

Sid McCain FINAL

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[00:00:02] **Ken Wise:**

This is Ken Wise, history 5388 I'm with I'm the interviewer, the narrator will be Sid McCain with the Trinity River Authority. It is April the 18th 2023. We're recording this on the Zoom platform over the computer. And the subject is Mr. McCain's career with the Trinity River Authority. Mr. McCain, thank you very much for agreeing to do this interview.

[00:00:30] **McCain:** Thank you.

[00:00:35] **Wise:** Can you tell us a little bit about your background? And how you came to work for the Trinity River Authority?

[00:00:42] **McCain:** Yes. That the way I actually started with the authority again, I was young, I've been working construction, the construction phase had slowed way down. So I needed a job. So I actually went in applied at the central wastewater plant, which was in Grand Prairie. And I got a call from Robert McMillan, who then was like the assistant regional manager of the...the authority. And he told me, he said, "Hey, you interviewed well at Central run out to the water plant and talk to Gerald and let's see if we can get you on out there." So, I came out and visited with Gerald. Gerald said, "Yeah, pass the physical and you're good to go." That was in 1975. So I was really excited to be able to get a job and... and actually making... When I, when I first started with TRA, I started as an operator trainee at \$3.06 an hour. That was six cents more than what I was making with a contractor. So, I was tickled to death plus I got benefits. So from there, yeah. Back then, and the main thing was to get your license. And so Gerald, of course, encouraged me to get my license, I got my license and then started moving up within TRA a little bit later on. We decided that the way TRA was looking that yes, that I was going to need a degree. So, I started school, of course, TRA paid 100% of it, and got my degree. And then from there, I moved all the way up to project manager. Past 10 years, I've been project manager planning on probably getting maybe two and a half more years, and then I'm going to retire with 50 years and seventy years of age.

[00:02:54] **Wise:** Wow, that's quite a career. Let's just for the recording, where are you located? Currently?

[00:03:02] **McCain:** This is the Tarrant County Water Supply project. And it's located in Euless, Texas.

[00:03:08] **Wise:** And then when you started you mentioned the water plant. Where was that?

[00:03:12] **McCain:** This is this is the same water plant. Yes, sir. I've been here all the years that the plant actually started out as a 6 million gallon water plant from there went to 12. And then we did 15-

million-gallon increments after that. So now then, we're at 87. Originally, when we started, we only had the two customer cities which would have been Euless and Bedford. Those two cities population-wise, probably about 30,000 in 1975. But what helped with the growth of this plant was the fact that DFW airport was coming online. So, the forefathers, you know, of Euless and Bedford realized, hey, we're going to need water and their groundwater wasn't going to be enough. So, they looked over and they had made some deals with City of Fort Worth to try to help but Fort Worth had a take or pay method on... on getting the water so you lose some Bedford decided now let's go ahead and build our own plant. They reached out to the authority. We built it and then took off. About 1978 we had three other customer cities which would be Colleyville, North Richland Hills, and Grapevine reach out to us and see if they could join the system. And two customer cities, Euless and Bedford voted 'em in and said Yep, let's go. They came onboard. So, of course, we expanded our population, we doubled it like overnight. And then from there, right now we serve about 250,000 customers. So, we've gone from the 20,000-30,000 to 250,000. growth potential is...is still out there for us. We're not exactly sure to what extent yet, but we're going to keep looking at it.

[00:05:36] **Wise:** I'm thinking of the term water plant is sort of this all-encompassing thing that provides the entirety of the service. What are kind of the component parts and how has that evolved since 1975?

[00:05:49] **McCain:** Yeah, what took place was back in 1975. We, at that time, co-shared of raw water pump station because what happens is we actually buy the water that that we treat here at the plant from the Tarrant regional water supply system. They pump it from Cedar Creek in Richland-Chambers, up to Lake Arlington. Then once it gets put in like Arlington, we then move it from there to our plant in Euless, which is about nine miles away. So originally, when we started out, Arlington and TRA, co-shared this 1955 version pump station, as we started growing in Arlington started growing and Arlington decided, okay, let's we're gonna need a larger pump station. So tra, why don't you help us out with a larger pump station and will let you have the old pump station. So that's what we did, we took over the old pump station, they built a new one. But from there, we brought it on into the plant. And so we started out is, as I mentioned 6 million, then we went to the 12 million, well, at 12 million, the engineers finally realized that, okay, we're going to really, if we're really going to expand this much, then we're going to have to change the design of what we're doing to accommodate all the land that we got.

