

Oral History

Pam Stevenson (Q):

I'll start out by identifying that I'm Pam Stevenson and the photographer today is Manny Garcia. We're here at the SRP Studio here in Phoenix at 27th Street and Washington and it is Wednesday, August the 4th, 2004, and I'll let you introduce yourself by giving me your name.

Tom Clark (A):

Okay, I'm Tom Clark; I have been associated with the Central Arizona Project for a very long time. I'm almost a native Arizonan and we've been in in Arizona since the mid 1950's, so been here a very long time.

Q: When and where were you born?

A: I was born in a place that doesn't exist anymore. I was born in a small town named Howell, Missouri. It's about 45 miles out of St. Louis and during World War II it was made into a munitions dump and ah since then it's been converted into a wildlife refuge. In fact, I tried to find it the other day we were up in Missouri and it just isn't there.

Q: That's kind of a sad story.

A: It is; it is a sad story.

Q: Can't find your home town.

A: Right.

Q: Um and so growing up then was it a farming community?

A: No my dad worked for a pipeline, an oil pipeline that ran from Tulsa to St. Louis, roughly St. Louis. And we lived at four different places along the pipeline. We lived in Tulsa and then I think across the river from St. Louis in Illinois most of my young life and then later in Springfield and Tulsa. So that's what we were doing there.

Q: So did you move around from school to school?

A: Yes, but it wasn't too bad most of my early schooling was in Roxana, Illinois where the last station on the pipeline was and I stayed there until I was almost out of high school and we moved to Tulsa. Dad was a telegrapher for the pipeline. At that time they did their communications by telegraph. And as things went on they didn't need telegraphers much anymore so he got promoted up because his job was gone I guess it was. So wound up in Tulsa. It was a pretty good situation with City Service Oil Company.

Q: Growing up did you have any ideas of what you wanted to do when you grew up?

A: I still don't. I really didn't. My path of where I am, where I am 'til today varied. I got out of high school and like all good people from Tulsa I wanted to be a petroleum engineer so I went to Oklahoma A&M for a semester. Found out I didn't like anything that I was taking except English. And I went to west Texas to work in the oil fields. And I didn't stay there too long. We ah my first job on a well, we ah experienced a lack of, we lost circulation and what that means, we'd drilled into an underground cavern and the materials you used to flush the process were just going into the hole down there. We couldn't, couldn't do anything then. Every time we would come out of the hole we couldn't get back in the same spot where we were. So we, we sit there for maybe a month or six weeks then I decided, well I think I'll go to New Orleans. So I went to New Orleans and got a job in the oil process down there and did some offshore work, which was very interesting. And then why did I leave New Orleans? I don't know, oh, I went home. I went back home for a while then I got drafted. And in the Army I think I made

one of the best decisions I ever made. I refused an opportunity to go to Officer's Candidate School so that like it would extend my period in the Army quite a bit. I didn't want to do that, but I was sent to Redstone Arsenal to become a guided missile mechanic. And from Redstone to White Sands Proving Grounds in New Mexico and that led me to Tucson from White Sands and that's how I got back, that's how I got to Arizona was from White Sands, New Mexico.

Q: What year was it you went in to the Army?

A: It must have been 1952 something like that and I was in for two years.

Q: As in the Korean War?

A: During Korean War, yeah.

Q: You didn't end up over in Korea?

A: Well, I didn't and I was very lucky and I, I, I don't know if I grew up a lot while I was in the army but I must have. It gave me some time to think a little more seriously about what I wanted to do. So when I got out I, I had the ability to work in missiles and when I married Susan, we began to have children and I needed a job and I wanted to go to school so I wound up in Tucson working for Hughes as a missile mechanic and going to the University of Arizona. I was in business economics and when, when I graduated, the fellow that ran the test machine next to me said, "Say there's an opening over in agricultural economics for a graduate student and I know a guy that's going to fill that." So I thought, well you know I like agricultural economics so I went over and I got that position and I finally wound up with a Master's Degree in Ag Economics from the U of A. And then I was looking for a real job and there was an announcement on the bulletin board in Ag Econ that the Bureau of Land Management needed an Ag Economist and there was an address. So I came to Phoenix, went to the address and they said sorry this is not the Bureau of Land Management and they're not here, but we can tell you

where they are. They gave me the address I went to this place and stood at the Bureau of Land Management, which was the Bureau of Reclamation. So I said well I might as well interview with these people and I went in and they hired me. So, so much for career planning. I don't know it just sort of happened that way.

Q: So tell me about what was your first job at the Bureau of Reclamation?

A: Well the project was into the planning stage and I, the evaluation stage, and there was a, a lot of things to be done you know because of economics we had a period to evaluate lands that would be irrigated. We had to estimate how many people would be involved in receiving the water, what the water use would be, and what the cost would be. I immediately started into repayment studies and I guess that was my long suit for a number of years. I, I don't know how many repayment analyses I ran, just a lot of them. And at that time it was with computers, not computers, calculators that were not very sophisticated so a lot of hand work. And even if we did them by hand, we put the numbers on a pad and we would have a string of a hundred years with either ten or twelve numbers for each year. So it was rather tedious but interesting.

Q: What was your job title?

A: Agricultural economist and I stayed at Phoenix for a while. And then went to D.C., but in Phoenix some interesting things happened while I was there. I can remember one of the first attempts at allocating the water supply as a basis for cost and there was a room with, oh I don't know probably 15 people, and Cliff Pugh was the ranking person there. And we had made suggestions and moved along and all the sudden somebody said, "Oh we had forgotten about Charleston, and the water that it will produce." And Cliff said, "Well let's just throw that into the M&I supply add 50,000 acre-feet to that and change all the numbers according." And that is about as much, as deep as the thought was going at that period of time. And it was appropriate because you had to start some place and

we knew we'd do it a hundred times before we got done and again hundred times before we got done.

Q: What year was that, that you started?

A: Started there in '63, 1963.

Q: So that was before the Central Arizona Project even had the final approval.

A: Yes, absolutely.

Q: Already planning all that though.

A: You had to plan it in order to get it passed in Congress. You had to take them a plan that showed what was going to happen within some degree of reason. And that was what we were working on. I was lucky enough to be in there with some of the first...there had been things that went on before that, but that was I think the really start of serious number crunching.

Q: Were you there at some of the Congressional hearings?

A: I was there at a lot of the hearings. I was very junior in the organization so I really didn't have any role at the hearings but I got to go to see what was going on.

Q: Do you remember any details from them?

