

CAP Oral History

Pam Stevenson (Q):

I'm Pam Stevenson and I will be doing the interview for AGAVE Productions for the Central Arizona Water Conservation District. I'd like to have you introduce yourself. Why don't you give us your full name?

Mary Beth Carlile (A):

I'm Mary Beth Carlile.

Q: And to start off, we always like to get some background. When were you born and where were you born?

A: I was born in California in Los Angeles in 1931.

Q: What brought you to Arizona?

A: Well, my husband was looking for a job. He's an electrical engineering professor and they hired him at University of Arizona in 1963. So we lived in Tucson for forty years.

Q: You've seen a lot of changes!

A: Yes.

Q: Let's talk about your background. You grew up in California?

A: I grew up in California in Porterville which is in the San Joaquin Valley. My father was a high school teacher and in the summertime, he was a forest ranger. So we used to spend our summers in those wonderful cabins in the forest. He used to fight fires. Go off on a horse and fight fires. I had a sister and a brother. So I basically spent my childhood in a forest. I loved the outdoors and my dad was a biology

teacher and so we learned the flowers and the animals. So the environment has always been a very, very interesting subject to me. And when I got to Tucson, I got involved with the American Association of University Women and one of their subjects was the environment and that was the time when the environmental movement in the early '70's just really got started. And we used to do a little panel for what can you do for the environment and wrote a paper on water and the water situation in Arizona.

And when Bruce Babbitt became governor in 1978, he was looking for a woman in Tucson who was a Republican to appoint to the Arizona Water Commission. Now, the Arizona Water Commission at that time was all men. It had always been all men and he appointed me. It was very interesting, because all the men were very suspicious of a woman and somebody from Tucson and was I in favor of the CAP and all of those things, but I was on for eight years. We worked out some wonderful things with the Arizona Water Commission. Now the Arizona Water Commission preceded the Arizona Department of Water Resources.

Q: I wonder if you knew Wes Steiner?

A: Wes Steiner was the Executive Director of the Arizona Water Commission when I came on.

Q: Why don't we back up just a little bit? You didn't talk to me about your educational background.

A: Oh well, actually I am a college graduate. I am trained to be a teacher and I taught for a few years until I started my family.

Q: Where did you go to school?

A: I went to Pomona College and to San Jose State University in California, everything California at the time.

Q: What did you teach?

A: Elementary school so that wasn't related to the environment or science or whatever. So my background is not in hydrology or in science. It's just been a love of mine which I've learned over the years.

Q: Sometimes you just become more of an expert that way than a formal education.

A: Sometimes, right.

Q: What year was that you got on the commission?

A: 1978. And at the time, I was on the governor's commission on Arizona's environment and water was an issue there, too. It was kind of a melding of opportunities to learn about the state and to learn about water and become knowledgeable about the people, who were a part of that, a part of that history and a part of the ongoing operation. And then in the early '80's, Tucson had a big forum about the future of Tucson. What are the main issues in Tucson? Water came to the very top. Even though they worked on other issues, of course there is always transportation and there's housing and issues of that kind, but water came to the very top. And they decided that they needed an organization to make sure that the Central Arizona Project got to Tucson. So in 1982, a group of us, 30 of us, formed the Southern Arizona Water Resources Association which we fondly called SAWARA. I wrote a grant from the Gannett Foundation and we raised over a million dollars in in-kind contributions and got the grant and I became the Executive Director of that and was the Executive Director of SAWARA for twelve/thirteen years. During that time of course, water policy was a major part of what I did and celebrating the CAP as it came toward Tucson.

We had one celebration that I recall that was in, I think, 1989 and it was in Florence in the middle of the desert, in the middle of July. We had Mo Udall there. He was the one that broke the champagne on the bulldozer of course to get the

leg started to Tucson. And Senator Dennis DeConcini was there and many, many dignitaries all out under a tent in the middle of the desert when it was 110 degrees. There were so many people that really, really took to heart the importance of the Central Arizona Project to Arizona.

Q: When you first came here in '63, the Central Arizona Project wasn't even approved yet. When did you first hear about it? What did think when you first heard about the whole idea of digging a ditch and bringing water in from the Colorado River?

A: It's interesting. If you were in Tucson at the time, the discussion went on and it was in 1968 when it was authorized by Congress, there was quite a controversy because it was a project for agriculture. Agriculture was to benefit from it mostly, not the urban areas necessarily, just sort of as a side. So the College of Agriculture there at the University of Arizona did a study on how the CAP economically would affect the whole state and particularly the area we lived in. And their study showed that it was not economically viable. So there was a lot of things in the newspaper about was it really the right thing to do to build the CAP and particularly to build it all the way to Tucson. So that was something that I understood from the very beginning that there was controversy about it. But when I got on the Arizona Water Commission, it was very clear that it was going to be a life line. So I understood fairly early that it was an important thing to support.

Q: What about that first paper that you wrote about water, was in the '70's?

A: It was. It was in the early '70's and it was on the beneficial use of water. It was really Arizona water law and how there was really no broad law on groundwater and we knew at the time that we were using more water in Tucson, groundwater, than what was being replenished every year. So we were concerned about that issue, but it was mostly Arizona water law, it didn't really deal with the Central Arizona Project.

Q: And the project was still pretty new at that point?

A: Yes.

Q: Was there public hearings and things in the '60's about it?

A: No. I don't remember any public hearings. They didn't actually start construction until 1977.

Q: Would you say in general in the '60's, it was opposed really by a lot of people?

