

Interview with Bill Wheeler on Wednesday, August 27, 2003, in his home in Scottsdale, Arizona, by Pam Stevenson. Also, present is the gentleman (unidentified) who videotaped the interview.

Q: Please give us your full name and tell me when and where you were born.

A: I am William H. Wheeler. I was born in San Diego, CA, on August 11, 1922.

Q: Tell me about when you came to Arizona and what brought you here.

A: I came to Arizona in 1953, about five years after I graduated from San Diego College. I came over as a field engineer for the Portland Cement Association headquartered in Tucson. After a few years in that job, I broke away and operated my own engineering firm. We did work mainly in the Tucson area for the state, the federal government, and for private developers. We did spread out and did a little bit of work here in the Phoenix area, around New Mexico, Colorado, and southern California.

Q: So your degree or profession is in?

A: Civil Engineering from San Diego State.

Q: When did you first get involved with water issues in Arizona?

A: Well, soon after I moved to Tucson, I decided instead of joining the Kiwanis club or something like that, I joined the Chamber of Commerce and got involved with their water committee, as I saw water as a very important element in the future of Arizona.

Q: How did you get involved?

A: I joined the water resources committee at the chamber. I became chairman of that board in the late 50s and that got me involved with representing Tucson on the Central Arizona Project Association (CAPA). I was on their board for many

years from I guess the early 60s until I retired at the Executive Director of that just earlier this year.

Q: What were the water issue at that time when you first got involved in the late 50s?

A: Whether Tucson needed Colorado River Water, and whether they should join in to the support for promoting the project, and for supporting the state in developing this project

Q: So it was already well under way, the plans, for CAP?

A: Actually 1946 was when there was some formal steps taken to get Arizona into the project. Historically, things began to happen in 1919 as far as getting Colorado Water into central Arizona but the final move began in 1946 when the CAPA became the fathers of starting the project.

Q: What did you think when you first heard about it, that this group who wanted to bring Colorado River Water all the way to Phoenix and then Tucson?

A: When I looked at the direction of where the water tables were going, I could see that it was a losing proposition to be dependent having cities and a state dependent on declining groundwater supplies.

Q: Didn't it seem pretty far fetched, didn't at the time to bring the water all the way from the Colorado River? Then again, maybe not.

A: It didn't seem far fetched to me, It seemed like its something that was a necessity.

Q: As an engineer, I guess you could see the practicality of it?

A: Yes, I guess that is what I saw.

Q: So you got involved in a water committee, you were an engineer, and you say you got on the board of the CAPA?

A: Yes, I was a member of about a 50 person board of directors that the association had and there were representatives from all over the state, but mainly the Phoenix area. And so I was on that as a board member in representing the Tucson area.

Q: How did you get on that, were you appointed or elected?

A: The Chamber of Commerce asked me. I guess I was appointed by them, they asked me if I would do that. The mayor and the Council of Tucson also approved my membership. So it was the chamber and the city council.

Q: But that was before there was an official approval for the CAP. So what . . .

A: We were trying to get CAP authorized by the congress, in those days in the early 60s, and what happened is that we had to do – the congress said they couldn't authorize it until we had secured our right to the water that we wanted to bring in the million and a half acre feet (af) that we wanted to bring into the central part of the state and we had to secure that through the courts. And that led us to the court case of Arizona vs. California in which we established that right.

Q: What, you had to become like part lawyer and part lobbyist?

A: Well, just a loyal supporter of the cause.

Q: Do you remember what the big issues were at that time and why it was difficult to secure those rights?

A: Well, yeah, we had a dispute with California over our right to that water and this went back to the 1922 compact and we, the state, had been slow in ratifying that amount. We came out of the 1922 negotiations with 2.8 million af of Colorado River Water and some of which we were already using down on the river in the Yuma area. But we had been slow in ratifying that contract in California was in the meantime was taking their 4.4 million af and more and they didn't want us to have a straw in the river to take our 1.5 af so they disputed that and we had to go to court to win that right.

Q: So was it mainly California that was standing in the way of the project, what about the other states?