A: Not really, I don't remember any of the details of the first hearings. I remember very vividly my last hearing but maybe you want to hear that later.

Q: From a different position?

A: From a different position, yes.

Q: I know talking to Sam Goddard; he talked about as governor going back and was questioned about every river and things like that.

A: I made several trips with Sam and he was always a good witness. He enjoyed it and came forth with his ideas; he was good.

Q: I'd heard at one of the hearings though that he felt he was being kind of blindsided that they weren't asking about Arizona things but about other rivers and that they really were harder on him because they could be whereas they couldn't do the same to Carl Hayden or the Udalls.

A: Well, I'm surprised that Sam would say that they were picking on him, but I'm sure they were too; well that's part of the process. They, the Congressmen, have a statement to make and they'll make it when their best opportunity arises. And when they're able to appear to be more in command than the person they're talking to then well, they'll take that advantage.

Q: Did you work with some of the Arizona congressional delegations?

A: Yes, I guess there's not any that were really into the CAP that I did not work with to some degree. Again, I was only in Washington for a couple of years. So from that position, I didn't do much. But after that, I came back to Arizona with what was then Arizona Interstate Stream Commission. And it began at that point to have much more of a relationship with the congressional delegation.

Q: Why don't you tell me about how you happen to come back to Arizona then at the Commission?

A: Well, I really didn't like Washington that much, living there that much. It seemed like you couldn't get off the road to go someplace. It was pretty restricted. And the traffic and whatever, I rode the bus to work and froze to death in the snow. It was terrible. I have a story about riding the bus that Dan Dreyfus, who was a very

big influence in my total career and I'll tell you about him in a minute if you wish. I told him about riding the bus, and he said when he went to DC the first year he would give up his seat to a lady that might be injured, pregnant, or crippled in some way. And he said the second year, she had to be both. And so that's the way I felt about it the second year, I was ready to leave. And so I had an opportunity to come back and work for Rich Johnson at the Interstate Stream Commission and that I did.

Q: Do you want to tell us? Who is Dan Dreyfus?

A: Dan Dreyfus a very interesting individual. He was a machine gunner in the Korean War. He volunteered, and then he volunteered to go Dien Bien Phu with the French and his dad was a General Coastal Artillery Commander and, but Dan Dreyfus wound up as an Assistant Director of the Smithsonian. He was the one primary individual that at least I know about, that did most of the work on selecting the atomic waste site in Nevada. He um, he was associated with Enron at one point and he...from his position with the Oil and Gas Institute. But anyway he's a very interesting individual oh and he also wound up as the Chief of Staff of the Senate Committee that considered water and power issues. So he was in the Bureau's office at the time that I arrived there and was a very good friend.

Q: Any other experiences while you were in Washington that you want to tell us about before you came back to Arizona?

A: Ah, no maybe one might occur to me later than come back to me, but nothing arises right now.

Q: Tell me about how then you managed to come back here to Arizona?

A: Well, I...the project was moving here and ah the entire, well not the entire, but the basic state entity that was addressing CAP was the Interstate Stream Commission and it consisted of Rich Johnson, who had been the editor of the Farmer

Ranchman's magazine. He was a journalist essentially, and he had working for him an engineer named Bob Farrer and then two or three ladies that the one was the bookkeeper and one was his secretary. So they had maybe five people and one was an engineer and the other one was a journalist that had it going so they were looking for some help. They knew they were going to get into technical things and I think it was Hank Raymond that was the president of the Central Arizona Project Association who approached me in Washington and wanted to know if I'd come back and take the job with them. And I was happy to do it at that time.

Q: What was the job that you took?

A: I don't recall what the name of it was, but I did anything that came up relative. I didn't really do any of the engineering but anything that came up that needed to be done is what I did. And I did a lot of analysis on the economic side. I can remember one of the things that Rich was really proud about that he had gotten me a new calculator. It was one of these 100 key jobs, you know, that just drive you crazy and I also remember that he let me have Ray Killian's desk that he used for years. So I was feeling pretty good.

Q: What year was that?

A: That had to be '67 or '68 something like that. I don't recall exactly but in that time period.

Q: That was in the time period that the CAP was actually moving ahead in its final approval.

A: That's right.

Q: Do you remember anything about that whole process of the negotiations and the politicking that went on?

A: Well, I was aware that it was going on and I can probably dredge up a story about the issues that were being addressed at the time. Again, a lot was going on in Washington and I was not in the middle of it. I don't remember exactly what the timing was on Plan 6 but it was before, it was in '67 I think, and that was a proposition where the Indians had concerns about building Orme Dam on their reservation and flooding considerable lands there. They didn't want to do that and some alternative had to be reached and a lot of effort went into finding a way to accommodate that. There were a lot of hearings here; I remember I had to participate in those. I don't recall what I said but it was a very big thing and it took a lot of the time of that group. Now, as that was going along, the delegation I'm sure got together and decided that the Stream Commission was fine but it was not going to...the way it was organized in what it was doing and what it had its resources, wasn't going to be enough. And about that time they approached Wes Steiner who was working for California in D.C. as one developing the project and he came then to Arizona to take over as a State Water Engineer and create, the Arizona Water Commission was created to, as the organization that he would run.

Q: Could we back up a little bit.

A: Sure.

Q: Into the 60's, before Wes Steiner and when you joined the Interstate Stream Commission and you were in Washington, Stewart Udall was Secretary of the Interior then and I know there was an issue that was going on about building dams in the Grand Canyon, Bridge Canyon or Marble Canyon. Were you involved in looking into those issues?

A: Yes, we did analysis of the various dams and tried to come up with benefit cost ratios that would be associated with each plan. And we had. I think it was Jim Smith that was Assistant Secretary at that time, and one day we were informed that it was time to make a decision and, I probably shouldn't tell this, we took a

board and put all of the dams and their figures that went along with it on the board and I didn't go to Smith's office, but when the group came back they were all excited about what had happened. But they put the board up on the easel, and, if it was Smith or whoever was the Assistant Secretary was, looked at it and said, "Oh my gosh, where's Bridge Canyon?" We had analyzed Bridge Canyon out of the process and from us upper, it was the preferred alternative so we had the numbers so Ed Barbour I guess it was came back and got the numbers and ran back and put them on the board. And this was in preparation to go into Stewart's office to give him the decision that we had come to. So they carried the right answer to Stewart's office.

Q: What was the answer?

A: Bridge Canyon.

Q: But it didn't get built, how come?

A: Well, the alternative to it did. But that element, that element was there.

Q: How did the alternative come up?

