you've got to get them their water.
SM: Ok. And how difficult is that, to tell…
GV: Sometimes it can be difficult because you might have personal knowledge of an individual who needs another five or ten days of water to get that crop in, but legally the other ditch downstream, if they're short, you have no options. You've got to get the next ditch down that is entitled to the water, you've got to get them their water. So you can't play favorites.
SM: Now, has anybody ever approached you with a bribe.
GV: No.
SM: No, never?
GV: That's the one thing they never have.
SM: Well that's good. [Laughs].
GV: One thing on the ditch system that you'll run into is the ditches are run by superintendents. The superintendents look after the users, but at the same time, they know what the river commissioner has to do, and when the river commissioner tells them to do something they do it. They really have no vested interest, per se, they don't have a farm on the system, they're usually hired by the company to run this ditch, and then they just basically take their orders from the river commissioner, which is me, when I tell them to cut off, they cut off.
SM: All right. All right, so let's backtrack a little bit.
GV: Sure.
SM: All right, so you were born in 1947, correct?
GV: Yes.
SM: And you were a water commissioner for Boulder for one year.

GV: Yes.
SM: And a water commissioner for Fort Collins for three years.
GV: Yes.
SM: And then…I forget how long you were a farmer.
GV: Well, Dad was born and raised here in Fort Collins, and I was born and raised on a farm, up until 1987 when we sold the cows on the government buyout.
SM: All right. And then 1977 was the dry year that you remember, and you bought the water sprinkler from Longmont in order to…
GV: In order to keep the crops growing, otherwise we wouldn't have had a crop that year.
SM: Again, why don't you go ahead and go over the broad umbrella of what a water commissioner does?
GV: Ok, water commissioner, his main responsibility is to deliver the water off the Poudre River to the entities that are decreed and entitled to it. Also maintain an accounting of all the water, where it went to during that particular water year.
SM: And…and then, the only memories as the childhood aspects of the Cache la Poudre was hearing the water commissioner in the morning, and then…now, did you ever have to go down with the supervisor and check out the ditches?
GV: No, never did.
SM: You were just involved with the actual ditches on your…
GV: Yes, I would go up to the head gate of our ditch, I would just check and make sure that I was getting my fair share, what I was entitled to, and so I never followed the ditch back up to the Poudre River. Our particular ditch, and other ditches that come off the Poudre River have other ditches that go to what we call laterals, that go to the various farmers.
SM: All right. And when do you remember that the droughts in 1977 ending?
GV: It was just one year.
SM: Just one year?
GV: As I remember, we were growing newly seeded alfalfa and corn at that time, and that we'd just gotten it in, we got a little rain to bring the alfalfa up, and we had no more rain the rest of the year until the first of August. The snowpack in the Poudre basin was very low, and the water that the Poudre River had available to the various users was very low. The water on the Poudre basin is supplied by the snowpack, so whatever the snowpack is the first of May is going to determine how much water the Poudre River is going to deliver in any particular year. To give you an example, in 2000 we had a 78% snowpack, 2001 we had a 74% snowpack, in 2002 we had a 30% snowpack. And as soon as everybody knew we had a 30% snowpack, they have a real good idea that there's not going to be much water. Then what becomes critical at that point is how much rain you're going to get during that period of time. In 2002 we had no rain, so besides being a low snowpack, we didn't have any rain to help out the Poudre River. So that was a double hit by most of the users. When you have no rain you rely on your reservoirs and your river a little more. That's your only source of water. And so, I guess as far as '77…it just lasted one year, the following year it was a regular normal year.
SM: So what does it look like this year? Is it going to be…?
GV: It doesn't look too bad. As a river commissioner, we go up and do snow surveys. February 1, March 1, April 1, and May 1, we have eight courses we do, and so the February course was at 85% snow, so it's not looking too bad. If we can keep up, and the weather patterns hold, I think this year is going to be ok.
SM: Are there times where you go…well let's see, I know there's the working Poudre, and then there's the scenic Poudre, how do those two things play out for you as a water commissioner? Do you take into account at all for the recreational aspect of the Poudre?

