Ron Thompson, Retired Manager of the Washington County Water Conservancy District Interviewed by Loren Webb and Dick Kohler For the Washington County Historical Society

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Participants: Loren Webb (Identified as LW) Dick Kohler (Identified as DK) Ron Thompson (Identified as RT)

- LW: Hi, good morning. My name is Loren Webb, and to my right is Dick Kohler. To my left is Ron Thompson We are here representing the Washington County Historical Society, and this is one [ninth] of our series. It's an oral history interview and this is, like I said, one in a series, and we're excited to have Ron Thompson here with us. He is a retired manager with the Washington County Water Conservancy District. He's been with the organization for about 40 years. So we'd like to turn the time over to you and just have you, first of all, tell us your full name.
- RT: Ronald Thompson.
- LW: Okay.
- RT: Well, Ronald Willard Thompson.
- LW: Okay. And how did you become interested in the law?
- RT: When I was younger and I had served an LDS mission and I knew I needed to get a strong education, I had an individual that was a heavy influence on me (and I just got married), and he wanted to know what I was going to do. And I told him I was going to go get a degree in something, as most young kids do. And he says "Well, let me give you some advice." He says, "Go get you an accounting degree, and then add a law degree to it, and then there's not anything you can't do. So that really got me, kind of, as I thought about it, I thought, you know, he's probably right Then I went on, ultimately ended up at BYU and got an accounting degree. Nearly went out to practice accounting with a Big Ten firm, but I just kept having that nagging feeling I need to add the law degree now, not wait. So we went on and went to the University of Utah and finished there in really the fall of two thousand, 1974 is when I came down here in January.
- LW: Did you go into private practice at that time or did you-

## Washington County Attorney

RT: I came down and worked with Ralph Atkin and Tony Allen. And then shortly thereafter I ran for County Attorney and, probably unfortunately, won.

- LW: What made you decide to run for County Attorney?
- RT: I've always been interested in how governments work and to some extent the criminal system, and I thought there was a void there that could be filled, and the County was just barely starting to grow. When I came down there was maybe 13,000 people, but you could see it was going to grow. Developments had gone on in Bloomington, and you just had that feeling that Washington County was taking off. And so I ran and won.
- LW: How many years did you serve, or how many terms?
- RT: I just served one term.
- LW: One term.
- RT: One term.
- LW: And what particular criminal cases, was there any particular criminal cases that you prosecuted at that time that stand out in your mind?
- RT: Oh, I had a lot of criminal cases. We had, it seems like when you get a community like ours that sits on that freeway, you pick up a lot of off-freeway traffic. We had a couple of homicides, and—
- LW: You had the Butler case, right?
- RT: I had the Butler case.
- LW: Do you want to tell us just a little bit about that?
- RT: Well, it was a terrible thing. It had a case where there was some infidelity, and a St. George City police officer whose wife had become involved with a city employee, and he got upset about it and went over to his house and shot, Gordon Hutchings was the guy's name, and it was not a pleasant experience. I can remember Judge J. Harlan Burns told me, "You'll find in the West that you can get killed for two things." He said, "Stealing a guy's wife or stealing the water, not necessarily in that order."
- LW: Were there any civil cases that stood out in your mind during that time?

### Terracor Developments in Bloomington and Bloomington Hills

RT: We did a lot of stuff just in terms of drafting ordinances and working on contracts. We had, at that time, you had, the communities were really fairly small. So you had a big development going on in the Terracor developments in Bloomington and Bloomington Hills and weren't fully developed. I can remember when we came down, and I think there were like six homes in Bloomington Hills, so there were a lot of things we

were doing with Bloomington, ultimately, which happened after I left the County Attorney's office.

There was a big litigation with the financers of the Bloomington project and their developers, and I ended up being heavily involved in those, and ultimately we annexed those properties south of the river, all of Bloomington, which was in the County, and all of Bloomington Hills into the City of St. George.

- DK: So what I know as an architect, planner, Bloomington was the first master-plan community in Utah. So you must have done pioneering.
- RT: I guess. Well, Bloomington had started. There wasn't a lot there when we came, but it's clearly started. It, you know, it's kind of a very interesting story when you know how that started because it was a, initially they bought them as agricultural fields and then started developing the Bloomington project. And ultimately, one of the driving forces that became, and I'm going to skip over a lot, is the Ivory Homes; and Ivories, and I can't remember who the other parties were, came as early developers. But ultimately they had wined and dined and borrowed a lot of money from eastern investors.

And there was a young guy with a, and I forgot the name of the company, but he was sent out here, he'd made some loans, and they sent him out and told him to either get their money back or don't come back. And he ultimately looked it over. His name was Ian Cumming and ended up buying the company. And in that same time frame, the savings and loans had gone through upheaval. Many of them had gone broke. And the company that owned all of the Terracor paper ultimately was a company called Senior Corp, which is a conglomerate of several banks that had secured paper.

- DK: A guy named Ray Senior, was it a person's name?
- RT: I don't know. I don't remember Ray Senior.
- DK: Okay.
- RT: They had worked out a deal with Ian where they lockboxed the receipts from sales. They were selling them on real estate contracts. They were unfinished lots. And so they took the money and put the money and put it into a lockbox where the money could be used to finish the amenities that were approved. But they had these big first-place loans, and they were, back in that time, unfortunately, they were prime plus, I think, three or four percent. So the interest rate in that time frame, just went nuts.
- DK: Yeah.
- RT: They obviously went broke. And the banks came in here, and I had been involved with some other issues there. You had a community growing in Bloomington that wanted to have some municipal services like law enforcement, and they had a water company that

was a public utility operated by Terracor which had a lot of issues with it. And so I had helped some of them with some issues with the Public Service Commission dealing with Terracor. So I got to understand the underlining network of how Terracor was organized and what they were doing and some of the structure of the banks and that.

And so ultimately out of this savings and loan mess the Senior Corp finally got everything resolved, and then they started to foreclose on all the properties. They had a big meeting here in Washington County, and they invited all the Bloomington and Bloomington Hills people, and the Bloomington people asked me to come, and I listened, and there was a bunch of very high paid lawyers, and they essentially said, "We're going to take everything, and we're not going to finish anything."

And I can remember in that meeting getting up, and I had met the fellow before, and I said, "Well, let me just tell you fellows one thing. You may think that you have senior paper, but when your company came out here and started to fire mid-level employees of Terracor, you became joint ventures with them. And if you think you're walking out of here without protecting these people, you're nuts." And it wasn't long after they came back and said, "How do we settle this?" And, ultimately, what we worked out is we annexed Bloomington and Bloomington Hills area. Some have said it was controversy, but the only controversy was that it was big enough annexation it literally went most of Washington fields all the way to the State line where the airport is, and then it went back, and everything south, Bloomington and south, was annexed to the state line.