A: Yes, there was a lot of controversy and there was one man in particular in Phoenix who also took on the cause. So there were a lot of articles and there were demonstrations and things like that.

Q: Who were some of the leaders against the CAP?

A: Well, I should but I don't. It seems like it was a long time ago now and I don't remember.

Q: There was an issue of whether it should just stop in Phoenix too then go on to Tucson. Wasn't that a question?

A: Oh, yes. As it was being built and when Jimmy Carter was president, he had the Bureau of Reclamation make a review, an economic viability, and whether it was necessary to build it all the way because it was a very expensive project. He pretty much decided, his administration decided, that probably there was no reason to continue it on past the Florence area, actually where it tunnels under the Salt River. So the Arizona Delegation and Congress, the Senators and the members of the House of Representatives, mounted a major campaign. Barry Goldwater was involved in that and John Rhodes and Mo Udall in particular. One of the most important...well, I'll think of it as we go along.

Q: Were you involved at that point with water issues in that part of the '70's when that was going on?

A: Yes I was. Yes I was. I was involved in that. That must have been in '75 or '77 right at that time, so I was on the Arizona Water Commission.

Q: That was before Babbitt was governor?

A: No, he was governor at the time.

Q: He became governor in '78 and Carter was elected in '76.

A: Actually you are right. It was just before that time. Carl Hayden was the other one I was thinking of who was so active in Washington for us.

Q: He was out of office by the '70's. Senator Fannin?

A: Senator Paul Fannin, right. John Rhodes, um-huh.

Q: We were going to interview him but unfortunately he passed away. We had an appointment with him to do it.

A: He was a wonderful individual. He would've given you a good interview too.

Q: You mentioned when Babbitt appointed you that he was looking for a woman, someone from Tucson, and a Republican. You were all three?

A: Right.

Q: What was the role of the water commission? What was it doing in 1978 when you first joined it? What were the issues they were dealing with?

A: As I recall, it mostly had to do with our entitlement to the Colorado River and relations with both Utah and California. We're lower basin states. We used to have a meeting, tri-state meeting, every year. So all of us could talk over the issues and work together on it. And the issues were pretty much making sure that all of us understood the law of the river. And of course the law of the river at that time was that any unused portion from either Nevada, which wasn't using all theirs, or Arizona, which wasn't using all theirs, would go to California if they needed it. It was a shared kind of thing. There really weren't any major controversies that we had to deal with at that time.

Q: Was the thought at that time that there was going to be plenty of water?

A: Yes, absolutely. Absolutely. Plenty of water and agriculture was going to have the major share of it. Of course, there wasn't the growth in the municipalities at that time and there really wasn't at that time much of a groundwater issue. Tucson really was always the largest city with the largest groundwater issue. The rest of the state was not concerned about that at the time. And the Salt River Project wasn't having any droughts. So there was plenty of water. In fact, one of the interesting things is that it's much cheaper for the cities to use Salt River Project water than it is CAP water. So for a long time, they didn't use much CAP water because they preferred to use the credits from SRP.

Q: What about Indian water rights? Did that come up at that time?

A: No. The Indians had been apportioned a certain amount initially. And they apparently didn't feel that it was an uneven balance at that time. And they weren't doing the major agriculture on the Gila Reservation along I-10 there at that time either. That was after that.

Q: You mentioned groundwater; I know one of the things that Babbitt accomplished in his term as governor was the groundwater law. Were you a part of that? Was that part of the water commission?

A: Yes, I was and I went to several of the retreats and so forth. And because I'm not an attorney, SAWARA wasn't begun at the time so I didn't represent Tucson; I was pretty much a passive observer of it. Of course, it formed the Arizona Department of Water Resources, but it was a very collegial and interesting time for legislature and the Executive Branch of the government for Arizona. It was a wonderful demonstration of how party didn't matter and you really got together on the issues that were important. It took a long time. It wasn't easy. The mines, agriculture, and the cities were the three major players.

Q: What were the issues that you remember about the groundwater law?

A: The issues of course were how to apportion them and the conservation issues. The conservation at the very beginning was not a major issue, but as the discussion went on, conservation became kind of one of the center pieces and linchpins in the water law. So that eventually the three management plans were built into it to have safe yield in 2025, but that all sort of evolved during the discussions.

Q: You mentioned when you first joined that they were kind of surprised to see you come on. Did you eventually gain their respect?

A: Oh yes.

Q: Talk a little bit about how that worked out.

A: Well, I'm sure you've heard the term Water Buffalo. So it was interesting because Water Buffalo is applied to somebody who's been around the water area for a long, long time and is just kind of one of the people who you can always talk to about water and they're active in some way and they have some background in it and so forth. So we used to laugh about how the people on the water commission had been there for a number of years for the most part and most of them were farmers or ranchers. So we sort of called them Water Buffaloes. They were very fine gentlemen so there was never any question about being courteous

and that sort of thing. A really wonderful warm friendship grew among them. Kel Fox was on at the time. Kel Fox, of course, I'm so close to his ranch now because I'm with the Verde Valley Land Preservation Institute and our first conservation easement is his original ranch and I know his wife Patty. So I have a very fond memory and long friendship with Kel Fox, which was established there.

Q: Any other particular people you remember there?

A: Well, of course Wes Steiner and Tom Clark. Tom Clark was at the Arizona Water Commission at the time and, of course, from there he became the first general manager of the Water Conservation District. So I knew him previous to that as well. Wes Steiner was a wonderful asset to Arizona at that time.

Q: In what way?