GV: Right now, other than some minimum stream flow decrees that are what we call junior decrees, they went to water court later, I get a lot of calls from rafting companies. The rafting companies call me and ask me what the flow of the Poudre River going to be, and try to give them a projection of what the flows are going to be throughout the year, so they can plan their rafting expeditions for the year. As far as trying to keep water in the Poudre River and keep the Wild and Scenic end flowing, the only requirement at this time is there's a joint operation project between the Forest Service and Fort Collins-Greeley and some storage users on the Poudre, that from November 1 until March 1 there has to be 10 cubic feet per second in the Poudre River being released upstream, at Chambers Lake or Barnes Meadow Reservoir. This is the only minimum stream flow that I have to maintain. I try not to dry up the Poudre River at any one point if at all possible. Once you dry up the Poudre River, you start getting phone calls from people. Why isn't there water in the river? So I try to keep the public's interest in water in the river against weighing the decrees that are entitled to water. If there's any way that I can go ahead and keep water, especially in the lower stretch of the river, basically from La Porte through Fort Collins, without injuring water rights I'll do it. For example, if I know a reservoir is going to fill during the year, I'll try to talk to them and say let's not dry up the river. Let's keep water in the river, because I know I can get you water later on and you're going to fill. The water they pass will go to other users downstream.
SM: Um hum.
GV: In a dry year situation, when you don't think you can fill a particular reservoir that is in priority, then you have no options. You've got to dry up the river at that point he's entitled to it. If I know he's not going to get filled in the future, and I ask him to let the water go on by, he could come back to me and say you injured me. You told me to keep the water in the river, therefore, you injured me, how are you going to make me whole? So you have to weight the pros and cons, even though legally I don't have the right to say you keep the water in the river. I can be kind of a forecaster trying to weigh the fish habitat part of it against water rights.
SM: Now, have there been any instances where you've had to let the water go dry?
GV: Yes. In 2002, which was an extremely dry year, there were several points on the Poudre River we did dry up. We had no options. The upper stretches of the Poudre River, which is from the mouth of the canyon up, never runs dry. There's always water in it. But once it comes through Fort Collins there can be periods of time at various locations [inaudible at 127] that have dry up points. But only for short periods, because there's enough return flows coming in that downstream may be 100 yards to 200 yards and water starts appearing again, and so we have a life stream again.
SM: Now, do you deal with anything, like in terms of people depositing waste into the river?
GV: Right now the river commissioner isn't responsible for quality of water. There's a possibility down the road that we could. Right now, as far as Colorado water law is concerned, water quality is not an issue. There is, I've heard, that there could be legislation that deals with water quality having to do with water rights issues, to where if a particular individual wanted to sell his water to an entity, water quality possibly could be a concern.
SM: Now, I'm assuming there's a water commissioner for Greeley, or is that you also?
GV: There's a river commissioner for each river basin. So as the Poudre River commissioner, anything having to do with the Poudre River, I'm it. My district is from the Continental Divide, which is Cameron Pass, to the east of Greeley where the Poudre River meets the South Platte, half way between Loveland and Fort Collins, and north to the Wyoming border. That's the area. There's a river commissioner on the Big Thompson, St. Vrain, Boulder Creek, Clear Creek, and river commissioners on the South Platte.
SM: Now, doesn't Greeley get its water from other sources too? Like um…