- DK: Including Sun River right?
- RT: Including Sun River.
- DK: And all the water rights, right?
- RT: There were water rights that came with it. And ultimately the golf course was being turned over, not the Bloomington, but the Bloomington Hills Golf Course, was being turned to St. George. There was money being given to them to build a clubhouse. There was some money put aside for finishing some of the amenities. And then there was a fair amount of money set aside to finish—the north part of Bloomington Hills that was finished at all. And so we ended up with a big block of money. Ultimately, the way it worked is we had a lot-owners committee, and the money came, and I administered that for them, and we put out the contracts and finished all the Bloomington Hills with that.
- LW: One of the issues that I remember was roads, had to do with roads, that the roads were not up to the accepted standards of the City of St. George.
- RT: No.
- LW: And the utilities, there was really no street lighting in Bloomington to St. George.
- RT: Well, there wasn't a lot.

- LW: It wasn't much to speak of.
- RT: Of course today, nobody would want lighting.
- LW: Yeah.
- RT: But—
- LW: But back then it was an issue.
- RT Yeah, the issue really was, and in the north end of Bloomington Hills, there was nothing there, a very roughout. There was no water, no sewer, no power, no communications. They had a small secondary water company that was providing secondary water to the golf course, and then on down into Bloomington that had a lot of things that had to be done. So all of those things we oversaw and had access to the money to finish those projects up.
- LW: Okay.
- DK: So that was the County, then, it was still in the County, or did it transfer to the City?
- RT: No, it got annexed in there, but the money came, actually, we put [it into] the Money and Trust account, and then I administered the Bloomington Hill stuff and Ralph Atkin administered the Bloomington.
- LW: And then the city incorporated it, annexed it.
- RT: The city had incorporated it.
- LW: Annexed I should say.
- RT: We probably had 95+ percent of the people sign that annexation petition. There was a small problem down on the far east side that Washington did not like how it was proposed to be annexed, and ultimately it was moved back to where they annexed to 3000 East. But originally the annexation would include where Pine View Estates is and go all the way down to the State line. Frankly, that should have probably stayed that way, but it didn't, and now you got a kind of a jigsaw puzzle going down through there.

## Washington County Water Conservancy District

- LW: Okay. So how did you become involved with the Washington County Water Conservancy District?
- RT When I was in the County Attorney's office, we started growing significantly. And I would often go in to Judge Burns, and I would talk after hours about whatever. I was raised in

Cedar and knew his family quite well. And while he was a tough judge sometimes, I, we often talked about where this County was going. And it was obvious to me back then that water was going to be a driving force if we were to meet the needs we had. We didn't have any significant stories, but we had a bunch of water rights. There had been the old Dixie Project proposed, but it did not take traction. Part of it was a big reservoir up by Virgin, but geologically, I don't think that reservoir would have ever held water.

- LW: Right.
- RT: And there were some other facilities looked at, but ultimately there really hadn't been a lot of water development. Back as part of that Dixie Project, they'd created the Water Conservancy District. Most of the board members were County Commissioners and then some pretty good geographic distribution, of ex-County Commissioners. They put some money into flood control and a couple of things, but did not do any big project. It's clear to me they needed to be developing, but when I left the county attorney's office--those boards were all appointed by the judges at that time. The reason was they did not want water to become political. They tried to keep that very non -political in Utah. And as I understand, because I wasn't in the meeting, he went to the Board and they had not done a lot, and he said, "Look, you guys need to get your act together or we ought to dissolve the District."
- LW: This was J. Harlan Burns?
- RT: Yeah, and—who was the point of the authority for them, and they asked him what to do, and he told them they ought to go hire me to get them cleaned up and see if they couldn't get a project. So they came to me and hired me, and away we went.
- DK: So they actually created the Water District with that, pretty much, is that?
- RT: Well, the Water District was created in 1962.
- DK: Okay.
- RT: I didn't come into the mix until 1978.
- LW: And where was your first facility? What was the address?
- RT: Our first facility? Our first significant facility was Quail Creek.
- LW: Now your address?
- RT: Oh, my address?
- LW: No, the Washington County Water Conservancy District's offices.

- RT: Well, it really worked out of a paper box, but the Secretary/Treasurer of the District at that time was Rudger McArthur with St. George City, and then it had some county commissioners on there.
- LW: But you eventually moved to 145 North, approximately 145 North and 100 East, right?
- RT: Yes.
- LW: Okay.

# Quail Creek Project

- RT: We bought that building and had it built, quickly outgrew the building. Our first project was Quail Creek, and that was a significant project. I remember at the time I had gone up and met with the Governor and with the State Engineer and looked at resources. We had looked at several projects, including Warner Valley, but it was so much more expensive, and ultimately we did some preliminary cost estimates, and we knew the project had a lot of hydropower potential in it, so we negotiated a commitment to buy the hydropower. And there's a lot of stories there, anecdotal stories.
- DK: Whose idea, were you the one for Quail Creek? Was Rudger McArthur, I mean, where did that idea come from to do Quail Creek?
- RT: No. The idea really came, they hired me and said "We want a project." We went back because there had been the proposal of building the Warner Valley project. When I first came here that was a very hot political issue. It was a big reservoir, it would have taken water out of the river above where we're at and brought it down in a canal and ultimately brought water into, through Hurricane Valley and into Warner Valley. It also had a big power plant called the Allen Warner plant that was going to be in the south end of Warner Valley. When I first came here, that was a pretty controversial issue.
- LW: And that was shut down, the Warner Valley project was shut down.
- RT: Yeah, they did a full EIS, had some conditions but approved the project, but ultimately it was abandoned. The water district was heavily involved in that. They were going to be involved in the building of the reservoir and the distribution of water.
- DK: So was it a state project?
- RT: No, it would have been a local project.
- DK: It would still be local. Okay.
- RT: When they came to me, they said, "We've got to find something. We want you to look at Warner Valley, and gave me a lot of responsibility. And I started looking, I got an

engineer, and we started looking at potential other sites, and the State had done some inventorying of where there was potential reservoir sites. We went back and looked hard at Quail Creek, which was maybe a fourth of the cost of Warner Valley and still stored 40,000 acre foot of water. And did some preliminary geotechnical work. We went to the State, and they assured us that they would help us finance the project. And then we put together a team to design the dam and get it approved. We had a general election for a bond.