[00:00:00] **McCain:** So, we started going from 6-million-gallon increments to 15-million-gallon increments, and everything on that side changed from we had small basins, like half million gallon basins. And now then we got two and a half million-gallon basins. And that's just one portion of it. But we added all the additional clear wells and filters and so forth. To bring that on. From there, we went up to four miles from the plant to our Murphy pump station, which is a big ground storage pump station site. That site has at at the time that we originally started, we had one steel, 5-million-gallon tank. From that we had five pumps out outside out in weather. So, for and of course the year it's coming online is 1981 I believe 82. And that was the year that we had 32 days below 32 degrees. So, everything during that timeframe was built on just the minimum amount of money that we could spend. So everything was sighs just to meet that demand. And what of course what happened was we we suck one of our transformers dry. And when we did that, then we lost power when we lost power, everything froze because it was all outside. So that was where we got our news where course power comes back on, we get everything back up. And the news media is sitting there spanning across the the site and of

course all the pipes are bust some spray, there were so we had to had to shut down again, start over and got all that going but that that. From there. We've now expanded out and we go out even further into the system. We've got inline booster pump stations scattered out in the system. We've got of course all the customer cities have elevated storage tanks and we went from like one elevated storage tank with each city to some of the cities have up to five elevated storage tanks now that we transfer water to-

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and those are the water towers that we-

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brought the ones with that you see with the logos and the names and so forth state champions aren't. So he...

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mentioned, I just wrote down 5-million-gallon tank. So how many customers will have 5-million-gallon tank service? Okay,

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what happens is yeah, now then we've got four 5-million-gallon storage tank. So, we have a total of 20 million gallons of storage up there. What we can do with that 20 million gallons of storage, again, if the plants that max capacity if we're running at seven, and then we've got that 20 million, we can actually pump out like 105 million. And that's that 100 and 5 million is on a good hot summer day is one day's water. So, yeah, again, you know, that that sounds like a lot for for a lot of water to the common person. But when you talk like Houston, and Dallas, Fort Worth, and so forth. Yeah, on a good hot day, you guys are moving like a billion gallons of water a day. So that's it's just remarkable how much water it takes to make it happen.

[00:11:15] **Wise:**

That is remarkable. So how much water did it take? In 1975? With-

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1975? Yeah, we were at about we had expanded to 27 million. So yeah, during that timeframe, we could actually take 32 million and we did several times. With, with just the one tank?

[00:11:40] **Wise:**

And is that measured per day? When you throw that? Yes. That's per day.

[00:11:46]

Yeah. 3030 to me in a day. Yes, sir. What-

[00:11:49] **Wise:**

in 75? In addition to the water treatment, what was Tru involved in in your area? If anything?

[00:11:58]

Yeah. Now, Tru is a whole does water and wastewater. So, in 1975, of course, that's when EPA came out and really, really started hammering the wastewater plants. So, you know, lots and lots of federal grants were donated or brought into the wastewater plants. And so, they were all coming way, way up on, hey, let's get this we got to get this all new stuff going. And so, for the ironic thing, of course, was Tru puts water in the Trinity River. So, what would happen was the big fish kills. So, the bad bad water, you know, was was going into the river. And of course, the state, EPA looked at it as the wastewater plants were doing the contamination and causing the low oxygen that would in turn, kill the fish. So, we had to really, you know, Tru strongly, strongly looked at that. The other of course, was the making the channelization or, or ship channel or whatever, from GAO, Galveston, Houston, to the Dallas Fort Worth area, they were actually going to channelize the Trinity River and make it to where it was, you know, we could get barges up and down and so forth. So yeah, that was that was a big, big thing. And then, of course, the teamsters finally knocked that down and said that that would hurt them too bad. So they deviated from that. Again, I don't know the the true true. All the ins and outs on that.