A: Well, in the west, it was California opposing it but there was a lot of politics involved. Colorado was not happy about it and the central and eastern United States, could not understand moving water 330 miles across the desert. All they had to do is put a bucket out and it would be full shortly and flooding was more there problem then getting water supply and they could not understand our position. So that was a big part of our problem was overcoming the lack of interest in the east and the direct opposition in the west.

Q: What about like Nevada, today that is an issue. Nevada wants some of the water, were they involved too?

A: They were involved. They were in on it at that time. Las Vegas was just a little gas station out there at a crossroads in southern Nevada. They didn't have the slightest notion that they would ever need all the 300,000 af of water that they finally got. Now they since – Nevada had grown and Las Vegas has become a megalopolis.

Q: Back in the 50s and the 60s thought they weren't?

A: They didn't have the slightest notion that this would happen but this is part of the problems that we have had down through the years of projecting what our needs and what are the problems going to be 100 years from now and how can you guarantee a 100 year water supply and things like that. And when you look back and say, okay, in 2003 how well would we have projected where we are today back in 1903. Its really a very difficult call to make.

Q: Or even in 1963?

A: Yes.

Q: Could you project in 1963 there would be this many people?

A: No.

Q: (An unidentified man asked this question) Wayne Aspenaul (?) is from Colorado and it was his committee, could you explain a little bit of how the politics of how that kind of works?

A: Well, Wayne was a prime mover. He was a very very important prime mover in the development of the Arizona Water Commission. It was the commission that he chaired and it made a lot of very important moves back in the 60s. One of their moves, one of the really bright things they did, was they brought Wes Steiner over here as the director of the Department of Water Resources and if anybody would have the title of water czar in Arizona, it would be Wes. He took, Wayne took, a lot of flack for bringing in the guy who had been the prime mover in California's claim for our water. They brought in the enemy in our camp and should have never dared to bring that enemy in. Well, he turned out to be the best thing that ever happened to Arizona's water programming and to Wayne Aspenaul's, I mean Wayne Akin, I got off the beat.

Aspenaul, I think he was a pure politician and he anted to be sure that all the dams and things he needed in Colorado go into the bill and got done. Then I got off from Aspenaul to Wayne Akin. Wayne Akin was from Colorado too. But Wayne was a very effective businessman and politician and a "Doer". When he took on a task, he would get it done. He is the one who brought in as chairman of the Arizona Water Commission, brought in Steiner. At the end of the lawsuit with California, after we won the lawsuit he brought Wes in.

Q: What was Wayne Akin's position?

A: Akin was the chairman of the Arizona Water Commission. He was a very active member of the CAPA too. He was a very influential Arizona supporter and a very positive guy. Until the day he died, he was looking at the bright side of everything, maybe like a John Rhodes.

Q: I guess you would have to be optimistic that you could actually get the funding to bring that water

A: The biggest water project that the United States Bureau of Reclamation (USBR) ever built was the Central Arizona Project (CAP). For a little state like ours to swing that program was amazing I guess.

Q: People must of thought at that time when you went back to Washington DC there weren't may congressmen or very powerful, but you had some key leaders, didn't you.

A: Yeah, we had Senator Hayden and Paul Fannin and Governor McFarland and John Rhodes and Moe Udall. And we did have a series of potent guys that were very wise, hard working, and honest Indians.

Q: (Man asked this question) Who hired Mark Wilmer for the Colorado River to go back to the supreme court?

A: I guess, wouldn't have been Jack Williams?

Williams was governor in the late 60s, early 70s because he appointed me to the Arizona Water Commission in 1971.

----- a discussion took place about this but I couldn't understand (it is about 16:13 into the tape) -----

Q: When did they hire Wilmer?

Man answered: It had to be in '62 because the court case would have been in '63/

Pam: That would have been McFarland or Fannin?

Bill: It could have been Fannin,

Pam: ----- **She is talking but is too quiet, I can't hear her.** -----

Man: I was just wondering if Steiner, when he came in, if he brought Mark with him?