A: I think it, it was not a major process to moving it to there.

Q: And which alternative were you talking about?

A: Powell, Lake Powell and the dam there.

Q: That one was already built at that point.

A: Well, at that point.

Q: It was built in the 50s, but I thought the alternative that came up was the Navajo Generating Station.

A: Well, the Navajo Generating Station I don't know. The, you've thrown me off base now. I was thinking that was, can we take a break here a minute. Let me check with Bill, he knows what that was.

Q: So the alternative to the dams at the Grand Canyon then was the Navajo Generating Station, were you involved at all with that?

A: Obviously, I don't remember much about the Navajo Generating Station. I probably was but it wasn't something, it wasn't in my particular area of expertise at that time.

Q: You started to talk about the change from the Interstate Stream Commission to another department. What did it become when Arizona decided to reorganize that?

A: Well, they brought Wes in and they made it the Arizona Water Commission. And it remained Water Commission for several years and then became the Department of Water Resources. The, when the change to the Interstate Stream Commission, the nature of, I'm sorry, the nature of the organization changed quite a bit and began to grow immensely, very quickly. Rich Johnson went back to the CAPA for a number of years. And Wes created a pretty much larger organization that, and they had much more to do, to address the company. And what I was particularly involved in then was a lot economic studies and some people today will say what were your decisions then, what did you decide? And I say I can't tell you a whole lot about it, I really don't know. But the one thing I know is that we were wrong on whatever we did. But that's not to be unexpected because sitting in Arizona at that point in time, we had a very small, relatively small population base and you're entering a period of great growth and I'm sure that all of our projections if you would go back and look at them at this time, would say how the world did these

people ever think that we would not grow any more than this. And but we were in the right direction and they identified a movement that was large enough that you had to accommodate it. You had to make plans to do what these numbers suggested. So it started it off on wrong way, right way and it gave us an opportunity to discuss the pros and cons with people that didn't believe that we would have even as much as we suggested that we were going to have. And using those numbers, we found the money to - we found where we had to get the money to make the project work and meet our repayment obligations estimated monthly payment obligations would be and moved into a contract that ultimately that set a number that has been very advantageous to use. It could have been much higher than we came up with.

Q: A little bit about Wes Steiner. What was the feeling when he came over from California? What was he like?

A: Gosh, Wes was a, he was a brilliant man. He had a mental capacity that was astounding. His moral character was Mr. Clean, I mean he was just an absolutely, had an impeccable background as far as I can determine and he still has it. But he came into a situation where there had been some neglect or maybe bad decisions relative to how we were set up. And he came in with individuals that were there that would just as soon that he hadn't come. But he came well equipped and he did a wonderful job.

Q: Was there some suspicion because he was coming from California?

A: Well, he was called a spy. There was suspicion and it was in the paper, you know. And Wes, it hurt him to have that said about him 'cause that wasn't him at all. He did a very fine job.

Q: It must have surprised people to hire someone from California though, when there was so many conflicts with California over water.

A: I am sure it did. But I've got to believe that you could've looked a long time and not found anybody that was any better prepared. He knew the problems, he knew the processes, he had the answers, he was an individual that could compete with anybody on their ground as far as that goes. We couldn't have made a better a decision. Now what, now he came in and he built a staff of very good, he brought a few people from California. I won't say he brought them but we would end up with some people from California that he had probably had some indication about before he hired them. Larry Linser was one. He was here for a long time, very prominent in the decisions that were made. Bill Matthews who is still a consulting engineer in the area was another one from California that came over. So he brought with him some talent or he acquired some talent from California, probably based on his experience there. We moved into an analysis that I don't think had been tried, even if it had been it hadn't been tried too many times before then. It was called input-output analysis and it was just coming along and we hired an outfit out of Kansas that had some Arizona people associated with it. And we put this together and it was not so much that it produced really great exact...what it did produce was exact numbers but your reliance on it shouldn't be exact but what it did, it allowed you to handle a whole lot of different issues in one analysis and bring them all together and sort of keep track of things and you could move from one set of assumptions to another and make comparisons very well. And Wes made that happen here. He was working forward all the time.

Q: What was your role under Wes?

A: Well, I was still the repayment person, but I started, I was the Assistant Director of the organization and I was sort of left at home to run the shop while Wes went out and did the running around. But uh, he did the important stuff and I did the daily grunt stuff more or less.

Q: So at that point, you were doing more than, than just the Central Arizona Project?

A: Well no, well, I was doing more but not in a technical sense. I was...the recharge things, and the other engineering things I did not participate in those. Like Larry Linser, he was also an assistant I believe and that would come under his daily work so I stayed with the economics and the business end of the organization.

Q: Your focus was pretty much the Central Arizona Project?

A: Absolutely. A little side here, as we started the, I recalled this last night as I was thinking about this, the way we got going was not the best one in the world and I couldn't get graph paper through the procurement process that was available to us. And found out that Cliff Pugh at the Bureau of Reclamation couldn't get ballpoint pens so we met under the street lamp two or three times and exchanged equal values in graph paper and ball point pens to keep the whole thing running, so...

Q: The little things you remember.

A: Yeah, right, right.

Q: So you were still using pens and graph papers into the computer age?

A: We were moving into it, but everybody had their own individual approach to things I guess, we still needed those things. Bringing that up made me think of something maybe it will come back in a minute. The relationship between the either the Arizona Interstate Stream Commission or the Department of Water Resources, wherever we were, with the local Bureau was always good. And the individuals that were here on site worked very well together. And I found that one of the things that has happened at the CAP that Cliff Pugh has never gotten the recognition that he deserves in the relative fact that we got it accomplished. Now he is a very, very good friend of Floyd Dominy. And he was able to sway Dominy's, well influence Dominy's position on many things and if Dominy had been against CAP, I don't know if it would've passed as it did. It might have been, due to our

delegation being able to get it overwritten, but with Cliff and Floyd working for it, it was a lot easier than it might otherwise have been. Cliff told me a story once about, and Cliff did one thing that was very beneficial to Arizona in that I think that he probably without him we would had at least a longer fuss over it and maybe would have lost the issue of the return flows to the Colorado River. The then-Regional Director, Harley West, in Boulder City did not think that Arizona should not get credits on their Colorado River water use for their return flows and Cliff thought they should. And Cliff had Dominy's support and finally won on that issue. But during this, Cliff said that Harley called him one day and said "Come to Boulder City" and Cliff said "I'll be there tomorrow." And he says "No, today." And don't know how he got there but he appeared in Boulder City later in the day and he said that there was a meeting room filled with people and he walked in and essentially didn't get sat down before Harley said "You're fired" so he got up and left. And he came back and called Dominy and he said "Don't worry about it." And I believe the story that that happened and pretty much that way. That Harley would've gotten rid of him if he could of. But his relationship with Dominy saved him and was very good for Arizona.