[00:13:53] **Wise:** As far as you mentioned, environmental issues and putting water into the river, how has the evolution of environmental science and regulation affected your operations over your career?

[00:14:10] **McCain:** Yeah, now that, you know, of course, the water plant, you know, we've, we've gone the, the opposite or, well, yeah. In that direction, that then, you know, used to the whole big thing was sell water, sell water, sell water, then, you know, we had the drought that started, like in 2011, and so forth. When that drought hit, water conservation became one of the key, key elements in slowing down. Because, you know, to actually build a lake, you know, we're 30 years from the time they put it on the map that says let's build one here, till it actually gets into because so we had to figure out some way to slow that down. And so water conservation came in, you know, which, which you guys know about the groundwater subsidence, and so forth, you know, pulling so much out, Houston sink, and everybody's thinking. So yeah, we had to really, really put something in place. So they went hard, hard, hard on water conservation. On the wastewater side. Yeah, that one. I only get to hear a little bits and pieces of that I don't, I try not to get too too far into it. Because they might want me to go over there and do something. And I'm gonna stay on the water side.

[00:15:40] **Wise:**

Here. Let's go back. Your current title is project manager, you said is that correct?

[00:15:44] **McCain:**

That's correct. Uh huh.

[00:15:48] **Wise:**

So, what what are the projects that are on your plate right now?

[00:15:54] **McCain:**

That you what we have, yeah, we're, we're going through right now some extensive growth. And then then extensive growth is we're gonna go in and rehab, all our filters, we have 24 filters, and we're gonna go in and rehab those filters. Rehab, it means we have to go all the way in and take we have like

a false bottom in them. So, we have to take the false bottom out, replace it. And then we're going to put in a whole new set of media. And which of course is what captures the the little particulates in the water, and so forth. So, we're going to capture all that. Make that all brand new again, because it can the summer runs, and so forth. And when we really peak, it's really, really harsh on those filters. So, we had to do that.

[00:00:00] **McCain:**

The other item that we got is what they're going to call a chlorine contact chamber. The plan actually uses chlorine as a disinfectant. With that chlorine, we actually put ammonia in the water, which is, you know, kind of a unique thing because of the fact that, you know, wastewater plants are trying to get rid of the ammonia, and here we are putting ammonia yet. But when we put that ammonia in what does it actually helps us with the treatment and the reliability of that water to maintain that chlorine residual throughout the entire system. And of course, without the chlorine, then TC Q, looks at that and says it's non potable. So, we actually have to have that chlorine. And so that ammonia helps us maintain that chlorine residual throughout the system. Now, once we get that done, and we get all that treatment, and we've got all this pristine water that we're developing, we're going to take it up to that Murphy pump station that we just talked about. Marketing pump station, of course, now, you know, it went online in 81 and then at throughout the years, we actually added additional steel tanks. So, each one of those additional steel tanks now requires that we go in there and do maintenance on them, and, like repaint them, and so forth. So, when we're repainting them, and bringing them back up to, to what you know, our standards that we need, and so forth, the the actual money that we're spending becomes pretty significant.

[00:00:00] **McCain:**

So, you know, back in the day, when we could actually build an entire tank for like million dollars. Now, the end today's prices, you know, we're looking at 2,000,002 and a half million, just to go in and rehab, one of those tanks, and we've got four of them, we've got two of them recently rehabbed, we're gonna go ahead and rehab the other two. But while we're doing that, we also found out that our, our pump station, the existing pump station, that's there. Of course, it was built, you know, like I brought up to you back in 81, when times were real, real tight, money was real, real tight. So everything was built, you know, just a fear. So, when we did that same way, we brought in another pump station to build beside that one. And again, it was built with the, the minimum money and so forth. So, everything had to be put in a real tight well now then all that's come to the harness, because now then our demands and so forth, have expanded so much that we're going to have to go in and spend about \$60 million and build a whole new pump station.