Bill: No, Steiner came in late. He came in '60 or '70.

Man: But he was the brains for a long time.

Bill: Yeah, he was a real heavy weight.

Q: So you were involved in the board of directors really in the 60s when a lot of this was going on. You went on the association board of directors in '65.

A: Yes, about that.

Q: That's about when it got the approval. I remember Sam Goddard was the governor. He went back before congress and testified before congress. Did you go back for any of those?

A: No, I didn't. I didn't go back until I was No.

Q: You pretty much stayed here. . . . Moe Udall, you were from Tucson so did you know Moe?

A: I knew Moe Udall. I was his engineer when he was in private practice in Tucson and when he needed an expert witness in a traffic case or something like that, stopping distance, I remember, side distance testimony and things like that in court. He was a plaintiff's lawyer.

Q: Did you know Stewart (?) Udall?

A: No, I never knew Stewart, just Moe.

Q: I thought they had a law practice together for awhile?

A: They may have, but I only worked for Moe.

Q: How well did you get to know any of the congressmen and people from Arizona that were working on the project? Did you know Carl Hayden?

A: No, I didn't know Carl but I was pretty much in all the other offices. I just started going back to Washington DC in 1985 when I was the Executive Director of the CAPA, after Rich Johnson retired. Why I became the Executive Director and then I went back each year for the funding hearings for several years after that.

Q: You were on the board of directors and when the approval came down in the 60s, which was really in the late 60s, they worked out all the details, you were on the board of directors at that time?

A: Yes.

Q: Was there any particular times or obstacles or things that happened during those 60s?

A: Yeah, during those years I was representing Tucson. And we had serious problems, political problems with the Tucson people. Many of them saying that water is poison and its really a terrible thing and we can't have that in Tucson, we have wonderful beautiful groundwater and we were saying yes, but is going to run out. We couldn't convince many of the politicians.

I remember Dr. Harshmerger was one, he was a national or international leader in geohydrology and taught it at the University of Arizona. He was one of the staunch members on my committee. He always backed us up 100% as far as the long term need for viable renewable water resource.

Another one at the University was Quinton Muse (?). He was head of the Civil Engineering Department there. He was also a very strong supporter of ours.

Then we had some people in the Agricultural Department who were violent enemies of the project. They were agriculture economists and because I disliked them so intently, I can't even remember their names.

Q: Why did they oppose it?

A: They said it was uneconomical. It was too expensive for agriculture to use. And of course that is another story, how the CAP became so expensive was because of the tree huggers. They knocked a big cash register out of the project when they knocked out the biggest dam on down the Colorado.

Q: Mrytle (or **Marble I am unclear**) Canon is the one I am thinking of.

A: No, Walapai (?) but it had another name too. But the one name I can remember is Walapai. They knocked that out and that was to make the cost of water almost nil. Instead of \$100 a af, the water was going to be practically a freebie because of the amount of electricity that they could generate with Walapai Dam.

So when the Agriculture people, after that dam got knocked out and they had to go to four corners, to the Page Power Plant, the price started going out of the ceiling and then later the price went up again when they knocked . . .

Q: Orm Dam?

A: Orm Dam, thank you, they knocked Orm Dam out and replaced it with three more dams and then knocked one of those dams, Cliff Dam, and then they knocked the flood protection of Phoenix out when they knocked out Cliff Dam and that was over an eagle nest.

It was really a sorry excuse. I still think Cliff Dam, I have now idea what happened to that eagle nest, but I am pretty sure its not there any longer. But they knocked out a very very important element of the CAP. They ended up having to raise Roosevelt Dam and build a new dam at

Q: Waddell Dam?

A: Waddell, you are remembering these things better then I am.

Q: I have been looking over the history . .

A: It was shameful what we let happen to the project all in the basis of the Sierra Club's tree huggers. The cost went out of sight over all those things. They are blaming the water guys for the cost being wrong and who we really have to blame is the enviro freaks.

Q: So they were against it early on?