- DK: Well, the key idea, though, both of them, Warner Valley and Quail Creek, they're off-stream storage.
- RT: Yeah, they are.
- DK: Which I think is, at the time, pretty innovative, wasn't it? I mean-
- RT: It was, but I think when you look at the Virgin River system, which tends to run a high silt load, that was a smart thing to do, to put it off -stream.
- LW: It was the Mead-Adams study, right, that proposed doing an off -stream dam or a dike, is my understanding.
- RT: No, I don't remember Mead-Ad—the study that we did was done with the State being involved, and Creamer & Noble was involved in it. We involved Dixie Power, it was Dixie REA at the time.
- LW: Okay, because Doug Alder in his book talked about Mead, who's, Lake Mead is named after, and Adams had proposed an off-site dam because of the silt problem. Well, the off-stream dam was the Warner Valley dam that had been proposed in that study. And that came about, really, after the big dam up on the main stem of the river up above. It was a big enough dam that would have covered the town of Virgin completely.
- DK: Okay.
- RT: I'm very familiar with the geology, and I don't know why that took that long to figure out and spent that much money that it was not going to work. If you've walked up the Virgin River gorge and up on top and watched the depth and the crevices that are in there, there's no way they could have ever made a reservoir hold there, I don't think.
- LW: So you looked at building an earthen dam, an earthen dike at that point for a while.
- RT: We did.
- LW: Okay.
- RT: And there are two dams there to get the storage that you need to do, one on the main dam, which is a big dam, it's a 200-foot-high dam. And then there was a, we called it a dike,

which was probably a mistake, because it was a fairly significant dam on the south side. And that stored 40,000 acre foot of water. There's about a nine-mile pipeline from the diversion dam, which is above the old hurricane diversion. It brought the water down in a 66-inch pipeline on into Quail Creek. it goes through two hydropower plants and then delivers the water to the reservoir. It delivered water to LaVerkin and Hurricane. It became the backbone of a lot of what the District does today. Still is the backbone.

- LW: So they started building it, and it immediately started to leak?
- RT: Well, all dams leak.
- LW: Yeah, but how did you address the leakage? But there seemed to be more leakage than normal?
- RT: Well.
- LW: Or not?
- RT: Well, I was a lawyer, not an engineer. I had a heavy learning, but, we started getting some leakage. The big dam was handled fairly easily. There was some pressure in one of the abutments. We went in and relieved that with some horizontal wells. That dam's functioned, still functions, extremely well. On the south dam, it started to get leak. I would go to the engineers and I'd say, "It just doesn't make sense to me." And they would explain to me it was going to be okay. But all the geologic beds lay perpendicular to the dam. And there was, so there were valleys and washes that went through there going north and south, and the dam sits in that east and west. And there was one place where I'd see wet spots up on this face of the dam, maybe 15-foot high, and I kept saying, "Well, this doesn't make sense to me, fellas." "Oh, you'll be okay." And so we put some additional drains in there.
- LW: Yeah, what happened, would you tell us about it.
- RT: I had been to some water meetings, and because of leakage I went past, every time I was out there, I would go drive the toe of that big dam that we call the dike. And it's probably about noon, and I drove past it, and I could see some very small leakage. It wasn't—but it didn't look like other leakage we've had. It was maybe less than a garden hose. And I went over and looked at it, and it looked to me like it was packing some material. And I called the engineers, and I said, "This is a problem here, fellows," and they said, and I says, "What should we do?" and I can remember it just kept growing a little bit. And we got some people over and started trying to build a French dam around it so it would stop the material from moving.
- LW: This is where you, when you called Omar Matthews and-
- RT: I can remember that night calling at late afternoon—it wasn't dark—and calling the engineers who were in northern Utah and said, "This doesn't feel right, you sure this dam's

not going to fail?" "Oh no, it's not going to fail." And I can remember having this sick feeling that says, "You better do something because this dam is going to fail." And so I got on the phone and got a hold of the County Emergency Services people, called the law enforcement people, and said, "I don't know if this is going to fail, but there's a significant risk in my mind that this dam's going to fail tonight." So, that probably singularly stopped us from--we lost some property damage but we had no loss of death. And they closed down the highway and it failed so fast that it was incredible.

- LW: Let me just go back and clarify. Was the engineer, were the engineers that you talked to, were they out of Provo, Utah, right? What was the name of the engineering firm?
- RT: Rollins Brown and Gunnell.
- LW: Yeah, Rollins Brown and Gunnell.
- RT: But—
- LW: Okay. So go ahead and tell us a little bit about the destruction, you know, of agriculture and residential particularly.
- RT: Well, it flooded. It did some residential flooding down in Bloomington, and, you know, there's a lot of reasons for that. You know, you, hindsight is a better teacher than foresight. But I remember when I was in the County Attorney's office we had a big flood that washed away the left abutment of the Man O War Bridge, and originally that was designed so there's a big dip, so if you got a monster flood in the river it would breach that left abutment and go on around it and down the river and then they'd rebuild the abutment. Well, when they rebuilt it, they built a big dike that went clear out, almost raised that whole thing up, so when the flood hit Man O War it wouldn't take it, it kicked it back around, went down through those neighborhoods, and down through Bloomington Ranches, some of it, and so there were some homes flooded in there.
- LW: So we're also talking destruction of the Washington Field Dam.
- RT: The Washington Field Dam.
- LW: The Washington Bridge.
- RT: Right.
- LW: The River [Road] Bridge, right?
- RT: Yes.
- LW: And the old metal bridge [on River Road] was destroyed.
- RT: That's right.

- LW: And at one point it made it so that the only way you could get across was around Toquerville and all the way down to the I-15 bridge, right? There was no other bridges, no other way to get to the south side at that point.
- RT: Well, you could have gone through Hurricane and come back down through Warner Valley and got to the south side.
- LW: Okay.
- RT: But you're right. You had to go down to Bloomington, exit, and come back into the fields that way. So what was the District's response, and what was the governor's response to the breach?
- RT: Well, our response, we realized it was a catastrophe, and we had a lot of discussions. We hired a Salt Lake law firm that's been representing us, and I can remember, if you knew me well, you would probably understand this, but I called them up and I said I wanted lawyers involved, and we had some insurance, and there was a lot of reasons that dam failed, but fundamentally, it was an engineering error—the principles that you put in dams was not followed in the section that failed. Most of the dams that have ever failed is for the same reason. The Tetons [near Sugar City and Rexburg, Idaho] failed for the same reason.
- LW: And that was the conclusion of the three-person task force, right?
- RT: It was, but if you went and looked at it the next morning when I was out there looking, I could see exactly what occurred.
- LW: Yeah.
- RT: They explained it to me in more detail, but ultimately I could see why it failed. It really had to do—in a dam, you extend these filters that go clear down in the foundation. Well, in this one, there was a big valley there, and they just filled that up with clay and then perched that dam on top of it, so there was no protective filter barrier between the foundation and protecting that material on the front so that it had a clear channel going down that wash that was not protected by filters. But that's [how] it happened. And the State's response, I thought they were great. You know, we looked at, there was plenty of mistakes that went on that both in the engineers and we had inspections going on with State and others, and we ultimately decided that, the State stepped up and says, "We'll help," and they loaned us a bunch of interest-free money to pay for the claims.
- LW: About \$12 million worth.
- RT: Well, twelve was what it cost to rebuild the dam.
- LW: Okay.