A: He was not only a good manager, but he was forward thinking. And he commissioned a report of all the water resources in Arizona. It's a major report. It's probably the first one that sort of catalogs and looks at all the rural as well as the urban resources and issues around water. He was really, as I say, he was just an asset to us.

Q: How were you able to gain their respect and become a part of that? You weren't a lawyer, you weren't a farmer, and you weren't a man. How did you convince them you knew what you were talking about?

A: Well, I did my homework. I guess that's one of the most important things that I've always done. I read all the reports and all the agendas and all the information and I joined in on the discussion. It was a building of relationship that way.

Q: Did that take quite a while to do that?

A: I wouldn't say so. I would say in a year or so they trusted me. They trusted my opinions.

Q: Did more women come on to the commission?

A: You know, it was so long ago. The Department of Water Resources and we were an advisory to them and they had some women on that but I believe I was the only woman on the Arizona Water Commission.

Q: How long were you on the water commission?

A: Eight years.

Q: It was after you left that that you went and started this other Southern Arizona...?

A: Southern Arizona Water Resources Association began in '82. So there was a slight...no...it became after the Arizona Department of Water Resources was formed in '80, 1980, we became, the Arizona Water Commission, became advisory to them and so I was on that for a few years as well. So I was on both. I was still on that.

Q: What gave you the idea to start SAWARA you called it, Southern Arizona Water Resources Association? What made you decide that you needed that?

A: It was very clear to the business community and the city and county governments there that without the Central Arizona Project coming to Tucson, we would never be able to balance our water supply because we were growing and because we were totally dependent on groundwater. And we knew that we had no renewable source, the only renewable source coming into Arizona was Central Arizona Project in a major way. It's interesting because in 1977, the water rates by the City of Tucson, and they own the water company, doubled the rates of everyone in the middle of the summer. There were immediate petitions for recall

and the entire City Council was recalled. So water became just a major issue in Tucson. Everybody was kind of, wait a minute, what's going on here? So it gave an opportunity for people to say this is really what's going on with water. We are over drafting our source. We elected a brand new council. They sat down. Looked at all the issues and kept the doubled rates. So people understood suddenly in their pocketbook that there was an issue here. And that's why the business community and the governments and everybody got interested in the issue and decided that it was pretty important to have a renewable source.

Q: That would get their attention.

A: Got their attention, right.

Q: Talk a little bit about how Tucson is always been different from Phoenix, I think maybe how has that impacted the way they look at water?

A: Well, it's interesting because when we formed SAWARA, we formed it of course primarily around the Central Arizona Project issue, but the grant that we wrote was primarily education. So the education became two fold. We produced materials for the classroom for every school in Tucson on the whole thing from the hydrological cycle, what precious water was, how water powered things, to conservation, water pollution, and all of those issues.

The other arm was conservation. So we started a major conservation program in the community and it was backed by the governments and by the business community because they were all part of SAWARA. We adopted the xeriscape from Denver. Denver had just begun a few years before and had patented the xeriscape, the xeriscape methodology. So we invited all of the green industry, all of the nursery men and all of the growers and everybody in Tucson to sit down with us and talk about how we could implement xeriscape in Tucson and we did. We slowly got them to buy those plants. We had tags in all of the nursery. We had billboards that showed that you could go to the nursery and get these tags, and

began to implement xeriscape in Tucson. By the time that I left SAWARA, we were doing contests, not only commercial contests, but also contests on private property. We had lots of people who were so proud of their new landscaping and so forth.

And we even convinced the builders, this was kind of an interesting dynamic, to convince the builder to put xeriscape in their model homes rather than grass. The thing is you drive up and see all this wonderful landscaping and you picture your house with the trees and the grass and so forth. But we slowly got that industry to change over so when people bought a house, they thought they wanted it to look like that. So that was one of the most successful programs. So we did lots with conservation. We did a plumbing code for low fixtures in both the county and the city. The University of Arizona was a participant with us and they did surveys and so we had a lot of scientific background and we put out a monthly "Water Words" which was a forum or eight-page piece on all the issues in Tucson and who was doing what. It was a very, very valuable piece that we did. So it turned out to be a very participatory community and that's how we got the things done that we did.

Q: And that was always a non-profit?

A: Always a non-profit.

Q: Never a government agency or anything?

A: That's right.

Q: Do you remember about the discussions about the CAP coming to Tucson? Was the discussion on where the canal was would go and was that issue?

A: Always. The discussion when it got to Tucson was about whether it should come along the Santa Cruz River or should it go around to the west to the back of the mountains at sort of the base of the mountains. There was a long heavy discussion

about that and actually that occurred during the time of SAWARA. It had not been settled by the time of SAWARA. So we had a committee that worked on that issue. The consensus finally in the community was to take it on the west side. And the Bureau of Reclamation participated with us and cooperated with us. They were building the canal. They went along with what the community wanted. What's happened now of course, in the west, the city owned a lot out there which they purchased. They purchased farm land so they could use the water rights. That farm land is now all converted to recharge ponds. So the CAP has recharged in huge ponds on the west side and then taken to a gravity flow into the system.

Q: Do you remember what some of the issues were? The pros and cons of the two different alignments of the canal?

A: One of the reasons for having it on the east side, which would be along the Santa Cruz River, is that you could've used the riverbed for recharge, but also it was more accessible to piping to the northwest and more accessible to the neighborhoods and so forth. They felt that it wouldn't cost as much for delivering if it was on the east side as it was on the west side. They built a treatment plant to treat it. But the farmers and the ranches, they're still very strong in Arizona and the farmers and the ranches said this is partly our opportunity to have water and all the ranches were on the west side, the farms. So that's ultimately what happened.