A: Oh yeah, they got stronger and stronger as time went on. In the beginning my battles were with some of the nay sayers in Tucson but then in the last 20 years why it became the eco terrorists and people like that.

Q: So were you involved at all when they made the decision to build the power plant instead of the dam on the Colorado?

A: Only peripherally. I was interested and I was on the board of directors but I was not a real important part of that.

Q: What did you think of that time?

A: It was shameful what we let happen. We did not stand up and fight for what was right.

Q: There was a lot of people at that time, I guess, they had just built the Glen Canyon Dam not too long before that?

A: Yeah, you know but try to examine where we would be in Phoenix today if we did not build that dam and didn't have that control of the river. The storage that is there would not have been there. And we would be in deep trouble today. And the papers or nobody is really explaining it to the public that some of the things we did were right and we would be in serious trouble in Phoenix here and now today with drinking water had we not done those things. And to talk about dismantling that dam or emptying out that dam could not be more asinine, no way.

Q: So you think they still should have built another dam in the canyon?

A: Oh sure, it was not in Grand Canyon, it was not in the National Park and the whole idea that they bought space in the newspapers nationally to make it look like they would have waves lapping at the shore is misleading. They seem to get away with foolish lies like that. I mean El Tovar (?) would still be a mile above the crest of that dam. If they had it like El Tovar it would be a wash with water.

Q: You were on the project board then, you mentioned for a minute that you were appointed to the Arizona Water Commission?

A: Yes, I was on the water commission from 1971-1978. I was the chairman from 1973-1977.

Q: Tell me, what is the Arizona Water Commission?

A: They became the Arizona Department of Water Resources (ADWR) in later years.

Q: We didn't have an ADWR?

A: No, they became the staff, Tom Clark and Wes Steiner and quite a number of, Frank Barrios, they were all staffers on the water commission and then the commission became the DWR.

Q: What was the primary thing that the commission was doing those years you were on it?

A: Well, we were the managers of the Arizona's interstate water interests.

Q: Sounds like a big job, what does that mean?

A: Well, dealing on Colorado Water River issues.

Q: What were the big issues in those years?

A: The allocation of the Colorado River Water and the planning of Arizona's water uses.

Q: The canal has not brought the water yet?

A: No, we had to do with the licensing of wells, the development of Arizona's water supplies. And then the department grew as the CAP project developed they became the operators of the project.

Q: Tell me about what were the biggest obstacles that you were confronting, and as an engineer you were involved at all in the planning how to build the canal from that far and making it work?

A: Well, the Bureau of Reclamation (BOR) was the main engineers on the project. We were blessed with the cream of the BOR's crop of planners and engineers, I think. I was with a firm that worked with BOR people in the Pacific Northwest and in the central part of the country and they felt that this was the best people in their organization that we had managing the Arizona project.

Q: Was there any special problems that you confronted or challenges in building the canal?

A: Oh heavens, nothing in that system that comes off the shelf. It is all designed from scratch because its bigger and more complex then anything that was on the hardware store on the shelf. They did a marvelous job. They did a lot of things very, very well.

Q: (Asked my man) You make water go up hill. Tell me how you make water go up hill?

A: Well they have serious of pumping plants that take the water up. The first one is down at Lake Havasu. And they pump that water 800 and 40 odd feet, I think. With six pumps, they pump 5,000 cubic feet (cf) per second. Try to imagine cf, 5,000 of those every second lifted 840 feet up into getting started into Arizona. In total, what did I say, I said 5,000, its 500 cf per second, totaling 3,000 cf with the six pumps. And this was all designed from scratch. In other words, there was no guidance for them, there are no pumps like those in the world, yet. And they did that. And they did a terrific job getting it up into the Buckskin Mountain tunnel, which is a tunnel about 22 feet in diameter and eight miles long through solid rock.

Q: (Man talking) I was there, videotaping – filming that tunnel when they were digging through it, actually filed it digging. You might tell about the engineering nightmare to get water up and then get it to come down.