GV: Greeley gets their water, drinking water, from two sources. They get it from the Poudre River, and from the Plant on Boyd Lake in Loveland.
SM: How does that work into this whole, deciding who gets water and who doesn't?
GV: Strictly by decree. The city of Greeley has a very senior decree, and they use that decree year round. When they need additional water they have to find other sources, either through their reservoirs or Horsetooth.
SM: Ok. What do you think is like the biggest difference between the city of Fort Collins' uses of water, and the city of Greeley's uses of…
GV: Well, the uses are the same. How much water do we have available to allow the users to use? 2002 is a good example. The city of Fort Collins had to put restrictions on. The city of Greeley, I don't know, they may have put restrictions on also. Again, it's not so much as uses as what types of water the cities have to use. So as far as on the Poudre basin, the city of Fort Collins have a lot more decrees on the Poudre River than the city of Greeley does. So the city of Fort Collins pulls a lot more water off the Poudre River than the city of Greeley does.
SM: Now, does Windsor also…
GV: Windsor gets their water from the city of Greeley. In the Fort Collins area, there are three water treatment plants: Greeley in Belleview, Fort Collins, and the Tri-districts on west La Porte Avenue.
SM: Have you had any problems with people who want to preserve the scenic part of the river, but at the same time you know that you have to find water for people who really need it?
GV: No, the only situation there is at this time is Nature Conservancy bought Phantom Canyon a few years ago, that's on the North Fork of the Cache la Poudre River, below Halligan Reservoir. So it's from Halligan Reservoir to what I call the mouth of the North Fork canyon. They maintain a minimum stream flow for the fish and North Poudre Irrigation Company has entered into an agreement to allow a certain amount of water year round, so we don't dry up the stream on the North Fork. So right now is the only concerns as far as an environmental agency wanting to maintain and trying to maintain a minimum stream flow for recreation and fish on the North Fork.
SM: Ok.
GV: On the main stem of the Poudre River the other agreement we've got is the minimum stream flow, the JOP, Joint Operation Project, between the Forest Service, Fort Collins-Greeley, and Water Supply and Storage. And that's from again November 1 till April 1.
SM: Um, have you seen anything over the years, like roads, bridges, or anything like that, make your job harder, or get in the way of supplying people with the water that they need, or any divergence? Like, you know, in the newspaper I think I read, there were people who were putting pumps into the river that were running in their backyard, to pull water out of the river to water their lawns.
GV: Yes.
SM: So do you see any of that?
GV: The best example that I can come up with is the Big Thompson River which had a large number of pumps that were pumping water out to water lawns. That's not my district, that's the Big Thompson District. The river commissioner at that time forced the individuals either to find an additional source of water to keep the Big Thompson whole, or quite pumping out of the river. So they developed an association, and came up with additional water, so the individuals that signed up were able to continue to pump out of the river, but they had an additional source of water that they put back in the river to prevent injury. On the Poudre River, you do not have the development like you do on the Big Thompson. There are a few houses that may have pumps. Nobody has told me about 'em, and I don't go door-to-door, up and down the river

checking to make sure that there are. If I would see one, I would go ahead and pursue it, but at this time, I don't know of any that are there.
SM: Ok. In terms of water restrictions, now is that like kind of a chain of command, where the city has to regulate how people water their lawns, and then if they use too much water, do you come and talk to the city of Fort Collins and say, you know, we need to enforce these water restrictions more so that we have water for other people?
GV: What the city does is strictly up to them. I don't have any authority to tell the cities how to restrict their water. All I do is tell them how much water their entitled to take at their structure. The cities also rely heavily on Horsetooth water. Horsetooth last year ran into a situation where this coming year they do not have the supply on the Western Slope to give the shareholders of CBT the amount of water that they would like. If you have a full share of Horsetooth water you have one acre-foot. Last year, they were able to give 70% of that, so seven tenths of an acre-foot. Due to drought situation they were cut back on the amount of water they could take off the Poudre River. They relied heavily on the Horsetooth water, and they realized that if they did not put restrictions on, they were not going to have enough water to finish up the year. Horsetooth this year told the individuals you could have 30%, so you can have three tenths of an acre-foot per share. Right now the city is looking at that, and they're saying we don't have enough water from the river and Horsetooth to satisfy the users, so we're going to have to conserve. You hear the cities are saying we're going to have to cut back, because we do not have the water to supply. So my job is to make sure that the Horsetooth water goes to the people that are entitled to it. But on the Poudre River side, I tell the cities what they're entitled to, and they can make a determination themselves what kind of restrictions do we have to give to the users.
SM: And then remember you mentioned that you regulate the wells?
GV: Yes.
SM: And how does that work?
GV: What happens is, high capacity wells, or irrigation wells, when I say irrigation I mean over fifteen gallons a minute that are irrigating farms and sprinklers, they fall underneath the priority system. So they have to go into an augmentation plan, which means they supplement the river with water that they take out of their wells. My job is to make sure that the high capacity irrigation wells are in an augmentation plan and not injuring the Poudre River. All of the wells in the Poudre basin that are high capacity wells are in augmentation plans, and so as long as they continue to participate in these plans, then I don't have to go out and monitor 'em. If there are wells that do not belong to any augmentation plan, then my job is either to shut 'em down or to make sure that they join an association that will supply water to the Poudre. The other wells that I get involved with are domestic wells or household wells. If an individual wants to drill a well, they have to have a permit, and my job is to make sure that the permit that they get is legal and they're entitled to go ahead and drill a well.
SM: And how many people do that, personal wells?
GV: Lots of people.
SM: Really?
GV: If you're not supplied the city of Fort Collins, Greeley or one of the Tri-districts then you only source of water is from a well. In the Poudre Canyon, everybody has a well up the Poudre Canyon. That's their only source of drinking water. Some other people around this area have old wells. If you have an old well that was drilled before May 8, 1972, then you can go ahead and continue using it for whatever purposes it was used prior to that date, lawn and garden, or house. Most of the wells inside Fort Collins are used for outside watering.
SM: And um, do you get a lot of people trying to get the augmentation plans? Like try and… [tape skips a little here, possible turned off briefly] …the system a little bit?