Q: But wasn't it a fact that it would look ugly going through the river bed or anything like that?

A: That's right.

Q: Was that a consideration?

A: Oh no. I don't think it was a matter...there were right-a-way problems in that it would have cost more on the east side because the land was more valuable than on the west. So it was an economic issue.

Q: But it was a longer distance to build it on the west side?

A: It was a longer distance, that's correct, but it also served the Indian Reservation if it was on the west side and the Indian Reservation didn't have much access to it on the east side.

Q: Indian water rights the issue was starting to come up at that time then?

A: Yes, it was. They were beginning to say that we have an allotment. We need to be able to use it and we need to have access to it.

Q: What about the actual construction? It seems odd in some ways that they would have had this all worked out before they started building it? You know at the very beginning, but yet they were still figuring, they were still debating where it was going to go that late in the construction phase.

A: I'm not sure why that it wasn't settled at the very beginning, except that it was such an expensive project and one of the biggest ones the Bureau of Reclamation had ever built. There were pipes, and tunnels that were bigger than had ever been made before. It was, in some ways, experimental. In some ways, it was brand new things that were happening. So I think they wanted to be sure that everything was not set in concrete before they were sure what they were going to do and how they were going to do it. So I think that was a part of it.

Q: Looking back in hindsight, do you think it was a good decision to put it on the west side or would it have been a better to put it to the east?

A: I think that that probably it serves the people that it should on the west side. The only issue really is serving the northwest Tucson, the Oro Valley and the northwest Tucson. It does not have access to the CAP and they would have to build, I think it's a twenty mile pipe from the CAP over to where their delivery system is and it's

too expensive. They have not been able to do that so far and that's a burgeoning population. So that's probably the only down side to having it on the west.

You know, they built a treatment plant for it and when CAP was delivered into homes, it brought, it corroded and broke the pipes. People not only had water pouring out of their ceilings and all kinds of problems, but they had brown water in their washing machines, and coming into their bathtubs, and into their showers, and into their sinks. It was because Tucson had so many old systems that were built so many years ago, that when Tucson Water came into being, they took over these old systems but did not replace the pipes. And so you had in the center of Tucson in particular, many, many, many corroded pipes where they say they that the calcium carbonate had built up inside the pipe, the pipe had disintegrated and so here's the calcium carbonate that serves as the pipe. So when the CAP came through, it dissolved the calcium carbonate because it was chemically different and you had old pipe and you had lots of problems. So people became up in arms and got an initiative on the ballot which closed down the treatment plant and indicated that CAP could not be delivered directly to homes. It had to be mixed with groundwater. It had to be recharged first and that's why the system that they have right now is that system.

Q: So they're still not delivering...

A: They're still not delivering through the treatment plant.

Q: I remember hearing about all the problems, but I didn't realize that was how it was resolved. They still don't deliver any of the water directly.

A: No. It's mixed with groundwater, but they recharge it first, then they bring it up, mix it with groundwater, and deliver it.

Q: It doesn't seem like the most efficient way to do it. Especially, I would think, because a lot of the new areas that have new pipes would be fine.

A: Probably the majority of the city of had new pipes, but they didn't deliver it initially to that part of the city and that was their mistake, partially and not understanding what was going to happen. Not being prepared.

Q: When was the first CAP water delivered? Do you remember when year that was?

A: '92 in Tucson, '91 or '92 in Tucson. '89 in Phoenix and the year or two before in Tonopah area. Harquahala was the first delivery.

Q: So in Tucson, is CAP still a pretty big issue there? How much of the city is getting CAP water? The east side, Oro Valley, doesn't get CAP water at all?

A: Right. The Tucson municipal system which is nearly all of Tucson, except for the northwest, they deliver in the south and the east. They have a huge system, a huge system. They also have reclaimed system. All the sewage, effluent, becomes reclaimed water and it is sent back out and all the parks and all the golf courses in Tucson are on reclaimed water. This is a major piece that the City of Tucson financed because the water company was, I guess you can say is so well managed, that they had funds and funding to be able to put in this reclaim system almost without bonding. They had some bonding, but it was amazing that they built this system almost with people not knowing what was happening. And it is a very sophisticated system and it's very well run and very well planned. So they use most of the water that goes through the, they have two plants...

Q: So they're called sewage plants?

A: Sewage treatment plants.

Q: When did they start doing that?

A: They started doing that in the early '80's. They were far thinking. And again, it may have all been because of this recall of the city council and the awareness that

something had to be done that there had to be some major conservation measures in Tucson.

Q: Did your SAWARA group have anything to do with that?

A: No. The city planned and executed their reclaim system before we were up and running.

Q: What was your title or your role with that group?

A: Executive Director, so I basically ran the program. We had a very small office; an office of no more than three or four at any one time. We did amazing things. I say so.

Q: How long were you there as Executive Director?

A: Thirteen years. We installed the conservation programs and school materials. We had some wonderful committees with engineers and the university professors would sit down and talk about the issues and we went to Washington, DC and testified for the CAP year after year, after year, after year. I went back there for at least ten years, every year.

Q: How was it funded? You said you had a grant from the Gannett Foundation?

A: Initially we did, but it was funded by the businesses in Tucson. The business community stepped up to the plate.

Q: When you left there, when did you get involved with the CAWCD Board?

A: Let's see, '92.

Q: So where you still...

A: 1990, I was still Executive Director of SAWARA. 1990 is when I ran for the office and was elected from Pima County.

Q: Why did you decide to do that?