[00:00:00] **McCain:** So, we're going to we're going to do that. That's the two big major projects that we've got in the horizon, you know, in the future and so forth. Again, to transport that water from Lake Arlington to the plant. requires a pretty significant size pipeline. And when once we get up to that 87 million, of course, you know, we burn a whole lot of energy. Because it's coming from the lake all the way to the plant, we got to, they call it head. So, we're trying to overcome that head to get that water to the plant. So, we're going to actually go back in and build new pipelines because it can, the others are aging out. And, you know, we're starting to have more failures than we are good days. So, once we get that bill, we're going to build like a 68 inch new row waterline. And again, you know, back in 1974, you

just went through pastureland, you didn't have any problems getting here and so forth. Now then that nine miles of course, is all developed got residential. So yeah, we're going through residential streets, residential neighborhoods. Were Yeah, we got highways, we got thoroughfares we got across. So, with all that, of course, drives that costs just way, way up there.

[00:21:08] **Wise:** So, you're gonna use existing easements, the existing easement for that? Or how's that gonna work?

[00:21:13] **McCain:** Now? No, we, we thought about using existing easement and to remove and replace the way this is, again, the demand on the plant is such that the contractor could no more get started till we would shut him down and say, Okay, you got to put us back in service. So, what they've elected to do is go ahead and buy all new easement, which means yes, that, you know, we're going to have that expense also. So yeah, yeah, we'd love to be able to use it. And, you know, back in the old days, we could work with our power supplier. Because they had, you know, they had already gone through and bought a bunch easement, they used to let us, you know, reside in their same easement. And now, then, of course, since deregulation, they're saying, Now, you go somewhere else, we don't even want you in our easement. So

[00:22:12] **Wise:** well, that's, that's a huge change for Tru, I guess you had to add a new aspect to the construction process.

[00:22:20] **McCain:** Yes. Yes. And again, easements. Once we get started, put a plan together and so forth. Yeah, it's three, probably about three and a half, four years to get all those plan rights together and moving forward. So yeah, it's pretty tough. It's a big, big, big chunk of the construction process.

[00:22:46] **Wise:**

Let's 68 and so that's a 68-inch diameter line. Yes. Is that going to be underground?

[00:22:54] **McCain:**

Yes, it's going to be underground, one of the thoughts that they've looked at and that technology may help us out with is there, they're talking that a large portion of it, they may just go ahead and tunnel it. So that, you know, the folks will never know where even there will start on one side of the subdivision tunnel all the way to the other side of the subdivision and, you know, be completely underneath them, and they'll never know. But, of course, you know, if we go that route, then yeah, repairs in the future are going to be you know, we'll have to calculate that in and see what that's going to look like but that that may be the choice that we have to go.

[23:43] **Wise:**

in night, going back to the beginning of your career, did you and you may have answered this but did you were you all above ground more than you were underground?

[23:51] **McCain:**

Now, now we're underground? Again, the- you know, it's kind of a unique thing. When I first started I couldn't figure out you know, we'd have conversations with the engineers and so forth and tell him hey,

you know, we don't have equipment that will dig down 15 foot the we only got equipment, they'll dig you know, three or four foot deep and you know, why are you putting these pipelines so deep and you know, what's going on here? Well, you know what, once they kind of explained to you well not only does the ground you know, help protect with this that deep once we put that much pressure on that pipe, the actual ground and so forth will actually help us you know, keep that that pressure rating on that pie to where it needs to be. So they kind of utilize both of it now then what we're doing of course is with all the new different types of pipe and so forth in the you know, they've got they've got thick wall steel pipe that we can use now they've got absolutely they got great plastic pipe that'll be go way, way up there on pressure force, fiberglass pipe, there's, we got a whole new market of pipe that we can use. So hopefully we won't have to go that deep. If we tunnel it, the, they used some examples that Houston has done. And I think it's like, down around the ship channel or something that some of their pie, they they tunnel, they actually do a shaft and go down about 100 feet. And then they start their tunnels. So their pipe is actually like 100 foot underground. And then they, you know, they tunnel it and come back up and build a shaft and come back out and get it back up to grade once they get past whatever they're trying to get past and so forth. But, yeah, yeah, pretty interesting. Style-

[00:25:56] **Wise:**

is interesting. So, we've described in some detail a lot of the operations would in a broader sense, what are the big challenges that tra faces on your end, such as population growth, you know, land acquisition, all these issues that we've mentioned, environmental regulation, what are the what are the bigger challenges that you face?