Q: What was Cliff Pugh's position?

A: He was the head of the office here, the Bureau's office here in Phoenix. And he passed away three or four years ago. I'm guessing that's right, not too long ago.

Q: He's not on our list of people to interview.

A: No, I don't believe you can talk to him.

Q: I see his name a lot. You talk about return flows, for those of us that aren't water, what does that mean?

A: Well that's, that's diversions that were made for maybe agricultural probably agricultural use and all the water that's applied and required to go in the upper

end of the process isn't used in the process, it comes out the lower end and in this case was returned to the river. And so, you could make a point where you got 50,000 acre-feet up here and that's what you're getting charged with and Cliff would say "No, we got 50 but we returned 10 so we only get 40,000" so that was the argument that was going on.

Q: So it was returned mostly right along the river?

A: Oh yeah.

Q: Well, wasn't there a particular like the Mohawk debt that that was their job was to get water to the farms and then back out? Is that what we're talking about?

A: Water into the farms and back out, oh yeah there were irrigation districts certainly, yeah right.

Q: That would be the particular ones that you were talking about?

A: Well yeah, they were doing that but what the issue was what's left for the CAP. So if you counted 50,000 as gone, then that was 10,000 more that was gone from the river than if you got credit for return flows so you got an extra 10,000 that you could identify as project water.

Q: So the water that would actually go in the canal?

A: Yeah, right.

Q: I think just as a viewer, you know it would be hard for us to understand because I mean I understand a little bit of it, but is there a way to explain that so the that viewer...

A: Ask Bill (Plummer).

Q: So maybe that's Bill's job.

A: Well, I guess really it did come down to your job ultimately didn't it Bill.

Q: You're not the first person to mention that.

A: Well, that was I just mentioned it not that I know the number or a lot about it. But it was an issue and it was an issue that had bad blood between Harley and Cliff.

Q: One of the other issues I think was about salinity; do you remember getting involved with that?

A: I had not been involved salinity very much at all. I've written a recent letter to the editor that they wouldn't publish because I didn't know enough about it, I guess. But well that's a different story.

Q: How long were you then with the Department of Water Resources that it eventually became?

A: Well, let's see I left there I think in '81 to go to the conservation district. When the, when Rich's organization left and we moved to the Arizona Interstate Stream Commission, the Arizona Water Commission rather, the Interstate Stream Commission became the Water Commission, I went to a meeting of the Board of Commissioners and I was introduced to them and this fellow looks at me and says, "Tom Clark I know a Tom Clark, he's cattle thief and a son-of-a-bitch." And I said, "Sorry, that's not me," but anyway that was my greeting at the Water Commission.

Q: Who were the water commissioners? What were they? Farmers?

A: Mostly farmers and a few bankers here and there. I probably shouldn't have talked this long without mentioning Roger Ernst. He was very, very influential in whatever went on with the early project. He, at the time, was a lobbyist I guess for

APS and he was probably the most active person that I had any contact with across the board. But Roger maybe be at the head of this group of people that did CAP things but you would find that they were people like Jim Hennes, you said that you interviewed and, his father Jim, says his father was very interested in CAP way back there. K.K. Hennes I guess was his name and he was a county agricultural type person. A lot of agricultural people, a lot of bankers, some educators, Quintin Mees from the University of Arizona, was always involved. He was the head of the engineering department down there. The people who were substantial citizens that were there all the time.

Q: In the 70's when you were looking at the Central Arizona Project were you looking at it still primarily as water for the farms and agricultural?

A: There was an element of us that were doing that. Agriculture was always considered one of the, you couldn't do it without it, type of proposition. There were others who would just as soon that agriculture hadn't been given such a prominent role. I think agriculture, without agriculture at that time I don't know that there would've been enough city support to bring it forward. So I think it had to go as a venture between of the two elements.

Q: You mentioned your work there, you were more involved with the congressional delegation. Do you remember some of the key people that you dealt with?

A: Yeah, Eldon Rudd a lot, Eldon was very involved. John Rhodes, we worked with him closely. Someone from the west valley, I can't recall his name right now but died a couple years ago.

Q: Bob Stump?

A: Bob Stump, he was a very influential person in what we were doing. Kolbe, I never did have much to do with him.

Q: What was Bob Stump like? He always seemed to be kind of in the background. You dealt with him?

A: I dealt with him. Bob was very stable person. He was pragmatic type individual and his support was useful...inside. One of the, my wife is from Florence, southwest Missouri and she had a family custom of buttering your nose on your birthday. And we went to a birthday party for Bob Stump one time, it was also a fundraiser I guess. Anyway, after the meal Bob was walking around to the tables and talking to people. He wouldn't know my wife from Adam and he came to our table and she got some butter and got up and smeared him on his face. He didn't know what to think about it but anyway he took it very well for the old sourpuss that some people thought he was. He was a nice man. But he was very useful. Um, who else, oh Sam Steiger, he was there when the bill finally passed and he was a strong supporter. One of things about my career was that I was able to deal with so many really, I thought, really good people. And counting yesterday, I think I was involved with ten governors that were past governors or current governors. And only one or two of them in my recollection, and I probably didn't know all that well I know I didn't know all that they were thinking, only one or two of them seemed the least bit indifferent towards CAP. And ones like Jack Williams and Howard Pyle and Goddard and Fannin they were—Fannin was another congressional person that I dealt with quite a bit—they were all such big supporters of the project and their life that they exhibited in that endeavor was good. Whatever else they did that is something else I don't know. But they were good folks by and large.

Q: What about some of the state politicians, Stan Turley is one that we will be interviewing.

A: You had interviewed?

Q: No, we're going to.

A: Stan will be a mountain of information. He was, he was central for many years to everything that went on in the state legislature relative to CAP and he was a very strong supporter. He was very, very capable person. I think he and Steiner were just, very thick. They trusted each other totally I think. And he was good. Burton Barr was in and out not nearly of the stature or the results of a Stan Turley. But he was there. And I'm sure that there were lots of others that I just don't recall now. But the state legislature was their "fairest" by and large, did a good job.

Q: I know at one point when they were having trouble getting federal approval and federal funds, there was some talk of the state building it themselves.