A: Well, I knew it was an essential piece of what Tucson needed to be involved in directly and of course I knew all the representatives. There are four from Tucson. I knew all the representatives. And when one in particular, I guess two, decided not to run, I decided it was time for me to run. I wouldn't have run if the people I trusted in there had stayed in there. When they basically retired and stepped back, I decided it was time for me to do it. And I found of course that the CAWCD is the best run, the most professional organizations that I've had anything to do with.

Q: Had you ever run for an elected office before?

A: I ran for the Tucson City Council in 1974 and I was elected in my ward, but I was defeated in the general election.

Q: So this is the first time you got elected to office?

A: This is the first time I got elected to office, that's right.

Q: It's kind of a different kind of an election isn't it as far as the CAWCD Board? Talk about how that election works?

A: Well, it's very interesting because on the ballot it's the very last thing, it comes after the judges and most people don't know what Central Arizona Water Conservation District is. They don't know that it is associated with the CAP and since CAP isn't in that official title, they don't understand what it's all about. You really don't raise money to run a campaign. It's one of those kinds of things that's strictly name recognition. So when you get down to that and often in Tucson it's

very competitive. I think I ran on a slate that had nine or eleven candidates. It's name recognition that is how you...

Q: And you are elected by the district? Tucson has a separate election?

A: No. It's all Pima County. The county has four seats so if there are eleven people; it's the top four vote getters.

Q: So you not in a seating against Maricopa County?

A: No. In fact, the terms are staggered so that the term for Tucson also is Pinal County. There is one representative from Pinal County. So there are five that are elected on one of the even years. And then, there are fifteen on the Board. And then the next year, five of the Maricopa people are elected. And then the following year, five more from Maricopa County. So you have a six-year term. So it turns over after that, you have to run again.

Q: So when you joined the Board in...

A: '90', 1990.

Q: What was the board like at that time? What kind of people served on that board?

A: It was a very friendly board. It's interesting because there has always been major competition between Tucson and Phoenix. And so you go on a board like that knowing there are ten from Phoenix and four from Tucson and one from Pinal County and you're wondering what the dynamics are going to be. Well you find out that on the CAP Board that there is no "us against them." There is no competition. It is a board in which everybody is focused on all the issues that have to do with CAP and working with the staff and making good things happen. So that was very refreshing to find at the very beginning. It was a great commitment because you were committed to one day a month and if you live in Maricopa

County, you drive over there at noon and the meeting starts at one and you go home at 4:30 or something like that and you're home. But from Tucson, you drive up and it takes several hours to get there because it's on the north side of the city and you get home after dark. So it is a day's commitment. And of course the twelve years that I was on the Board, the Phoenix traffic became worse and worse so it became more of a commitment. It had wonderful leadership. When I got on to the Board, George Barr was the president and he was from Tucson. He's been the only president from Tucson. I was vice president for many, many years but I never was elected president.

Q: Were there other women on the Board when you got on?

A: Yes, there were probably...the entire time I was on, there was at least three women counting me sometimes four, which is good. In fact, in Tucson and even in Maricopa County, if women ran for the Board they usually won. It's name ID and whether you're a female or not which is kind of nice.

Q: It is an advantage sometimes.

A: That's right.

Q: Seems like often there is some other notable name on that Board though like old politicians go?

A: Governors in particular, that's right.

Q: Did you get to know some of those people?

A: Oh yes, Paul Fannin and Goddard, Sam Goddard, Jack Williams, wonderful man. All of them were very, very fine gentlemen. And they enjoyed being on the Board. They enjoyed the fact that it was useful and it was a place that you could exercise

your viewpoints and spend your time discussing worthwhile issues. I can understand why they wanted to be on the Board.

Q: Water has always been one of the main issues of Arizona.

A: It has.

Q: Did you see the Board change over the years you were on it?

A: Oh my, yes. My yes. It's interesting because one of the reasons that it changed is because the Salt Gila Indian Settlement, the Indian settlement that was signed a year and a half ago, started after I was on the Board probably about three years after I was on the Board. It sort of took front and center. It was a major, major issue because it meant...it determined how much water was going to the Indians and how much water was going to agriculture and municipalities. And the discussions were very, very intense and not a lot of progress was made. You think about how many times you sat around the table and discussed the issues and you thought that maybe you had some type of an agreement on this whole thing and so you went home. Then you came back a few weeks later and you found out that no, that isn't the way it's going to be. So it's back to the drawing board and that went on for years. That was a major issue and because of that, the board became more concentrated on a few issues rather than more broad issues. Grady Gammage become the president and he became one of the major negotiators and he went to Washington and assisted us. Of course, Grady is not only very familiar with water and land issues because he is an attorney and such, but he used his attorney skills for us as well and negotiating skills and things like that. He did a very, very fine job. When he was no longer president, George Renner became president and then he became the major negotiator. And we all used to laugh about how our grandchildren are probably going to still be going to negotiate this when they get on the Board. It took a long time to formulate everything and even though it appears as though that the Indians get a good big proportion of the water, the financial issue and the issues of how that water is to

be used and not used. It can't be sold across the border, for instance, because initially the Indians wanted no strings attached. They could do anything with their water. So there were a whole lot of issues like that. So ultimately, it's a very, very good arrangement for everybody and a fair arrangement.

Q: Do you think the cities will end up buying the water from the Indians?

A: Yes absolutely. The Indians...they already have. I mean some of them already have contracts with the Indians and they will. The Salt-Gila use a lot of their water because they have such major farm fields, successful farming.