# RT: And—

- LW: How much to—
- RT: We borrowed three [million] for damages, which we paid back to the State.
- LW: And every claim was repaid, as I understand it.
- RT: Every one. Well, I have to tell you this kind of funny story because I sat on the Board and I said, "Look, we can fight these. We've got government immunity and we'll have [to] be in litigation for years. And we'll have a lot of negative public sentiment. Or we can step up the board and say we're going to pay the fair amount of claims." We had a million dollar policy, and we borrowed three [million] more, which is what we thought we could cover. FEMA came in and covered the public structures, the bridges and those kind of things. And I can remember our lawyers and I drafted the fair compensation policy that I asked the Board to adopt in our very first meeting. Our engineers called me, our attorneys called me up and said, "We don't think you ought to do that." And I remember listening to them. And I said, "Well, boys, are we hiring you to give us legal advice or management advice?" And they were silent. And I said, "Well, I think you're trying to give me management advice, and that's what I get paid for. So we went ahead and passed it. But I think that was critical because we didn't have a single lawsuit out of that. Not one.
- LW: Yeah, it was amazing that way.
- DK: It was also the reputation that you came out well.
- LW: Yeah.

## Washington Field Dam

- RT: Well, we had to take personal responsibility. I kind of learned in that general time that you think you've got protected, but ultimately the buck always stops at the District's door. And so you better control your projects the best you can.
- DK: Well, the other thing is, though, Washington Fields Dam, which had been there since 1897?
- LW: 1891.
- RT: Yeah.
- DK: And it was functioning for all that time, but when you built it back, you pretty much look like you built it back pretty much in the same manner that it was built.
- LW: And even better. Wasn't it even better?

- RT: I think a little better.
- LW: The Soil Conservation Service helped with that a lot.
- RT: Yeah.
- DK: But you know, it still kind of, you know, has what do you call it, where the water can go around.
- RT: Well, what happened was the dam comes across the spillway, and the spillway is on rock.
- DK: Yeah.
- RT: That stayed there. What failed was back over to the south, which was not, there was, originally that geologically dips down on a southern slant. So, when it overtopped, the spillway stayed, but where all the diversion structure was—
- DK: Yeah.
- RT: Those that went over that had, there was nothing to hold. They didn't have a big rock foundation that could sustain it.
- LW: And farmers were without irrigation water for over a year, weren't they?
- RT: Oh, no.
- LW: Or was it more?
- RT: No. We went right back in.
- LW: Oh, was it right back in?
- RT: Yeah.
- LW: We're talking about the Washington Field Dam.
- RT: They had the water back in by that late spring.

#### Rebuilding Quail Creek Dike

- LW: Okay. Okay. So tell us about how you came about with developing the roller-compacted concrete dam to replace the original earthen dike.
- RT: Well, roller-compacted didn't have a lot of dams but it had some technology behind it, and they had built three or four in the United States by then. And we started looking at

alternatives, and we had hired a group of, we call it a technical team. It was made up of some engineers who had had immense experience with the Bureau of Reclamation, with NRCS [National Resources Conservation Service], and hired a very good geologist with a lot of dam building experience. And they both looked at why the dam had failed, and then they served as a technical advisor as we started looking at types. And it became obvious to me that you had a foundation that you needed to have something more in it.

I'm not going to go into all the details of the discussion of how we ended up with what we did, but ultimately we tore down the old dam completely and segregated the materials so some of it could be reused, and went in. And as we studied, you know, that concrete dam is not going to go away. And we didn't want to go through the risk of what was there. And so there's a cut-off trench in there that the deepest part of it is seventy-six feet deep. And then it was all backfilled with concrete. That's in the foundation, and then when they build the dam, it goes up in layers. And it's interesting because they ultimately almost never stopped. They worked 24 hours a day until it was finished.

- LW: And they completed it in 1990—
- RT: Yes.
- LW: Which I just thought was amazing.
- RT: It was. It was an incredible project.
- LW: And you went with a nationally ranked engineering firm, Morrison Knudson, correct?
- RT: Yeah, we did.
- LW: Out of San Francisco.
- LW: So, and it's held firm and it's doing its job.
- RT: It is doing its job.

#### Virgin River Dam

- LW: Okay. So can you tell us just a little bit about some of these other projects, the LaVerkin Diversion Dam. Can you tell us a little bit about how the LaVerkin Diversion Dam got started? A lot of people have not, have never seen the LaVerkin Diversion Dam.
- RT: Well LaVerkin Diversion Dam was later in the development. But the District had bought the water rights, most of the water rights of LaVerkin Creek we had bought and owned, including clear up the very high end of Kanarra Mountain. And there was an old diversion dam where that dam is today, but it was a rock dam, some concrete, but not this kind of structure you needed. So we went in and rebuilt the dam and put a pipeline down and

ultimately, if you look at the District's network, we had a pipeline that went from Virgin to Quail Creek.

- LW: And that came from the LaVerkin Diversion Dam, right? I mean that's-
- RT: No, you mean the big diversion dam for Quail Creek?
- LW: Yeah.
- RT: You're talking about the one on the Virgin River.
- LW: I'm talking about the pipeline that goes, that funnels into Quail Lake, also.
- RT: Okay, I'm sorry.
- LW: And that funnels into Sand Hollow. Isn't that the, I'm talking about.
- RT: To me, I know the LaVerkin Dam is on LaVerkin Creek, okay?
- LW: Okay.
- RT: This is the Virgin River Dam.
- LW: Is that what they call it? The Virgin River Dam?
- RT: Yes.
- LW: Sorry.
- DK: Yeah, it's the main diversion.
- LW: It's the main diversion.
- RT: It's the Quail Creek Diversion.
- LW: Yeah.
- RT: Interestingly, that's right on the site of the old Dixie Project where they're going to build the dam. So there was a fair amount of geotechnical data there. And it's about a thousand feet upstream from the old Hurricane Diversion. It's about a 75-, 80-foot, it's in a very narrow slot canyon there. And so it's a concrete dam entirely.
- LW: And it diverts all the water, right? For Quail and Sand Hollow?
- RT: Yeah, it does.