A: Yeah, I know, did hear but I was not directly involved in this but as a board member I was hearing some of this, they had a burger of a time getting this “auger” to work through the rock and it kept clogging up and it was costing the contractors a ton of money to go a foot or two through that rock until they got the right combination of spacing and the right kind of teeth on the augers and things like that and then they went through it like it was soft butter. I did hear, and this was all third hand that I got it, that the BOR had budgeted they were paid by the foot for going through that tunnel and all of the sudden they practically broke the BOR’s budget because they went so fast. It really went fine. And another engineering marvel is they came out within inches of where they were supposed to come out at the end of 8 miles through the tunnel. They hit their target. They did a lot of very, very good things that not very many people give them credit for.

Q: They had to come across the desert. I bet a lot of that desert nobody had even explored closely.

A: That’s right.

Q: They had to come across the desert. I bet a lot of that desert nobody had even explored that closely?

A: That’s right. These canals only fall 5 inches per mile, that’s all the slope that makes the water move through those canals. They have 13 pumping plants, I think, that were smaller lifts and gradually lesser amounts of water to get it finally down to south Tucson.

Q: When did they actually start construction?

A: I think I have the information here. We met over at Lake Havasu in about 1968, I think, to begin the little diversion dike to try and keep any muddy water that came out down of the Bill Williams River and into the Bill Williams arm of Lake Havasu. That was the actual beginning of construction of the water features of the project. I think they did start work on the Page Power Plant a little earlier than that. And we won 24.3% of that, I think.

Q: And when did they finally get the water here. I got some sort of general questions that I am not to sure where you would see them fitting in. What did you see as the biggest problems confronting the construction of the project?

A: One of the big problems was how to deal with the fissures down around Picacho Peak. There is a big split in the earth down there from the subsidence of the land in the Eloy area, that land has gone down, I understand, as much as 11 feet and that has left cracks in the earth and the canal had to deal with that. So what they did is they stayed on one side of the crack, they never did cross it. They went up into the mountain there and they had to go through a lot of really mean rock to avoid the crack. And they left that crack to be dealt with by the ranchers and farms out in that area. They had to cross it because the BOR didn't cross it. They avoided it at great expense cutting out a lot of serious rock to cut through.

Q: If the canal cracked later it could have been a big expense too.

A: Yeah, it could have been a maintenance problem. I guess that the Maricopa Stanfield canal now crosses it, but they have dealt with it. It hasn't been that big of a problem for them.

Q: Would do you think were the greatest allies that helped get the project approved and built? Who was really the pushers and supporters?

A: Local guys?

Q: Yes.

A: Wayne Akin was one of the real prime movers in keeping the state together and making it happen. Wes Steiner was a prime mover more in the engineer side and the funding side not the political side.

Q: What about the political side?

A: Jack Williams was a very heavy guy in making things happen. Paul Fannin and Gov. McFarland were very heavy. And, of course, Hayden was always back there and John Rhodes.

Q: **(Man asked question)** You've crossed political line here a couple of three times, talk a little about that and what was that?

A: They all pulled the same direction. That was the great thing about it that when you said "water" they all jumped. Eldon Rudd, anytime you said "water" he just said "how high". I mean he was a marvel in sticking by us and making sure the water issues got done.

Q: You mentioned Udall?

A: Moe Udall.

Q: Then Stewart Udall was Secretary of the Interior at the time it got approved so he must have had a part in it too?

A: Yeah, the one thing that was not political in Arizona was water. They all towed the mark on water.

Q: What about the opponents, you talked a little bit about that, who were the greatest opponents?

A: Frank Welch was on of the worst guys in the area of that and the other was Carolina Butler.

Q: What was their role? How did they get that power?

A: They would come to meetings anytime we had a meeting on the project they would come and . . . the term I was thinking of was “analysis paralysis”. They would analyze to death.

Q: Why don't you start that over, a full sentence, now that you are settling down here.

A: Alright, the people that were the worst enemies of the project were trying to kill it with a term I called “analysis paralysis”. They would come to our hearings and they would expound on a bunch of foolishness and the papers would pick that up and all we would see in the paper the next day was the “analysis paralysis” and none of the facts or the important information that came out in the public hearing.