Q: But they are not allowed to sell it to other states? When you said they can't cross the border you meant other states? California? Or the highest bidder?

A: Correct. Whereas the law of the river is such that people in Utah or Colorado theoretically could sell some water to California, but the upper basin and lower basin states are trying to kind of prevent that from happening, too. That all the upper basin allocation stays up there and the lower basin stays in the lower basin.

Q: It sounds like over the years, you've become not only an expert in water but in water law?

A: Well, you have to you know when you read these things every day. One of the things that I'm most proud on the CAP Board is the replenishment district. The CAP Board sits as CAWCD and it also sits as the Replenishment District. That Replenishment District was formulated by the legislature to have water that they could sell to someone who did not have groundwater or didn't have enough groundwater for their development. So it's primarily for developers although there are a lot of cities now that are also a part of the district. The district was sort of a step-child. It hadn't come into its own yet. So we began to work with it. There was a staff member who is the director of it and we began to work with it. We set up some rules on how to fund it because up to that time, the CAWCD was loaning

money to it so that it could function and pay its director. So we had to somehow get it on a financial footing so it could pay for itself and pay all the money back to CAWCD. So we did that. And we slowly put rules in that are very good sound planning rules that are going to serve the district well over the time. And that all happened when I was on the board and I was chairman of that committee...where they were going to get the water how they would manage all of it. They set up rules that are pretty good to work with. They've been changed a little bit over years. The legislature helped us refine them a little bit. But what we determined is that if we started a recharge program that we could recharge excess, what we call excess CAP water, for of course many, many years and I think there's probably still some excess water which means it's not being contracted for like for instance Tucson is not using its full allocation. So what happens to the rest of that? Phoenix is not using its full allocation and neither is Scottsdale or Mesa or whatever so a lot of that is purchased by agriculture. Actually, Tempe Town Lake was originally filled by excess water. Not anymore, it has to have its own source, but it was originally filled with excess water from the CAP. They decided that there, for many, many years there'd be enough excess water that if it was be recharged, we could build up some credits that we would be able to use over the years. We started an aggressive recharge program and we now have projects...the best ones that we started, the easiest way to start them, were on the west side. There's one in the Agua Fria River for instance. There are also some out near some of the pumping plants on the west side. But there is so much growth on the east side now that we've now established a recharge off of the CAP canal on the west side of Maricopa County into Pinal County. We also have several recharge projects in the Tucson area.

So many of the credits then of the recharge projects will eventually accrue to the Replenishment District. Again, there is this financial thing of who had the money to be able to recharge initially, it wasn't the Replenishment District it was really CAWCD, but we will eventually buy the credits. Those who actually will use the credits will buy them, will pay for them. So they've set up a system now where the Replenishment District has at least a recharge source, but some of that recharge

also belongs to some of the cities, also belongs to Phoenix and Tucson and to Mesa and to Scottsdale and to Tempe. It is one of the most aggressive recharge systems in the west. And California and Nevada were very interested in our bringing some of their water over or their allocation or bringing in an Arizona allocation over here and then they would pay for it. They would pay for the recharge of it and then eventually for the credits and they would take it then out of the Colorado River and we would use the recharged water. So there were some really sophisticated negotiations going on over this. But it's become a very, very valuable source, but it's sort of used in conjunction with the Replenishment District. The Replenishment District has become really a god send for a lot of projects, building projects in Maricopa County. Because they can come to the district, join the Replenishment District, and have some water credits for their development.

Q: I had heard originally that when they started the recharge project that part was so that California couldn't say, well you're not using all of your water so we'll take it. So it was a way to use more water then we really needed to use?

A: Surely that certainly counted for one of the reasons to do it.

Q: Explain that. What was the logic on all that?

A: The logic was, as I mentioned before, any unused apportion from Nevada or Arizona could accrue to California. Now California has 4.4 million acre feet in their allocation and Arizona has 1.2 million acre feet and Nevada has 300,000 acre-feet but California was using 5.1. Where do you think they got...they went from 4.4 to 5.1 to 5.3 even at one time but that was Arizona's water primarily, because Nevada really is almost up to using their full allocation. So it was an interesting sort of dynamic of California depending on Arizona not using their water. There's always kind of first in right, first in time, or after I've used it for a while it surely ought to be mine, homesteading you know, establishing your right. So we wanted to be sure that all of Arizona's water stays Arizona's water. So they were aggressive,

that's where the excessive water issue came up. We sold it under rates so people would use the excessive water under the going municipal rates for instance. That is why all of these...it helped establish really good water management. You would think it might not, but it did. What happened was the things that were done because of it all were good water management practices.

Q: So is it actually going to ever make a dent in recharging the groundwater?

A: You mean will the recharge water ever make a dent in...

Q: In the water level or getting it back?

A: Oh, you know one of the controversies of the recharge is that it was never recharged where the water is being used. It was not recharged into the central basin in Tucson. It was recharged on the west side. It's not recharged in the aquifers in the middle of Phoenix. It's recharged on the west side and the east side. This was a major controversy. What good is it going to do if you're not putting in any of the aquifers that we're already using? And how expensive is it going to be to not only put it in, but to get it back out again and will it be there? How do we know about those aquifers? They're not dependable because we don't know anything about them. It was just not possible to go into a community and build a recharge project in an established urban area. The environmental issues were too great. If you were going to have something that was worthwhile, that really took enough water to be worthwhile, it had to be a new project on the periphery of the community.

Probably the most urban recharge project is in the Salt River and it is probably one of the first ones. They've been recharging there many, many years and have a lot of recharge water flowing under the Salt River because of it.