A: Well, they think there was talk about it but I don't believe that the figures ever made anybody feel like they wanted to really to do that.

Q: So while you were there during the 70's, the project was really under construction and moving forward?

A: Yes, um-uh. Well, I can't recall the day that it started but yes it got going and was, before I left was fairly well along. The...most of the, most of the burden for a number of years at the state level was the, would be the Department of Water Resources, the burden of overseeing or being involved in guiding all this that was happening.

Q: What about in the 70's, when Jimmy Carter came in. I understand there was some threats to stop.

A: Well there was and I hadn't thought of that in years. But it didn't happen. It had to be, we might well have been reduced in the appropriations that came annually but they managed to keep moving forward. I'm sure Bill will have more to tell you about the details of that.

Q: Tell me about, you left the Department of Water Resources at some point. When was that and why did you leave?

A: When we, the proposition was...when the project became a reality, there was going to happen was the, there was the question of who's going to be responsible for the operation and repayment and such. And the legislature created, there was a big concern a big process in the legislature and I don't remember if they actually passed an act or what. But anyway, the governor appointed later, there was an establishment of the district, and the governor appointed I believe it was 15 originally 15 board members. And this must have been in, I don't know in '80, '79, '80, something like that. No, I'm sorry it was earlier then that but I don't know. They operated with a lot of help from the state organization, from Steiner's organization, for a long time. And finally, they decided to develop a staff of their own and that's when I went to work for them in 1981.

Q: And they were, what was this organization?

A: That was the Central Arizona Water Conservation District, CAWCD. They now popularly call themselves the Central Arizona Project but it's still that irrigation district that that's that they are. They had...

Q: So they were basically a volunteer.

A: Yes, right.

Q: Volunteer board?

A: Yes. Board, that's right. And they, when it first started, when they first had the project as a reality, John Rhodes was essentially the czar at that point in time. Nobody did anything without checking with John and you went through Wes Steiner's office. And basically these people that were moving the thing forward before this organization got started was Wes Steiner, and John Rhodes, Roger

Ernst, and an attorney named Burr Sutter. There must have been one or two others but I don't recall the names now. Things would happen here and they would get on the phone and call John Rhodes and ask him what to do. I don't remember what the issue was, but something had gone wrong and we were in Wes's office one day. And they finally decided that they had to call John. And one of them, let's say it was Roger Ernst, said to Wes, "You call John" and Wes say, "No you call John, I called him last time." And he was I guess pretty stringent on his requirements with them.

Q: So in 1981, what was the position that you took?

A: General Manager of the CAWCD.

Q: And was that the first time they had a...

A: I was the whole organization there for a few days. But I took a couple of people from the Department of Water Resources with me and we began to hire and when I left I think we had about 400 people so we built an organization. Mostly those people are maintenance people that maintain the project and operate it on a daily basis. And there's now, I think I had an attorney, and now there's three or four attorneys and everything else grows that way. But they are into a lot more things than certainly I was when we started that. But it was a very interesting proposition to...we brought a lot of people from the Bureau of Reclamation that had worked on getting it together and getting it built. I understand you talked to Andy Dolyniuk yesterday or sometime. He was one of the people that we hired for a while as a consultant; he never did work directly for the District. But we utilized a lot of the Bureau people.

Q: So there was kind of two organizations, the Bureau of Reclamation that were building the project.

A: Um-huh.

Q: And then your group, you were the first paid staff person.

A: Um-huh.

Q: And what was their role that was different from what the Bureau was doing on the construction issues, please explain.

A: Well, let's go back just a little bit. You know, the office for the district is out on North 7th Street just by Deer Valley Airport. At the time that I joined the district, it was scheduled to go at Scottsdale and Bell Road. And a Des Chappelle who was one of the chief people at the Bureau at that time and we were having trouble with Scottsdale in relative to things we had to do in order to locate there and Des and I went out one day and said we don't want to put up with that we'll go someplace else. And 7th Street was gravel from the point north I think at that point in time. And we saw that we would have to be moving trucks in and out of this place and such and we didn't want to be in downtown Scottsdale. So that was federal land and I don't remember how we did it, or how he did it, but we got that piece of land dedicated, it was on the canal, dedicated to the office building. So the office building was built, but the Bureau had, in the past, had offices downtown. Well they moved into that office building. Well we had hired a bunch of their people to, their truck drivers to be our truck drivers and that type of thing. You know they just moved over. But pretty soon we're two organizations occupying essentially the same space so as we grew they didn't necessarily cut down to accommodate that. And a few years ago they moved and turned the entire place over to us out there. And it was I guess bull of contention for a while as we struggled to decide who would decide what the temperature inside the office buildings would be and that type of thing. But it worked out very well ultimately. And the organization seems to have settled at around 420 people. I don't know if I answered what you asked me or not, but that's what came to mind.

Q: Why did you want to take that job? It was really a brand new job, why did you want to do that?

A: Gosh, I...it was a challenge I guess. I've never really been as interested in why the water goes through a pump as to why the people are willing to put it through the pump. And it seemed more like a people proposition than the Department of Water Resources seemed to be at that time. I think it was a good selection.

Q: It must've been a challenge too?

A: It was a challenge, a great challenge. But I had awfully good people. I stole some from the Bureau, Larry Dozier is still out there. He is one of the very best water people I think in the Western United States. And he is working for the District.

Q: I heard a couple of people said a couple of things that you were known for when you were out there that you would actually sign some of the payroll checks occasionally to keep track of knowing people, tell me about that.

A: Well, I don't remember signing payroll checks, but I did that. I would go over the reports that I got from people in the evenings sometimes and I've called, I'd get a report that said somebody did a real good job on something and I'd call them at home and say, "Hey I'm sitting here and saw what you did and it was great and thanks a lot," and they'd say, "Who is this?" And they didn't believe it but one guy who was always in trouble, I'd get bad reports on him all the time. One day I realized that I hadn't gotten a bad report on him for a while and this was during work hours so I called him up and said, "What's going on with you, I haven't seen your name cross my desk for a while." I tried to relate to the individuals and I enjoyed that.

Q: One of the other things that someone mentioned to me was that they thought you were responsible at the project for the starting the traditional Christmas steak fry. Can you tell me, what was that? What is that?

A: We decided we ought to do something for the workman around Christmas so we had an auto shop that appeared to be about the best place that we could congregate and so one year we started giving people assignments to get together and find out, create a menu and how we are going to do this. So it's grown into a proposition where most of the employees are on site and some that aren't and their families and retirees, which includes me now, older people, show up and this last one was really good. They had a country western band that the employees did and they give awards for exceptional service. It's a real nice deal. It really is and I don't know that I deserve credit for it being started, but I'll take it. It's good.