- LW: Which I think is amazing.
- RT: Yeah, it does divert the river into a 66-inch pipeline that goes down along the Virgin River, crosses it four or five times, and ultimately ends up in Quail Creek.
- LW: Okay.
- RT: There's a fair amount of fall in there. There's two hydropower plants, one at the LaVerkin Hot Springs that takes water and puts it back in the river at that location. There used to be an old hydroplant farther down that was owned by Utah Power and Light, and we bought those rights. And then there's the big plant for all the water that goes in Quail Creek goes through the hydro plant.
- DK: So we are doing a little bit of hydro-renewable-like energy.
- RT: Yeah, hydropower is fabulous.
- LW: What about, has the Conservancy District been involved with the well systems in the, particularly in the Snow Canyon State Park, or is that—
- RT: No, not in Snow Canyon.
- LW: Okay.
- RT: But we've been heavily involved in wells on the east side of the County.
- LW: Okay.
- RT: Probably 20+ wells have been built around Sand Hollow and up in Ash Creek along what we call the Cottam Wells. And we've drilled some wells down in the Grapevine area east of Leeds.

### Virgin River Program

- LW: Okay. Can you describe the Virgin River program? I know that's part of the Conservancy District.
- RT: Yes.
- LW: So I'm just, I'm just going from-
- RT: The Virgin River program is dealing with endangered species every day. And most of those species reside within the habitat of the Virgin River. And that's obviously where we needed to develop it. It became obvious to us that you could either have conflict and polarization, or you could find a way to get all these players together, both State, local, and Federal, and find a way to deal with the issues that were impacting endangered

species. So we created the Virgin River program. We have a set of goals. It's funded by Federal, State, and local resources. And it's done a lot of great things over the years.

- LW: Okay.
- RT: We remodeled, for example, the Washington Fields' diversion to make sure those fish didn't just come down and go into the canal and be killed. We bypassed fish and water down the river without going into that canal system and ultimately being terminated. So there's a lot of things that have been done with that program.
- LW: Okay.
- RT: I've always believed that you, if you can get people that are willing to collaborate and try to work on consensus and get all the players in the room, you can often find solutions that will work for everyone.
- LW: Okay.
- RT: What you can't do is if you won't talk. And that gives us a forum to talk. And I, you know, I took the position when I came into the District, we need to understand those species better than anybody. So we hired our own independent biologists. We worked with the Utah State University to build some significant programs that allow us to monitor and look at trends.
- DK: The balance is some of the water has to stay in the channel-
- RT: It has to.
- DK: For the, for the wildlife.
- RT: Right.
- DK: The fish. But the other problem I gather is that where the diversion happens, the main diversion up towards Virgin—
- RT: Yes

## Pah Tempe Hot Springs

- DK: On the Virgin River, that the total dissolved solids there is, I don't know, a third of what they are below?
- RT: If you look at the hydraulics of the river, the hot springs produce about 12 cubic foot of water, roughly 5,000 gallons a minute, it's 107 degrees hot and its TDS [total dissolved solids] is over 10,000 parts per million. To put the TDS level above the hot springs is about 400.

- DK: Oh, really? That's big.
- RT: While that's mixed with other water, the hot springs, it's still a big volume, particularly in the summer. I always wondered when I was a kid, because I had grandparents in St. George and I had grandparents in Hurricane, you go to Hurricane and those fields had orchards and grew fruit and nuts and strawberries and lots of stuff, and then you'd come down to the Washington Fields and they marginally grew alfalfa and grain, and no orchards, and I often wondered why. But as I got older and watched the, of course I knew the hot springs, because as kids we spent lots of time down in there. My mother was a Hurricane girl, and I spent most of my summer in Hurricane, but, but those springs heavily contaminate the river from the hot springs downriver. In fact, those salts coming out of the spring is roughly 110,000 tons of salt a year. Think about that, it's an enormous quantity of salt. That's a third of all the salt load that comes in the Colorado River's coming right out of that one spring complex. And so, we had to get the water above it. We were after drinking water for people, not just farming.
- DK: Yeah.
- RT: And you had to get above the spring, so that's what that does, and of course the old Hurricane LaVerkin diversions, which the big diversion replaced, were all above it, and that's why they had this high quality water and Washington Fields they had the highest water right, but it had poor-quality water.
- DK: Yeah, so it was the older one. That's why it had the water rights, the Washington Field.
- RT: But the quality of water was sufficient for what, hay, alfalfa?
- RT: In the spring and fall is not bad water, because it's diluted enough. But in the summer, when there's 40 or 50 cubic foot and 20% of it's coming with that hot water that's heavily contaminated with salt, it's a higher percentage. So off to the summer, TDS will get down, Washington Fields at 3 to 4,000. That's not good water for ag.
- DK: Well, and nobody took drinking water out.
- RT: No.
- DK: I know in the Bloomington area, Heberville, originally, there below Atkinville, where Santa Clara comes in—
- RT: Yeah.
- DK: They ran a canal up the Santa Clara, so it could have Santa Clara water.
- RT: Right.

- DK: Eventually, before that, I guess they took wagons to the West Spring in St. George-
- RT: Probably.
- DK: To get drinking water because you just can't drink that. You know, you know, even after the silt settled out, right, it still just didn't taste good.
- RT: You know, kind of an interesting thing with the hydrology of the river in that area is that if you go just below Heberville or Atkinville, where Sun River is, there used to be some sinks in there. And so in the summer, that river right there would dry up. The interconnectivity was almost zero unless it was a big water year between the water that was at Bloomington and the water that you found down at Littlefield. That river was regularly dry all summer long, except for floods.
- LW: Going back to Pah Temp Hot Springs, you know, the sulfur in there. And so, Ken Anderson operated the Pah Temp Hot Springs there for quite a while. And then, was, did the Conservancy District use eminent domain to shut him down? I know there were some issues between the District.
- RT: Well, no. There's a lot of issues in there, but ultimately what happened is that the springs was owned by a Smith family. And Ken had leased a part of it, and the Smith family was a little bit fractured. And ultimately, we had got easements from the Smith family for the Quail Creek Project. Ultimately, we had the earthquake, which everyone will remember, and that moved some of that spring water around in that canyon. But there had been some intense studies done by Bureau of Reclamation where they'd gone in every spot the spring was coming up, and measured it. So we had that background data. But as we had gone in and put the pipeline in, we had capped some of the stuff that was coming up in the bottom of the river and pushed it out in what they called the grottos. Well, when the earthquake came, that water went back to probably what was its base flow.
- LW: And it was in September of 1992.
- RT: That's right.
- LW: Okay.
- RT: And of course they blamed the District for that, and Ken had gone and bought a third interest in the springs. The rest of the Smith family didn't want anything to do with him, and they came and sold that to us. There was a contract in there which we thought Ken had breached. And he sued us, and we countersued, and ultimately [the] court ruled in our favor. And we settled it. Our settlement was based on him paying a certain amount of money and he had to do some development things, but ultimately, and we had an agreement, if he couldn't do it, we would buy him out for a fixed price. He had borrowed a bunch of money against it, and there was a bunch of litigation that went on through a bankruptcy with the secured creditors, and they ultimately ended up with the spring back and immediately come back and said "We're not going to do any of that stuff, you just buy

us back out." And we had a fixed price, and so we bought it, and we've taken it over since then.