Q: Why were they so opposed to it?

A: Because they do not like anything that is for people. They tend to use the environment as a tool to whip up opposition to things and they care less about bugs and bunnies but they use bugs and bunnies as their tool. I think that all in all, they are more interested in political power and in beating up on people than they are on the real causes and long term needs of the people. They don't like people basically.

Q: Do you remember what their strongest arguments were, the ones that bothered you the most, that did the most damage

A: I wrote a whole paper on the subject of Frank Welch's complaints. He kept saying, “Well there's cheaper ways to bring water into central Arizona”, “In the first place, they don't need, they should just conserve it and quit using it. We have got the bombing range out with lots of groundwater out there if we just dig wells out in the Barry Goldwater bombing range and bring that water in”. They had ideas of getting rid of need for water just by conservation and quit bathing and things like that, I guess. They could come up with a list of negatives that could be taken a part and we spend a lot of time just figuring out answers to their foolishness.

Q: What were all the answers that you gave?

A: Oh god, I can't remember them all now. I can give you a copy of that letter that response I did to some of his things. I will dig it out in a minute.

Q: What did you see as your role in developing and getting the CAP built?

A: Well, just doing all the positive things that were necessary to help keep the funding up and to educate people on what the long term needs of the state were.

Q: Describe a little bit how your role changed, I guess, from you starting at the Tucson Chamber of Commerce . . .

A: We gradually, I tried to take my engineering business into the water development area and that was not working. We merged out firm, we lost complete control, the firm wanted to go more in the direction of airport planning, highway planning, freeway work, and things of that type. I sold my stock and left the firm. I joined a water resource firm. The water resource firm, that's when we decided we had to move to Phoenix because that was more the center of activity in resources, so that is when I became the Vice President of a bigger firm, a national firm.

Q: When was that approximately?

A: 1978.

Q: So at that point, the CAP was not your source of any income really?

A: No it was not. I was just a board member, a non-paid member. In 1985 when Rich Johnson retired as Executive Director of the CAPA, the CAPA hired me away from Bookman Edmonston Engineering firm to take over as Executive Director.

Q: Was that a big step for you?

A: No, it was about a horizontal step but it was more into the kind of thing that my heart was in to which was Arizona water interests.

Q: When you took over at the Executive Director, that was a change in your role.

A: Yes, I went from the CAPA board to the director. The CAPA never has had very many employees. Its maximum of three, one in Washington, and two here in Phoenix.

Q: So as Executive Director that was about the time the water go here, wasn't it?

A: Yeah, the water got here in about 1985. It go to Harquahala Valley in '85 or '86.

Q: How did that change what the project was doing? Or did it?

A: Yeah, the project began to be realized and the goal of the CAPA originally was to bring or get the project authorized, funded, and built. And it was being built by then so the project really began to wonder exactly what our goal was or whould we just say okay job well done and fold up our tent and just steal away into the night. We were prepared to do that and some of the water people said No. We do have problems in Arizona like the whole state has serious water problems. The cities that are supplied by the CAP are helped a lot now and there not in bad shape but Prescott, Flagstaff, Payson, Ft. Huachuca or Sierra Vista, Nogales, there areas still have big problems. Cottonwood, even with the Verde River running through it, it still has major problems because SRP still has claims on some of that water that otherwise Cottonwood would like to avert. There heavy problems of balancing the water supply around the state and of taking care of future growth and there was really, the ADWR works on those things, but there is a need for a private organization that is kind of thick skinned and doesn't have the sensitivity that governmental offices have. There are needs to deal with the Sierra Club and to deal with the various nay Sayers, and to deal with the people that we have always had a problem with the on the CAP. Some of the same kind of things are still out there and need somebody to work on them. So that kind of began changing the nature or goals and the work of the CAPA and it probably has to have a new name. Some of those things are still being wrested around with and we are trying to see what happens and this is all part of what gives me regrets is that I didn't get to stay and do them all.

----- End of the interview -----