Q: It's like a big group now.

A: It is a big group, they're probably 6 or 800 people that show up. That'd be a guess, I don't know.

Q: What were some of the major issues that you dealt with the new being General Manager there and through the years.

A: This isn't a, I guess what you would call a major issue but it sticks out in my mind is one of the stickiest issues that I had to start with and that was nepotism. And the reason that it was a problem, there had been a ruling some place that said that you could not refuse to hire somebody because they had somebody that worked there, you know, you couldn't bar nepotism in your place. And on the board was Rod McMullin, he's one of my favorite board members. But Rod was fresh from, well he was not – yeah he was fresh, from Salt River Project and they were having a terrible issue with nepotism in some of the plants. And I had gotten into a lawsuit up in Northeastern Arizona at the power plants and he was not willing to have anybody working there that was related to somebody else. And it was just a personnel problem, but we finally prevailed and Rod accepted it and it wasn't like Rod to accept a loss. He hated to lose but he was a good board member too.

Q: So did you have a lot of family members?

A: We had several and one of the things that happens when you got 400 people working at a place, well some of the unmarried ones start hanging out together and pretty soon you got another nepotism situation. But it's not, I've not seen that it has caused any problem out there other than realizing that we have to accept it. And we've done that.

Q: What about some of the other problems, the things dealing with the actual construction and getting the project under operation?

A: We had some subsidence on a stretch of aqueduct out to the west that was addressed and I guess successfully, it's stabilized. And to my knowledge, now there's another area of subsidence occurring that may be more devast...not devastating more important than the one we had and this is in an urban area and maybe an issue. Not really do I recall any major things that, well we had to re-do the pumps at Havasu from the original installation. The rotors, not the rotors, the pumps themselves didn't perform as well as we had wished. They were terribly noisy and even today, you would have to wear heavy ear protection to be in that pumping plant over there around the motors. But generally the project, I think, has been an engineering success. It just had minimal problems.

Q: What about the problems with the underground siphon pipes?

A: Well, that's another one, you're right. They had to be replaced some of them, reworked and there was adjustments made relative to that. But again, this project is huge. It's sort of like Mr. Bush and the war. Things are going to happen and do happen and get addressed. I don't think any of them has been serious enough to say you got less than we should have gotten in terms of the project.

Q: Were you involved, there was a lawsuit over the repayment of the construction costs, right?

A: Uh-hum.

Q: Can we talk about that?

A: Well, yeah I can I guess. The, one of the results of the analysis that we did for years and years was the coming up with what the project was going to cost and how it was going to be repaid. And imbedded in that is an allocation of the cost to various functions of the project. Some of the functions are reimbursable, some of them are not, some of them carry interest, some of them don't, and if you're standing 10 years away from the final dollar you spend when you sign a contract, you don't really know what that final dollar is going to be. So we had a repayment cap in the project, in the contract. And when it came time to pay the, what we felt the repayment contract called for was not what the United States felt the repayment contract called for. And so we submitted it to court and the issue is unresolved at this point in time. But it's an expensive issue, there's a lot of money involved in it, but however it comes out in whose favor it comes out, what we've done is in the best interest of most of the people. And when we pay it one way or another, it will still be that way.

Q: Do you remember roughly what can of figures we are talking about?

A: I don't know, it seems like, no I don't want to say cause I really don't remember what the number is.

Q: Do you remember when you were doing all the projections what you thought the project was going to cost?

A: Do I remember what I thought the number would be?

Q: Yeah.

A: I have in my mind a number of 2.1 billion but I don't remember if that is before the allocations to the functions are made or if that's what we wind up with as with what this district should pay. And I'm not even sure that the 2.1 is right but it's a lot of money. And whatever it turns out to be, it's going to be okay.

Q: But you've been involved with this project from even before, well not before conception, but before it was even under construction and all the way through. Do you remember the day when the water actually starting flowing through the canals?

A: I remember the day that we celebrated the delivery of water out at Harquahala. Happened to be my birthday, on May 22, and they had an inner tube floating down the canal that said "Happy Birthday Tom" on it. But anyway, yeah it was a great day. And I remember the blast on the mountainside when they started building over there on the river. Those were all good days. I can see John Rhodes in my mind here over on the river that particular day. There have been a lot of great days associated with the project.

Q: Did you ever really think that you'd see the water flowing through Phoenix?

A: Oh yes, I don't think I ever doubted that it would happen. Maybe it was just stupidity, but I...no, when the issue came up I didn't see how you could avoid doing something like that.

Q: You talked about some of the big supporters you had like John Rhodes and people, do you remember who some of the people were that made it difficult for you?

A: Oh yeah, Frank Welch, what was that gal's name? I can see her but I can't recall her name right now. Frank Welch, David Yettburn...

Q: Caroline Butler?

A: Caroline that was the one I was trying to think of. Caroline Butler, I like Caroline Butler, but she was sort of a pain. She's still at it. I saw her not too long ago downtown. The Bureau was giving a presentation on its plan for the future and Caroline was there still fussing about the project.

Q: What was your role in working with those people?

A: Oh, we didn't ever have face-to-face confrontations. We would appear at different meetings and present different sides of the issue and write an occasional article or something like that. I wasn't...and we didn't have anybody assigned to that being their total job to put these folks down. We just went ahead and said you know we are doing the right thing and these guys are wrong here, here, and here but we weren't mean to them I don't believe.

Q: When we interviewed Bill Wheeler, he gave me a copy of a position paper that he sort of had answering all of Frank Welch's so people could use within the Bureau.

A: Well, now see that was a function of the Central Arizona Project Association for a long time. They were sort of the expression of the project that could do things that, as a government outfit, you probably wouldn't want to do. And so Bill (Wheeler) and before him Rich Johnson, did a lot of that.

Q: Explain that to me a little bit more, the Central Arizona, you were the general manager of the Central Arizona Water Conservation District and there's also the Central Arizona Project Association. What's the difference?

A: The Central Arizona Project Association goes way back into Arizona history. It was a group that set out, I don't know what their earliest date was, but set out to acquire additional water for Central Arizona. And they were a volunteer outfit; they were funded by contributions. They had a large membership in probably in the 40's, 50's, and 60's. They had a lot of money to spend. The banks and such supported them. I won't use the word propaganda, but I'd like to use it in the

better sense of the word. They disseminated information about the need for the project and such. And that was a private organization. It still exists today but barely. I am the Executive Director of that organization now more or less. But anyway, then the water conservation district is a government organization that's created by Arizona law and has taxing authority. Everybody that has a home in the three-county area is paying a tax towards the conservation district to run the project. And that's where a lot of their money comes from is taxes.