## Sand Hollow Reservoir

- LW: Okay. Tell us about the Sand Hollow Reservoir and how that got developed.
- RT: Well, Sand Hollow is a fabulous reservoir, but for a lot of reasons, I can kind of sit back and look at how that came together; there's a lot of issues that went on to get to that reservoir. We knew we needed more storage than Quail Creek. By then, you know, by the early '90s, you could see that we were on a growth trend that Quail Creek alone would not handle. And this really ties to lots of issues, but ultimately, we had Kolob Reservoir, and there's a broad history of Kolob that was built in the 1950s, and initially, the local two irrigation companies, Hurricane and Washington Fields, had bought the ground, put the project together, and went to the Utah Water and Power Board at the time and wanted to build it. They had some concern about whether Washington County would ever be able to pay for it, and, of course, they thought they would.

It's a bird's shot from Kolob to Cedar City, and not much of a cut, so they went and said, "Look, we want part of that water," and they forced their way into the project, so they ended up with, I think, 40% of the reservoir. But they had never been able to develop it. There was a concept that they would drill a big tunnel through Crystal Creek and take that water in to Kolob. Then they were supposed to build a replacement reservoir on the North Fork, the North Fork, of the Virgin River, which was above the Zion Narrows. The district, early on, had bought that site, the old Bullock site it was called, and there had been a bunch of work on it.

Well, in that process, we had, Cedar City came down and paid some money for some storage in Quail Creek that would allow them to take Kolob. Kolob was not feasible for them without a lot of other things. We insisted that if for some reason they could not take Kolob into Cedar City, that they had to sell their interest to the Water District. We by that time bought some other ground because we were after some water adjacent to the Park, some land in what they'd called, Lower Kolob. Zion Park came up and said, "We want to assert reserved water rights in Zion Park." And we agreed to sit down and discuss whether it was feasible or not. And Cedar City was in that negotiating group, and then Washington County, mostly the District, but other people.

- LW: So, that was tied in [with] the Zion Park Agreement-
- RT: Yeah.
- LW: Tied in with Sand Hollow. That's interesting.
- RT: Well, it was really the emphasis for Sand Hollow. We were not focused on Sand Hollow. I have to tell you, and I'd gone out there as a young kid, my family went out there several times a year with my Hurricane cousins. So I was familiar with Sand Hollow, but I wasn't

very visionary at the time. I had a chairman who would take me out there and say, "You ought to look at building a dam out here."

- DK: Who was that?
- RT: That was Wayne Wilson.
- LW: The Board Chair.
- RT: I couldn't get myself really around how you could put a reservoir there.
- DK: So the idea there, though, the key idea is that it leaks, so-
- RT: Well, that was part of it, but that didn't come up until we really started looking at it, or what benefits we could get. But ultimately, in our negotiations with the Park, we committed that we would go do a serious look at whether there was another site for downstream development, and they committed they would do a serious evaluation of the Bullock site, which is right where the trail for the Zion Narrows comes through. I think we both did an honest effort. And frankly, when we were done and had done a serious technical evaluation of the Sand Hollow site, it was cheaper and better in every way. And then you didn't have the environmental issues. Well, the Park had looked at it and said, "Well, we might be able to do something here, but we really don't want to."

And we ultimately negotiated where we traded the land that was in the Bullock site, and we traded the lower Kolob ground, which was about 1,000 acres, to the Park to the Department of Interior, and we ended up with the underlying fee for everything that was in Quail Creek, all the canyon going down that was in public domain down the Virgin River from the diversion dam down. And we ended up with 3,000+ acres where Sand Hollow sits. And we had to pay a little, we did it on appraised value, and we had to pay a little bit extra, but not much. And then we ultimately built Sand Hollow.

But in that process, the settlement agreement has lots of parts to it of what you could do. And there were some options for some upstream development. The things we were interested in, being able to bring Crystal Creek into Kolob. There's a set aside for some potential reservoir development over on the East Fork. And then some minor development for livestock and other things above it.

But the Park just took a hard nose. They were never going to let Virgin River water go over into the Great Basin. It was kind of over our dead bodies will that happen.

And it didn't take long after that, the city manager from Cedar came back and said, "We want you to buy us out of this." We purchased a big block of groundwater that we knew was available and traded it to Cedar and paid them the balance in cash, and then they were out of that project. In that process, they had done a study on bringing Crystal Creek, putting the tunnel, but there had been a study looking at whether they could build a big canal out of Crystal Creek and take it in to Kolob.

- LW: Where is Crystal Creek located?
- RT: It's the next, you have Kolob Creek, then Crystal Creek is the next one and they all join together in Deep Creek.
- LW: Okay.
- RT: This diversion is up high. And I went back and dug that out, and I looked at it, and I thought, "You know, if the tunnel is this expensive, why can't we just run a big pipeline out of here into Kolob?" It's steep. I mean, I've spent time as kids walking down into those canyons and fishing with my dad; it's rough terrain. But you know, with modern equipment, you can do a lot of stuff. So we ultimately decided we would build the Crystal Creek project where we put the diversion where it had been recommended, and then we just put a big pipeline out of that canyon that comes over into Kolob.

The interesting thing about Kolob is it only filled two out of ten years. With the addition of Crystal Creek, it fills every year. And so how the District uses Kolob is we'll leave it full all summer because the water doesn't evaporate fast, and then in the winter, starting about, oh, after Thanksgiving, we'll start bringing that down, we'll keep a constant eye on what the snowpack's doing, and then we'll lower it down, and take that water down and store it in Quail Creek and Sand Hollow.

- DK: Well, and then the more stable water levels make them more of a recreation.
- RT: It's a win-win. The recreations. You know, someday they probably ought to add a little more storage on to Kolob.

## Gunlock Reservoir, etc.

- LW: So what are your thoughts on three key reservoirs that were built prior to the Conservancy District: the Gunlock Reservoir, Baker Reservoir, and Kolob Reservoir? What are your thoughts about those three?
- RT: I think they're nice little reservoirs. Yeah.
- LW: Definitely nice additions that were—
- RT: Yeah. I mean, they're, they're, for any water storage [unclear word] like we are, you look at the Santa Clara, and Kolob, or Gunlock has been a tremendous boon. The problem with Gunlock is it's on stream, and so it constantly is, you know, getting silt. We spent a couple of times over a million dollars dredging that reservoir to try to maintain the storage, but it's, that's going to always be a challenge.
- DK: So what, Gunlock has wells, right?