[00:26:20] **McCain:**

Yeah, one of the biggest challenge that we just started out with, this just hit the horizon is going to be P Foss and PFOs. So, you may have heard a little bit about that, where, you know, Teflon breaks down and gets into water that's supposed to be carcinogenic to us. Again, firefighters that, you know, the the foam and stuff that they use for firefighting, absolutely big contaminant. So yes, the United States is coming in and banned the production of all the things that create those that P Foss and so forth. But we can still import it. So, like when we're importing, like wrappers and different things like that fast food wrappers that prevent the food from sticking and so forth. Again, when we throw it in the trash, then we get the P FOSS. So yeah, that's one of the big, big things that we're looking at. Now what happens is, is to get that P FOSS out. What the engineers have brought to us and so forth is they're looking at the granular activated carbon, which Yeah, it's you know, it's work and it's going to pull that P FOSS out and contain it for us, the problem is the courses we have to regenerate that, that that carbon, now what money you're looking at, is she out to get saya 100 million gallon plant like us, it would probably cost \$500 million. So when you, when you put that 500 million on top of the, you know, 40 50 million that we're already going to have bonds floating around for, yeah, you know, people, water is just going to be tremendous amount of money, you're not going to be able to afford to put it on your lawn, you're gonna have to just figure something else out. And again, you know, we can, we can go to the, the gray water or the purple pipe water or whatever. So, and of course, that's where the wastewater plants will treat it to a certain degree and pump it out and in, you know, lots of golf courses and so forth to use that. But again, that that, too, is a cost that, you know, we don't have the infrastructure in the ground for it yet. But anyway, so...

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that's what water is a challenge throughout Texas history, I suppose.

[00:29:03] **McCain:**

Again, Sir. Sir.

[00:29:06] **Wise:**

So, looking back over the span of your career, how would you describe the evolution of the Trinity River Authority, the chief personally seen and experienced?

[00:29:18] **McCain:**

You know, when the authority when we first when I first started, of course, you know, like I mentioned there, it was a small plant. We didn't the authority didn't go out and, and really promote and try and, and gain more customers and so forth. We let the customers come to us and say, you know, hey, we want to be a part of that. But that transitioned to from the first central manager, which was David Brown to the second General Manager, which was Danny Vance. Danny wanted to just kind of hold even in not let's, let's, let's just hold what we got, but do the most of what we got, let's make what we got perfect, and then not try and expand it out. Now then we have a Kevin ward. And Kevin Ward is more of a visionary. And he's looking to say, hey, what's out there? Who can we help serve? What can we do better? Let's go find it. Let's go get it, let's, let's make it, you know, all part of TRA. So, he's, he's really trying to promote TRA and move forward. Whereas before, the general manager was like, Okay, I don't want to buy Tru logos stuck on anything, I want to be as low key as we can be. And now then it's like, you know, we're sponsoring stuff. We're putting our name on stuff, or we're doing a whole lot more, which is great. I am X, absolutely, you know, ecstatic about it. Again, we're reaching out now to like school aged kids and stuff, trying to bring them into the authority, bring them in, show them what we got, you know, science fairs, any any way we can promote and get people involved in what we're doing. It's, that's a whole lot better now.

[00:31:17] **Wise:**

Is there anything else that we haven't talked about that you'd like to discuss as we close out?

[00:31:23] **McCain:**

No, sir. No, sir. Thank you for the opportunity to do this. I think it's great.

[00:31:28] **Wise:**

Thank you very much for agreeing to participate. Yes, sir.

End of the Interview