Q: So they work together but they're separate?

A: They are separate. For years, again, the CAPA outdates the district by a number of years. And the CAPA was instrumental in setting the not only the approach to obtaining authorization of the project but was instrumental in identifying what it should do after it began to be built. It was a great organization and a lot of Arizonans contributed to it.

Q: If you had it all to do over again, is there anything you would've done differently at the project?

A: Are you asking me what major mistakes I made? I'm sure if you took me back and started me out again many years ago, I would do a lot of things differently but I can't think of anything right now that I just absolutely regret that I did. I'm sure that there are some things but I am well at peace with myself on it.

Q: Nothing you can think of that you would like to do over?

A: Well, there were two or three people I would've fired, but that is about as far as that goes.

Q: What are you proudest of about as your role with the Central Arizona Project?

A: Well, I think I contributed to its being, to the project being here. I don't think that I did anything that would...I think there are a lot of people that had a whole lot more influence on things you can see than I did. I don't know that, that what I did was anything that hundreds or thousands of other Arizonans couldn't have done. I was lucky to be where I was at the right time and I turned left when left was the best way to go and right when right was the best way to go. But it was no particular insight that I had, it was just a lot of good luck.

Q: Like stumbling into the Bureau of Reclamation office.

A: That's right; it started out there and just went on from there. When I was in the Army, we did a...at Redstone, we did a Fourth of July parade in a little town in southern Tennessee. And we had a company commander name Hershel Godby and Hershel didn't want to be in the Army at all. But anyway, he didn't know left from right. But we were all at a mass formation in front of this warehouse getting into this parade as it went by, and Hershel gives the command "Company, left, march" or right turn whatever it was. Well, if we'd turn left, we would've marched straight right into the building. But nobody turned left, everybody went right and Hershel, I don't guess today knows that he told us to go the wrong way. But some things just work out that way, you know, and I think I've been blessed with that.

Q: Has there been any surprises for you, anything about the CAP that is different than what you envisioned where you needed to go?

A: Oh yeah, I think that obviously the detail of what it turned into in size and numbers and cost and whatever. All of those things are surprises to a degree, to the degree that we just, you know, we know we needed a pump but we didn't know how much that pump was going to cost or if it was going to come from Japan or this type of thing. But I think I just started in with this with maybe a naïve cloak over my head that said hey this is what we want to do, we're going to do it, and everything is going to be alright. And I think that's where I still am that we're

gonna...when we look back we're going to say "Well this could've been done better but it was appropriate at the time."

Q: A lot of your job early was doing like you mentioned forecasting how was Arizona going to grow? How much water was going to be used? How it was going to be used? Have you been surprised about how Arizona has changed over the years?

A: Absolutely, yes. It has grown so much more than we thought, I thought. And you know I would be hard pressed to go out there and find very many people that had it right. I just don't, it seemed a surprise to everyone. And I'm at odds now with some of the things that are happening relative to the project and that growth. But as I look back, I don't think there was, I think anybody that had been on a course to that was driven by what they thought in their mind would be like it is today. I think they would've been just shoved out of the way and say hey we can't accommodate you, you're just too far out. And so, I think that necessity required some conservatives going down that road.

Q: If you would've predicted accurately, they wouldn't have believed you.

A: I think...that is what I'm saying; if we had been right we might not have gotten the project.

Q: You say that you're at odds with some things now. What things do you see now that...

A: I have concerns with the amount of water that's going to the Indians under proposed bills. And just recently I read the statement that Lyndon Johnson made the day he signed the bill, there wasn't a mention of Indians in that. Now of course the Indians were in the mix as it went along but it was not envisioned as a project that would give over half the water, half of the Colorado River entitlement, to the Indians. That's my main problem today.

Q: So that's been a surprise to you the way that's worked out?

A: That is a surprise, yeah. I didn't think that would happen.

Q: What do you think Arizona's critical water issues are today?

A: Well, the critical issue, I guess today, is the one everybody talks about most is the drought and the continued supply on the Colorado River. There are things that are to be resolved that may change the amount that we have for the project. We're getting to the point where the upper basin may not be able to deliver what's required under the normal conditions under the Compact. Getting beyond that's going to some sort of a problem. New Mexico was short changed in the original proposition. They look to get some benefit from the project. It turned that they haven't gotten that, they're asking for it now and then they're asking for it in a way that maybe a little hard to take. So there are issues that aren't resolved there. I believe that we need to start the Yuma Desalting Plant to take care of the Mexican Treaty, the water that goes to Mexico. And it's, people will say "Oh it's not the most efficient way to address that problem." Well, probably if you were doing it again, you wouldn't start with that but it's in place. You can start it up and get some good out of it for the incremental money is not all that out of proportion. It's not the long-term solution probably. But anyway, there's these things that are around there on the project that are still bothersome and need attention.

Q: We didn't talk about the Yuma Desalter Plant. Why don't you talk a little bit how that came about and why it's _____ (1:26 tape muffled)

A: Well you know I shouldn't do this, Mr. Plummer, he had charge of that for a while. He knows more about it than I do a lot more than I do. But I was down there the other day and I'd never been there. You could eat off of the floor. I mean it was the cleanest place that I have seen in a long time but that doesn't make much water. And I don't know, but it costs a lot of money to keep the floor clean is what I'm saying and they could just as well as been spending that money to do

something else. The plant, I've got a copy at home of the minute, I don't know the number of the minute, I don't remember now. I can't remember his first name, but Brownell came in years ago when Steiner first came to...and Wes was all pumped up. Herbert, was it Herbert Brownell? Herbert Brownell. And he led an investigation that developed an agreement to take care of what we owed Mexico relative to the river. And the minute comes out and it has the number, in the upper left hand corner it has Mexico City and the date and whatever, and the heading on it says something to the effect of a solution that will fix the issue, the salinity issues, between United States and Mexico forever. And this is the same, I think they cut that out and pasted it on every new resolution that we had, but we fall for that all time. But something has to be done and I'm an advocate of putting a major maybe even an atomic desalting plant on the Gulf of Mexico and bringing it into play, in a really a regional wide proposition down there that would take in as far as over to Hermosillo in terms of municipal water supply. And there is a huge agricultural area between _____ (name of a city, unclear) and the coast that is losing water supply to salt water intrusion. There's need for electricity both directions on that coastline over there. And we can reduce the economic differential across the border there and that would help keep the Mexicans in Mexico and reduce our problems with illegal immigration even by doing something. So I think there's some fertile ground down there for somebody to get in to but what was I supposed to be talking about when I started this.