Q: Wasn't there some thought to that you could get rid of it but you couldn't just put like a reverse well and pour the water directly down to the aquifer but they want it to soak down through to clean it?

A: That's right. That's right. Everybody always thought that the CAP water was not as good as the groundwater, so how do you clean it up? You let it filter down. That's somewhat true. We're at the point now where the Central Arizona Project water is wonderful water, you know. There's no question about it being good water. Clean it up and use it.

Q: Do you have any idea how much water is recharged every year? Are those terms interchangeable recharge and replenish?

A: No, recharge is actually the act of doing it. Replenishment is a broader term. No, I'd be making a wild guess if I told you how much.

Q: You were talking about developments depending on new areas; I heard Anthem is using CAP water.

A: Anthem bought credits from the Indian reservation that is in Maricopa County, that's near Maricopa Ak-Chin. They bought credits, a twenty-five year, I think, contract with the Ak-Chin to take "x" number of acre-feet, at least 10,000 acre feet. They built a line from Lake Pleasant where the CAP is all the way up to Anthem and that is their entire source of water. They don't have any pumping credits in that area. Their entire source of water is the CAP from Ak-Chin. In 25 years, it doesn't seem like a long time does it. What will they decide to do in 25 years?

Q: You mentioned a couple times the rural community studies that have been done on rural areas. You're living in Sedona now. What about rural area and water in Arizona?

A: Rural areas were not taken into consideration in 1980 when they wrote the water law. And one of the major issues is that groundwater and river water, streams, there's no law that brings the two of them together. They are treated as entirely separate entities. When you live in the Verde Valley you understand that so much of the groundwater has gotten there because of years and years of the Oak Creek or the Verde River or whatever flowing, and so they're adjudicating now mainly the San Pedro River and the Verde River to determine who has the rights, where what they call "where the bright line is." If you are drawing water out by wells within that line toward the river, you are really taking river water. If you have driven in the Verde Valley recently, you'll notice that all of the communities are clustered right along the river, so obviously their wells are close to the river. And the Salt River Project has some senior rights on that, so the Salt River Project is suing a couple of people in this area. The adjudication isn't finished, but they think there are some people who are using their water and telling them they have to pay for it. So it's become a major issue in the Verde Valley because people have been here forever. They have established rights. They have...the older rights on the Verde River here are what are called "ditch rights," so there are some farming with ditch rights that's older than the Salt River Project, but they are the only ones who have that. This is an example; this area is an example of virgin population and limited water supplies and no laws. The only law on the books that affects us in any way is well spacing and that means you can drill a well anywhere in rural Arizona as long as you are so many feet from the next well. So you can imagine. There are several wells in my neighborhood here. We have a water company, but people have decided they want their own wells. So you can drill your well. This is a real problem because there are a lot of wildcat subdivisions too, where people don't come together and have water companies and so forth. They have single wells all throughout Arizona. There are a lot of issues that need to be addressed. You know that there are, there's Williams, and Flagstaff, and Strawberry, and Pine, and Payson who've all had water problems, especially in the summer where they've had to truck in water or find new sources or things like that. And that's just the tip of the iceberg.

Q: So are you still involved with water in Arizona?

A: I am. I am. I'm interested in what's happening here. And of course Prescott is at the top of the Verde River and the source and they're growing and they're going to potentially use some of the water that would flow into the Verde River. So we're interested in that. We've started a major conservation campaign in Sedona. I've been working on that.

Q: How do you see the future then of water in Arizona?

A: Well, I guess I'm not as optimistic as some. I've always felt that there is a limit environmentally to resources and if we don't take care of them and if we don't live within in them, that we will destroy not only our immediate area surroundings, but those for others as well. I mean the greenhouse gases and all the global warming and all those kinds of things are a bellwether of the kinds of things that we have to deal with in Arizona, as it gets drier and with less rain and less snow pack on the entire Colorado system for instance and on the Verde water shed, and the San Pedro, and the Little Colorado, and the major water sheds in Arizona. And as there is less rainfall and less snow pack, there is going to be less replenishment and more people. There's a time when...now is the time when management should be taking place and it's not. I mean people come to Arizona; you meet new people who come to Sedona every day. And they say, I came to the desert and I don't see anybody saving water and where I came from on east coast or whatever or I look out on a lake, we have conservation measures. And I don't understand why it isn't mandatory here where we have water problems. When you see that and hear that, you know we're not doing what we should. You know that we're not doing enough. So CAP is a wonderful savior for us for a certain length of time, but there comes a time when even CAP won't be able to do the job.

Q: As you look back over the years on the CAP Board, what accomplishments are you the proudest of most?

A: You know the CAP Board is a whole and I don't see myself as doing individualistic things. The issues and the problems and working so closing with a wonderful staff, makes you have pride in everything that happens. You don't say, "Oh, I did that" or "This was one of my accomplishments." I would say that I was proud to be a part of the board the entire time. Because I think the decisions that were made always were wise decisions and they were carefully thought through and they were financially sound. It is a financially sound organization and one that is so well managed that it's a pleasure to be a part of it. Obviously, the thing that I'm most proud of is the Replenishment District because I worked most closely with seeing that mature into a major operation.

Q: Are there any particular things that happened during your time on the board that are memorable?