GV: There are a few out there, but what happens is, when their well goes bad, they have to apply for a well permit to get it re-drilled, when they do that, we go out and check it, and we'll catch them that way. I'm sure there're some wells out there that don't belong to the plan, but until it's brought to my attention I don't know where they are.
SM: Have you seen well's go dry more often during the drought years?
GV: In dry years, yes. This happens especially to what we call shallow wells, which are thirty to forty feet deep. They rely on irrigation water to replenish the ground water, which raises the water table. When the irrigators cut back or you have a dry year, the water table drops and the wells then either are not pumping to their capacity or they can go dry. Once the irrigation starts, then the water table rises and their wells start producing again. One thing has me worried a little bit this year, is some ditches are renting some of their water to other sources, and so they're not going to irrigate. When that happens I'm kinda worried that some wells then are going to go dry.
SM: And how long does it take to replenish a well usually?
GV: Not that long. If it's a shallow well, you run water on your field, maybe a week?
SM: Hmm. It's just the deeper wells that usually take a little bit…
GV: What happens is deep wells, which are four to five hundred feet deep, these are more in the mountains, rely on the aquifer and the snowmelt to replenish their system. If you have a couple dry years, the water is just not going to get down into the four or five hundred foot depth to replenish these wells, it might take a year or two. For example, this year the snow pack seems like it's pretty good. When the snow melts it may take a full year for it to get all the way down to replenish some of these deep wells. So the deeper the well, the longer it takes to replenish, but the same time the longer it takes to deplete it.
SM: Right. Um, what are your thoughts about future changes in the river, such as sale of water to cities, prolonged drought, decline of farming communities, or the rise of suburb communities?
GV: Yes.
SM: [Laughs].
GV: When you go through an extreme drought like 2002 the farmers did not have enough water, the cities would love to get that water, so what I'm finding this year more farmers are looking for ways to make money selling their water or renting their water, to other entities, cities, other farmers, or augmentation plans, and not farm. With the idea that if they have another dry year, they may not survive. Whereas, if they could rent their water, they would have money coming in, they don't have to farm, save the money, save the expenses of farming, and still have an income in to survive with the hopes of the following year having enough water to go back into farming. In the Poudre basin I'm finding more and more subdivisions popping up. And as subdivisions pop up, they sell their water to the cities. Fort Collins has an agreement that if you sell your land, and you want city services; you've got to supply the city with a source of water. So when a subdivision pops up, the city, especially the city of Fort Collins, acquires that water. I don't know how the city of Greeley does it…