Q: How did the Yuma Desalting Plant come to be built?

A: To meet the requirements of a treaty that we had with Mexico. Mexico is allotted so much water out of the Colorado and the desalter was to reclaim the returned flows, we get back the return flows, so that they would be usable to meet that treaty obligation.

Q: When did it get built? Do you remember?

A: I don't know.

Q: Why isn't it operating?

A: It's inefficient. It costs too much money and whatever. Ask Bill.

Q: Did it ever operate?

A: Yes. It did, didn't it? They are doing some research there they say. What I saw that they claim is research was not mind boggling at all. It was sort of really minimal I thought. It's an issue they'll work through it, I'm sure and hopefully come up with some better arrangement than they have now.

Q: How do you see Arizona in terms of water in the future? Do you think we will get through the drought? Do we need to start rationing water now?

A: Well, I'm again, it's probably I shouldn't be here but I am, I'm not one that is in favor of rationing water to current people in Phoenix so another million can move in here in the next 10 years. I think that a long-term program for making the water supply adequate requires at some time to get in touch with building permits. And I don't see that anybody that has any power is thinking that way. So I don't have any hopes that that'll happen but I think that's...if I were czar that's what would happen. We would send them to Oregon I think.

Q: Did you ever predict in any of your analysis a long-term drought like this?

A: Not my analysis but certainly at the district yes. I mentioned Larry Dozier a while ago and this is sort of his area of expertise and you know, my understanding is anyway that they look at droughts by looking at what happened in the past and see what the extreme conditions were and how long they lasted and such. And then have some sort of a probability factor of everything coming together at the same time. And it's, you can probably if you do 10 analyses and you spread them out far enough, you'd probably, one of them probably cover what's going to happen. I don't know how you can rest real comfortably that knowing the one

that you picked is going to be the actual one. So it's something that, I think that there is a potential out there for a really drastic situation to happen. Now whether it will or not, that's the way the wind blows I guess.

Q: Do you have any advice for the people today that are running the CAP?

A: Not really. I think that more than by and large, I was tempted to say by and large but I don't mean that to be limiting, I think that what they are doing is good. I think that they are certainly within the bounds of acceptable management. And there is no doubt in my mind and I'm sure there's no doubt in Sid Wilson's mind that it could even be better. But they were doing a good job. And they should be encouraged to keep it up and maybe even do a little better.

Q: And you're still involved as you said?

A: With the CAPA a little bit, but all what we've been doing for the last couple of years is having some informational forums that take an issue and have speakers relative to it and just try to make people more aware of what's there and what's available.

Q: One thing I like to ask everybody is do you have any advice for young people today trying to decide upon a career and are getting started with their lives?

A: I'm a terrible one to ask that. I guess the basic advice that doesn't get very specific is to don't limit yourself by thinking that there's something that's beyond you; do it anyway. And you'll find out if you can do it.

Q: I think that covers the questions I've got. Is there anything you thought of to ask him that I didn't?

A: Bill will answer everything that I didn't, that I didn't get it right.

Q: Tell me how you decided early on how water from CAP would be allocated?

A: Well, obviously there are major categories of allocation like municipal/industrial and agricultural water and then maybe a couple of lesser allocations that I won't go to. Within those, you have Indian and non-Indian also and we tried to identify the entities that would be in the area, in an area, that could receive water from the canal. And to suggest or try to determine what their anticipated need would be for water at given points of time and see how each of these ultimate uses competed with each other in terms of necessity and availability to pay and such. And we did a lot of studies that looked at cropping patterns, and alternative supplies, and populations that needed to be served, and growth potential and all that and tried to put them together and identify the areas where people could come, or entities would come through this process with a desire for CAP water. And we had, I guess this started...I started this at the Water Commission. And the Water Commission went on to into the Department of Water Resources, and we came up with propositions, proposals that we thought would be in the area and then identified what we thought water costs would be and asked people to consider their views of it and then come tell us how much water they wanted. And I don't recall exactly what the response was but when we finally got the word from the Indians, well we had more water asked for than we had water available. So we went on into the moving a step forward to bring these people to signing contracts for water. And of course some of the water demand went away when the time came to sign the contract came up. And so I, I don't know what the numbers are now would be entities that have sustained their contract but we contracted for most of the water and some later came back and said we can't, agricultural users in particular, came back and said we make it under these conditions and there was slack cut for them several years ago. And still we lost agricultural users and such. Now, the allocations are some of them are in court. People are wanting to maintain allocations that maybe their district didn't, or not wanting to maintain. The Indians are wanting much more water assigned to them than was ever anticipated. I think that our initial allocation to Indians was a couple hundred thousand acre-feet a year, maybe 250,000 acre-feet a year. Now it's, I

don't know, 400 and something, 300,000 Bill is showing over there. So I don't, that, there's a proposition right there. I think Bill is probably absolutely right that 300,000 is what came out of the federal government, I think, that Wes Steiner's allocation was less than that. And so we've, right now get into a different view on it. And who knows who's right on it. We won't know until it's over, I guess. Allocation has been a major problem and it's fluid, changes with the price of cotton, and the cost of land around Phoenix. One of things that's happened, and will have happen and it seems to be for sure is that I think its Anthem, is Anthem that is running on an Indian allocation, it is. It has the Ak- Chin allocation. And so the Indians are going to turn that around and make it available to more, Indian water available to non-Indian uses, to city uses. So it gets really, really complicated and god bless all the people who have to work with it. It's some job.

Q: One of the things Ak-Chin is being used for, did you think about water, the CAP water coming here and being used to grant to recharge the groundwater back in the early days?

A: Not in the real early days it wasn't a major item but it was always a . . . you know something that well of course if we have to, we can do this. And it has become more and more of a thing to do and a major program at CAWCD now that addresses that. And it will be more visible in the future and more important also.

Q: Someone has mentioned to me that early, maybe the late 80s or early 90s, when the water was being delivered and California wanted more that Arizona was trying to show that they were actually using more and that's one of the reasons to come up with that was to justify or so that California couldn't put claims on it and that Arizona was using it.

A: Well, that might have part of it. My understanding of how we would lose it to California I don't think we would be too much affected by that. I could be wrong totally there.

--- End of Interview ---