- RT: The benefit of Gunlock is it sets on Navajo right there, and that's a recharge facility just like Sand Hollow. You know, the huge benefit of Sand Hollow isn't what you see on the surface. It's, they've stored, I'm sure, way over 150,000 acre foot of water is stored underground in that structure. You know, that's three times the storage of the reservoir.
- DK: So in some ways was Quail Creek patterned after the wells and Gunlock?
- RT: No. Sand Hollow was. I mean we knew, we had done enough work in Sand Hollow. We knew that we had a structure there that was probably 700 to 1,000 foot deep of sandstone with roughly 25% porosity when we built it. And we knew that if we managed it right, we could put that water and store it, and it could stay there for hundreds of years until we needed it, which is what's happening right now. And the problem is to do that you have to get State permits, but you're constantly monitoring so you know exactly how much you're pumping out of that aquifer, how much is going in, how much you're losing from evaporation loss. I mean, there's a lot of stuff going on scientifically. We have many monitoring wells around that valley so we can track the waters that continues to build up in the basin.

## Shivwit Band of Paiutes Water Settlement Agreement

- LW: So tell us a little bit about the Shivwit Band of Paiute's Water Settlement Agreement, because that ties in with, you know, Gunlock a little bit.
- RT: Well, it does quite a bit. That's kind of an interesting story because we didn't start out looking at an Indian water rights settlement. There had been an effort to list the Virgin River spinedace. It's fundamentally a tributary fish found in the Virgin River. The spinedace doesn't get into high elevations. I'm sure that has to do with water temperature. Maybe it's the trout habitats above, and they're a predator to the Virgin River spinedace, but the way, wherever you go, the Virgin River or these tributaries or Beaver Dam or the Gunlock, there's a pretty good population up to about a little over 4,000 feet elevation, and it disappears, and you end up with trout habitat, and they don't survive well together. But there was a proposed listing of the spinedace, so I personally think it was nuts, but if you're going to be able to, with these cities and all the stuff they were doing and how the tributaries were used, it would have been disastrous to have the spinedace listed. So we did two things. We first of all went out, and we hired and went and sampled every tributary in the Virgin River up to, so we knew exactly which ones had spinedace in it, where they ended. Most of the reason for listing it was because of the impact on the Santa Clara River.

Some of that is being blamed on Gunlock, but pragmatically, if you know, it's not happenchance that Gunlock was settled where it's at. And if you know the history, Ivins, Santa Clara, the lower St. George area, that Tonaquint was all out of water most summers, and Gunlock actually got built because Jacob Hamlin went up and figured out where the water was still running in the summer, and that's where they settled. We also knew they'd store the water in Gunlock and dry the river from October until they started taking water out in the spring. And then to get the water to the Santa Clara diversions, they'd have to turn 35-second foot of water, and they'd get 15 at Santa Clara. So there's a lot of system loss in there.

So what we negotiated was we were going to build a pipeline, and we would put Santa Clara and Ivins and the lower Santa Clara on a pressurized irrigation system. And by doing that, we could then take some water and put in-stream flowback in the Santa Clara below Gunlock. And that was what our intent was. And we got, actually, it worked out, the funding, it was being paid by the State and Federal and the Water District, and there was an agreement we'd put three second-foot of water back around the diversion dam that would be kept in there.

The Shivwits had been arguing that they were entitled to a settlement, and you can't get through there without working with them, because you've got to go through the Reservation. And even though this pipeline goes down the highway and then follows the old Ivins canal back over to come down, it still goes through the Reservation. And so it seemed pretty obvious to me that we needed to find a way to resolve that. And we did resolve it. We agreed to increase their allocation in basic water, some of the water we were saving with this pipeline, and that would get the same priority as the other high-priority water rights in the river. And there were some water sharing agreements, so in the drought, they only get so much, and we agreed on a method of determining how much water we thought was going to be available each year based on snowpack and carryover storage and so forth. And then we negotiated where there was a \$15 million allocation that came to St. George City to build a reclaimed water, and we brought reuse water back up the river that's capable of pumping it back to the Reservation. And so when we got done, we had provided some base flow water to the river. We had provided additional water resource to the Band. We had agreement to bring some additional reclaimed water out of the wastewater plant. And then that whole system was piped in a series of pump stations and allowed the water to be pumped back up to the Reservation. So far. they've never taken it back up that far, but it's capable of delivering it to the Reservation.

### Quail Creek Water Treatment Plant

- LW: Okay. Tell us a little bit about the Quail Creek Water Treatment Facility that was originally owned by the City of St. George, and now it's owned by the Washington County Water Conservancy District.
- RT: Yeah, there's kind of a long history there, but traditionally water districts sell water in blocks, and in a lot of places where a city will come in and buy a block of water or contract for a block of water, and then they have to pay for it whether they use it or not. In our District, we've had to come to the conclusion that we're in a desert, we need to have a conservation effort that would be wise with the water we're using. So we started the first district in Utah to go heavily into water conservation planning. And as we were encouraging people to use less water, we had some of these water contracts with cities that they were having to pay for, and we were telling people don't use the water. You can imagine there was some conflicts there, as they had to pay for water that we were telling

people that they need to use wisely and don't use it, and they were depending on that water revenue to pay their bills.

By the time we got to the early 2000s, we were still growing at a very rapid pace. And we had decided that we were going to do a regional pipeline to help the cities and interconnect them. We've always been trying to interconnect these cities, because, just because water is a regional commodity. Water rarely appears in the geopolitical boundaries of a city. We had started interconnecting these cities, mostly because we realized that some of the cities were at serious jeopardy if you couldn't move these resources around. So ultimately, our goal was to interconnect from Virgin all the way to Ivins. And we built a regional pipeline, contracted to build it with water coming out of the treatment plant, and it would go to Washington, St. George, Santa Clara, and Ivins. By exchanges, we had Hurricane, and LaVerkin, and Toquerville, and Virgin tied by a pipeline network.

- DK: Now, some places in the County aren't in the Water District.
- RT: The District includes all of Washington County.
- LW: Enterprise isn't a member.
- RT: All the cities have benefited one way or another from the Water District in a big way.
- LW: Okay.
- RT: But when we got the pipeline done, remember, we were selling water, this is before, we were selling water based on blocks. And I had this group working on the regional pipeline that had involved most of the bigger cities, and they came back and said, "Now how are we going to divide this water?" And St. George came to us and said, "We want a contract for every drop you have left."
- LW: Wow.

## Water Manager Meeting with Southern Nevada Water Authority

RT: And I said, "Well, we're not going to do that. Even though you're 65,000 in the County, we've got to take care of the whole system. And I'd been thinking a lot about how, because I knew we were coming to that day, and I wanted to get rid of this conflict on conservation so we could move more aggressively into it. I said, "Look, we need to pool this water in a way that will work." I took them down to southern Nevada, where you had Southern Nevada Water Authority, and then you had some smaller cities, and they were all fighting over their allocation of Colorado River, and they had created what they call the Southern Nevada Water Authority, which is really an interlocal agreement. The Conservancy District law is a little different, but the net effect is the same.