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GV: When you go into Severance, Eaton and around Greeley, you're seeing new subdivisions popping up. My feeling is agricultural uses of Poudre River water is on the decline. It's just more profitable to grow houses than it is crops.
SM: Now these farmers that are renting or selling their water, is it a pretty good price for them to do so?
GV: It depends on the type of water they've got, and the water law's a little complex. You can't take regular ditchwater that is decreed for irrigation, and all of a sudden rent it to the city. It has

to go through water court and get what we call a change of use. So if the city wants it, that particular water has to go to water court, get the change of use from agricultural to municipal uses. But there are certain types of water out there that are very profitable rent to the cities. The city wants Horsetooth water, and if a farmer has Horsetooth water that has been used on a farm, the city will pay a premium for an acre-foot for water. You can make a lot more money by renting your water to the city for what they will pay for an acre-foot than you can farming. Other types of water that can be used by the cities that don't have to go through water court is what we call the foreign component of water. The foreign component of the river is water that is brought over from another district or another basin into the Poudre River, it's not tributary to the Poudre River. For example, the two major sources in this basin are called the Laramie-Poudre Tunnel, which takes water from the Laramie River and brings it over to the Poudre, and the Grand River Ditch, which takes water tributary to the Colorado River, and brings it over to the Poudre River. Now those waters, since they're foreign water, can be used for any use if they have gone through water court. You also have Horsetooth water. Unless the water has gone through water court, it really can't be taken out of one ditch and moved to somewhere else. Because you're [inaudible at 414].

SM: [After long pause] Do you see any changes…has the river channel changed over the years?

GV: You get channel changing when you get big flows. In 1983, we had a high snowpack, and got rain on top of the snowpack, which caused about a two-week flooding situation on the Poudre River. During that time period, with the river in a flood situation, it did start cutting new channels and creating new ways to move down the river. A couple of the areas that I can think of was east Fort Collins, around Fort Collins Nursery, it was starting to cut in and make a new channel there, and out east around the Windsor-Greeley area, it was starting to cut and make new channels. But those are really the only situation where you're going to get river changing channels, in flood situations. And '83 was the last one I can remember where it actually did make some changes.

SM: So when there was that, I can't remember when it was, when we had that mini-flood by College, on the CSU campus? Was that '80…no, '90-…

GV: Oh, '97.

SM: '97.

GV: That was the Spring Creek flood. It didn't create a flood situation in the Poudre basin. What it did was cause flooding in isolated pockets where you had this heavy rain. The rains happened in the LaPorte area and right along the foothills, where we got anywhere from five to ten, twelve inches in a real short period of time. The flooding situations happened in creeks that could not hold it, but not the Poudre River.

SM: Ok. That was kind of interesting.

GV: Yes.

SM: Is there any that, you know, we haven't touched on that you'd like to tell? Any fun stories, or anything that perhaps these actions didn't touch upon?

GV: Let me think.

SM: Life as a river commissioner? [Laughs].

GV: The only thing that I can think of as far of situations that we might have [inaudible at 441] when you're in a dry period, things come up that people look at that they'd never happened before. In particular your smaller streams that people have decreed water rights on start drying up. In wet years they don't. For an example, if an individual has water rights and he farms and he's irrigating pasture ground on a small creek that normally runs, he can get water out of it and irrigate. In dry years he starts calling me and wants to know why don't I have my water? So even though it is not dealing with the Poudre River, he still has water rights on creeks or streams that