A: We always have a lot of celebrations. When we have a new recharge project, we go out and celebrate that. A lot of field trips, we went to all the pumping plants, Havasu in particular. Seeing and hearing the motors that were giving us terrible problems and seeing them rewind and refit and so forth so they hum now. Going to each of the plants and meeting the people who are there who are so proud of what they do and they're so effective. We have steak fry every year that the staff puts on for the board and so forth and we're invited to participate, and meet, and be with all the staff. It's a wonderful group of people, over five hundred on the staff. They also have...we also have leadership luncheons for them. They're leaders in the community. They do a lot of community work. We are very proud of that and we reward them for that.

We had some union issues for a while. There were some who tried to unionize the workers at CAP. We worked through a lot of those kinds of things and sort of changed the whole philosophy. Sid Wilson, the General Manager, changed the whole dynamic of how everybody works and what their merits and opportunities are. And they are very happy to work at CAP. They are well taken care of. They have good benefits. You feel like you are rewarding people who are working hard

to make good things happen. So that's a part of being on the board. But I can't say enough for the professionalism of everybody who participates, the board members, everybody.

Q: You mentioned celebrations; you were on the Board for the celebration I think it was for water delivery to Florence?

A: That was a SAWARA operation. SAWARA did that. SAWARA had three major celebrations. That one, when it got to the outskirts of the community where it would've either gone down the Santa Cruz River or around to the west side. We had a celebration there. And then of course when it arrived, we had a celebration there and those were all put on by SAWARA. But of course all the dignitaries from CAP, including the Board Members, were there.

Q: You did that as part of SAWARA not part of CAP?

A: We did; that was one of our major jobs.

Q: When it arrive in Tucson was that really a celebration or was that people saying "Oh No!"?

A: It was a joyful celebration. It really was. We were happy to have it there because of course, when it came nobody knew what it would do to the pipes. It took a while for that to happen.

Q: Was that one of the biggest challenges that you faced was the problem down in Tucson when the water started creating problems?

A: That the CAP Board...

Q: Yeah. But you were on both groups at that time

A: It was not...it was not an issue so much as the CAWCD Board as it was in Tucson. There were a lot of jokes made about it, you know Tucson always has to do it the hard way. It was not a problem for CAWCD. It was always kind of like the customer is the one who has to deal with the water. I know one of the things that they were saying at the time is that when CAP was delivered in Phoenix for the first time, the water company got telephone calls. The water company said "yes" and they said "What did you do to our water?" and the water company said "why" and they said "It's the best tasting water we'd ever had." So here was Phoenix loving the CAP water and Tucson saying "yuck."

Q: Are there other things that you can think about that you did that you would've done differently?

A: I don't think so. I have nothing but very positive memories and thoughts about what we did and how we did it and who was involved. It was all a very positive experience for me.

Q: Where there any surprises do you think from the time you first got involved in water with the Water Commission to your involvement with CAP about how things have worked out in Arizona?

A: I think that probably the evolution that I've seen since first writing that paper or I got on the Arizona Water Commission in 1978 that things have evolved very well in Arizona. There's a lot of dedicated leadership. There has been not only at the national level but as I say, in this tri-state working with California and Nevada and the upper basin states, and working through the legislature. Although many of the legislatures water is not their first thing, there are only a few legislatures that carry the ball for water. I would say until the last few years, things have really gone well for Arizona water. I think the fact that they will not pass in the legislature a rural water management bill that allows the counties and the cities to take into account water for building. Right now, if a developer comes for a plat at the county or the city level, you cannot consider whether there is water or not. Now

that's is the most ridiculous thing in Arizona not to be able to say is there have enough water, do you have enough water, what are your sources, how are you going to be sure that in twenty-five, fifty, a hundred years there will be people living in these houses because there is water. You can't ask them or if you ask them, it doesn't stop any development at all. That's absurd and it's been at the legislature now, I think this is the fourth year that there's been a very good bill that could've been passed but it's been stopped by just a couple of very powerful legislators and for no reason.

Q: Why wouldn't they pass it?

A: Well, we sort of have to go back I guess to the agriculture mentality, the ranching. It's kind of like leave me alone. I can take care of myself. The rural areas can take care of themselves because we were able to manage our own affairs.

Q: Are the rural areas the ones that are asking for this law?

A: The urban rural areas are but they're powerful ranchers who are legislative leaders. So to me that's the major issue there isn't an universal conservation program throughout the state that is either voluntary or mandatory and there isn't the opportunity to look at water in all aspects with this growth that's happening in our state.

Q: What advice do you have for the people today operating the CAP?

A: I couldn't second guess anybody who's operating the CAP right now. The people that I know, the staff and so forth are still there. They're doing a wonderful job. The board has changed. There have been quite a few changes since I've been there. When you get good professional advice from your staff and you trust them, good things happen. And I think that is the way CAP is run.

Q: Are there any other things that you wanted to bring up today? Something you thought I'd ask and didn't.

A: I don't think so. I think we've pretty well covered everything.

Q: Looking back over your life, do you have advice for young people today that are trying to decide what they want to do with their lives, maybe something to pass on to your children or grandchildren?

A: I would certainly hope that my grandchildren, and my children of course know who I am and what I've done and how I feel about things, and my grandchildren know too. They understand how I value the environment, and nature, God's world that we have around us. That always they would take into account where ever they are, whatever they do, that they have to be stewards of this world.

Q: When you think about what to do with your life I'm sure as a young girl going to school that you never imagined that this...

A: I never imagined it right. I always loved the outdoors and I always loved the environment, but I never imagined that water would be one of the major issues that I would spend my life thinking about and working on and worrying about.

Q: Are you happy that it turned out that way?

A: Oh yes, oh absolutely. I'm delighted to have been where I've been and done what I've done.

--- End of Interview ---