And so I took all these guys down, the water managers, and had a meeting with Pat Mulroy, who was the general manager of Southern Nevada Water Authority and the Vegas Valley Water District, and I can remember she kind of told how they brought that together, and all the cities were involved in the Southern Nevada Water Authority. Her challenge is a little different, because every one of them have an equal vote. She can't do anything without consensus of all of them. We already had the Conservancy District as a framework to deal with that. But she explained how they'd pool all the water, and then it went to the cities based on their demand. I can remember, she went around the room, and she went to Hurricane, "How much water have you got left?" And they didn't have very much. And how much does the LaVerkin have, and how much did Washington, and St. George, and Santa Clara, and Ivins, and they were all about out. Of course, the District was sitting on a big block of water, and she explained, she turned to me and said, "You don't have any problems."

But ultimately we came up with the Regional Water Supply Agreement that brought LaVerkin and Toquerville and Hurricane and Washington, St. George, Santa Clara, and Ivins into the Regional Agreement. Other cities were given the option, we were delivering the water to Virgin, and that's a different story, from some wells we develop, The Cottam well, but they did not want to change. We had water contracts with LaVerkin and then Toquerville which were, Toquerville never used any of the water, and that contract was terminated and they came to the Regional Agreement.

- DK: And that's still a little up in the air, isn't it?
- RT: Toquerville?
- DK: No, Virgin.
- RT: Yeah, I don't know. I went to Virgin.
- DK: I mean it's not totally resolved yet, I understand from-
- RT: No. I went to Virgin and said, "Look, you're welcome to come to this agreement. I think for the district it's sixes for us, it doesn't matter. I think your rate payers would be better off and the way it's structured would be better off in the regional pipeline. I think your developers are better off with what you have. But I couldn't convince them at the time.
- DK: Yeah, because it's attractive, it's less expensive-
- RT: Yeah.
- DK: For the developers than other places.
- RT: Yeah, well, it's because the rate payers are paying a significant portion of the capital project, and that was an expensive project, you know. We drilled wells, the Cottam Well, and piped it all the way to Virgin, but Virgin at the time had a leased water source with less than five years to go. I mean that was not a good situation for them.

- LW: So Ron, when you talked about Pat Mulroy and the Southern Nevada Water Authority, I thought maybe, can you discuss a little bit about the importance of the 1923 Colorado River Storage Project Agreement and its impact on Utah and particularly southwest Utah?
- RT: Sure.
- LW: Because that leads into maybe-
- RT: I don't know if you've got enough time to do this.

### Colorado River Compact and Lake Powell Pipeline

- LW: Well, maybe you can talk, I guess, then that leads us into the Lake Powell pipeline and the future.
- RT: Yeah, I don't know if you've got time.
- LW: Okay.
- RT: I assume you'll cut and splice this some place, but the Compact was put together by the seven Colorado River states, and in the Compact, there was a concern in the upper states where all the water comes from that with the growth going on, particularly in southern California, they would claim all the river and they wouldn't have enough to protect themselves. Now some of the water, particularly in some of these upper western states, was developed way before 1922, but ultimately the Compact created what they call the upper division, which was Utah, Wyoming, New Mexico, and Colorado, and then they created the lower division, which was Arizona, Nevada, and California. The agreement was that they would, they assumed they had more than 15 million acre foot of water.

So the fundamentals of the Compact was that the upper basin would deliver on a 10-year rolling average seven and a half million acre foot of water a year to the lower basin, measured at Lee Ferry. They had, then they agreed to build two big reservoirs. Nevada didn't think they needed Lake Mead, you know, they said, "We'll never need the water. There's nothing in southern Nevada."

- LW: Wow.
- RT: They couldn't envision a million, two million people living in Vegas valley at the time, but ultimately there was seven and a half million allocated to the lower basin and seven and a half to the upper basin. They thought at the time there was going to be roughly 18-, 19-million-acre foot of annual flow, but they had a very short window in the 10 years before the 1920s, which is a very wet cycle. And so it was, as clear as they started into it, there was not going to be all the time enough water for taking 15 plus having to provide some water for the Mexican Treaty.
- LW: Okay, Ron, we've got about two and a half minutes left.

- RT: Okay.
- LW: So I just want to maybe fast forward to the Lake Powell pipeline and the future, what you see the future is for Washington County and providing for the water needs that we have.
- RT: Well, Lake Powell is still an important project. Whether we can get through the politics of it, I'm not sure, but I would say, and it really comes back to the Compact. In the last 10 years, before we started Powell, that lower basin had received an extra 16 million acre foot of water above their Compact allocation. The reason Lake Powell is low, sure, we've been dry, but the reason it's low is we gave them an extra 16 million acre foot of water that's not theirs, it's ours. And bottom line, until we rectify, I think the upper basin got snookered into an agreement to keep those two reservoirs in terms of equal storage, and then you had Arizona, particularly, but California then taking way more than their allocation to keep Mead low, artificially low, to force extra water out of the upper basin. That agreement expires in '25. I'm pretty sure the upper basin is not going to get snookered twice.
- LW: Okay, so what do you see as the future for water? We have just over a minute left.
- RT: Well, you have to have water. No society can survive without it. We can use it better, and we are. If you look at where we're at, conservation, we're better than anybody in Utah by legions, and we'll get better with that. But you still have to have additional water resource, and, you know, I think the District's got a good plan to deal with that. Powell is a part of that mix, but they're not dependent totally on Powell. There's other resources. It's very expensive, the alternatives, but they're there.
- LW: Okay.
- RT: We probably will end up treating a lot of brackish water before we're done.
- LW: What do you think your legacy is going to be when you look back?
- RT: Oh, I don't know. Some great grandkids and kids. I kind of look at that like, you know, each guy has his role.
- DK: No, you're going to be remembered for all these things we talked about.
- RT: I don't know.
- DK: And detailed solutions because it was very innovative.
- LW: It was.
- DK: I mean, I don't, looking from the outside, not being a local.
- LW: You have eight seconds.

- DK: Yeah, what happens in other places isn't anywhere near as crazy.
- RT: I'd be glad to come back.
- LW: We want to thank you for coming, and we want to thank Dick for being here, and we're out of time.

[Recording time automatically ended after exactly 75 minutes of recording.]

After the interview, Loren told Ron that he had two more questions he did not get to ask in the interview:

(1) What month and year did the WCWCD move into its new offices on the Red Hill? What was the square footage and what was the total cost? How did that come about, and who was the contractor on the project?

(2) How did the Red Hills Desert Garden come about and when was it completed? What is its purpose?

Ron said he would answer those questions and that his answers could be added to the interview transcript. As of January 10, 2024, those questions have not been answered.