are tributary to the Poudre River. What we end up doing is looking at the problem and set up meetings with individuals to try to figure out what has happened to his water rights, what injuries are happening to him, and try to remedy those situations. In dry years, as far as time constraints goes, I spend more time on these smaller flow issues than I do on the main stem of the Poudre River. Yesterday I was in Red Feather on a situation that individuals were trying to figure out what are we going to do this next year? They took me around the Red Feather area, which encompasses north and south Lone Pine Creek, Elkhorn Creek, and Gordon Creek, with issues of how are you going to prevent injury next year? We spent all day on that yesterday, a month ago we spent another day in meetings, about this issue, so this summer I'm going to be spending more time on these issues. What happens is, you're seeing development on these small streams and ponds being built. Individual ponds on small creeks cause evaporative losses. A normal stream that might run all year-round that is intercepted by these little ponds in a dry year that people are legally entitled to build lose water to evaporation, By the time it gets down to a user it may be dry. As far as the future, I see more and more of my time being spent on these low flow issues taking away some of my time from the Poudre River.
SM: At that point, will there probably be a need for more water commissioners, besides you?
GV: With the budget constraint, we're not longer allowed to do much more overtime. As our overtime is cut, we have been told that we will do an eight hour day, end of discussion, don't apply for any overtime because you're not going to get it. But at the same time, in the summer there's no way that you can run an eight-hour day. With me being a retired dairy farmer, you don't have an eight-hour day. For me coming as a dairy farmer into a river commissioner, it doesn't make any difference. There might be some days I put in eight hours, some days I might put in fourteen or fifteen hours.
SM: Well, you say you were on call 24 hours. Do you ever get really late night calls?
GV: Well, I have gotten calls at 11:00, 11:30 at night. And those…if I'm asleep then it kind of bothers me a little bit, but I'm awake until ten or ten-thirty, and it doesn't bother me to get calls at ten or ten-thirty at night, and it doesn't bother me to get calls at 5:30, 6:00 in the morning. In the summertime I start getting my river calls to administer the river at 5:45, and then in the evening my last call is at 6:00. It doesn't bother me, if I'm home, I'll answer the phone.
SM: Yeah, I was wondering if you got any phone calls at three in the morning.
GV: No, not yet.
SM: Now, what is the definition of an injury?
GV: An injury would mean that an individual did not get the water he was entitled to. Somebody was taking water that didn't belong to him, but should have belonged to the next person downstream, and so that person was injured. The way we do water rights, is you have junior and senior water rights, depending on when you went to water court and got your decree. If a senior water right downstream was entitled to ten feet. And a junior right upstream was taking the water that was rightfully due to the individual downstream, the downstream user was injured, he did not get the full amount of water he was entitled to.
SM: And then at that point, you go and talk to the person with a junior right, and what if he cannot compensate for the water that he used?
GV: In the summertime, it's very difficult when the river is dropping. A junior water right upstream might have been, legally taking his amount of water. The river starts dropping out. Overnight I'm losing a hundred CFS. The downstream user had his water yesterday, but does not have it today. So then I've got to go upstream and tell this user here, ok, cut back on your head gate, I've got to get water downstream. So yes, this individual was injured half a day, maybe a day, but the upstream user has to have time to turn off his head gate to get it downstream. He can't be at his headgate 24 hours a day. So in a timely manner, I shut this person off to get the

water down to the next individual. On a rising river there is no problem. As a river commissioner you've got to be kind of a forecaster. What is the river going to do tomorrow. So you follow trends.
SM: And how good are you at forecasting?
GV: Not very good.
SM: No? [Laughs].
GV: What the previous commissioner, we call him the wet river commissioner, I'm the dry river commissioner, was able to do and forecast is totally different from what I'm into now. Each year I've gotten less and less water, and so what I'm forecasting and what I'm thinking of giving the people has a tendency to be, how do I put it, wrong. And so I'm constantly going back, making corrections, making corrections, with the idea of thinking, tomorrow's going to be better, what's going to happen tomorrow, then all of a sudden it doesn't happen. So I've got to make corrections. You're constantly making corrections and adjustments on a daily basis. The way we run the river is we set the river in the morning with the idea of what it's going to do that day. Then I'll make my calls in the afternoon and in the evening, trying to forecast the next day.
SM: Damn. That sounds like a tough job.
GV: Well, you would like to know a day ahead, what's going to happen, but you try your best to predict it; that's all you can do.
SM: Save the little man, huh?
GV: Exactly.
SM: All right. Well, I think that is about everything. I don't think there's anything else, that was pretty in-depth.

End of Tape