

Colorado River Water Users Association –UTAH
Tape #3
LARRY ANDERSON (TAPE #1)
ORAL HISTORY INTERVIEW
August 20, 2008

la – Larry Anderson

ps - interviewer Pam Stevenson, Agave Productions, Inc

bs - videographer Bill Stevenson

ps Okay. I'll start off by identifying on the tape that today is Wednesday, August the 20th of 2008. And we're in Bountiful, Utah to do an oral history interview for the Colorado River Water Users Association. And I like to let you introduce yourself. If you could give us your full name?

la Okay. I'm, up, Darrell Larry Anderson. I go by Larry. Native of Utah.

ps And tell...when, when were you born? And where were you born?

la Born in 1944 in Logan, Utah, which is up in Cache Valley, about 90 miles north of here

ps So, I assume your family's from Utah?

la Yeah. My whole family's from Utah. Ancestors migrated here in the 1850s, and so...uh...been here forever.

ps And, what did your family do? Were they farmers?

la My grandparents and my father were farmers initially. My father later opened a construction business. And then I kind of operated the farm with my grandpa, and worked construction with my dad and my...the rest of my family as I was growing up.

ps Well, talk about your growing up years. What was it like growing up in Utah. Did you grow up in Ogden?

la Logan. (ps – Logan!) Logan, Utah. Yeah, it's Logan, Utah. Well, I grew up in a little community just south of Logan. About three or four miles south. It was a farming community. About 300 people lived in the community. Kids my age...there was only about five of us. It was great to grow up in these old farming communities. At the time we owned and operated a farm. I learned how to thin sugar beets, and even top sugar beets, before we went to more mechanized ways.

As I continued to grow up, I, of course, did more and more things to... learned how to irrigate with my grandfather. Flood irrigate. So we were...or... used the water. Cut hay, baled hay, hauled hay. All those types of things you would normally do on a farm.

Milked cows a little bit. We had a small herd of dairy cows. And I learned how to milk cows by hand. Wasn't really good at it, but I learned how to do it, and...from there we went on to more mechanized ways, with milkers.

And, we always had a good cow herd...through the winter. And, I've been known to go out when it's 20 below zero to feed those cows. It wasn't much fun, but we did it anyway. And, I grew up and had a wonderful time. It was a great way to grow up.

Learned how to work. Appreciation for land. For farming. For nature in general.

ps You say you used flood irrigation on your farm. Where did that water come from?

la It came out of the, out of the drainage to the Bear River, called the Blacksmith Fork River. Which was usually a really good water supply. We generally had enough water to meet our needs. Only seldom that I remember were we ever very short of water in that area of Utah. It's a...one of the few areas of Utah where we were blessed with an abundance of water.

It's not the desert, like the desert south, had a lot of mountains in the area. Had a good snow pack, and therefore, water held up generally pretty good on the Blacksmith Fork River.

ps You say there were only about five kids your age. Where did you go to school?

la Well, went to elementary school, of course, in a little town called Millville, which is north of us. And then, on to junior high in the town of Providence, which again, is just a little further north. And from there to South Cache High School. The high school doesn't exist any longer. It was taken down. A new high school has been since built by a community that had about 300 people, now has closer to four thousand people. So I hardly recognize it when I go back up to the area.

My two brothers still live in the area, but my folks have since moved into Logan, so they have a house in the city of Logan. And they also have a house in St. George in Southern Utah. So, they spend about half the year in Northern Utah; the winters they spend in Southern Utah.

ps So, it must have been a pretty small schools that you went to....not one-room schoolhouses, but...

la No, they were elementary. They were, uh...we had four rooms. Two grades to a room. But then, you know, as you got on to high school it was, of course, bigger. High school graduating class was about 120 people. So...it got bigger. It was still pretty small.

ps You mentioned you had two brothers. How many kids were in your family?

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la Just the three of us. I was the oldest. Brother three years older, and a brother 10 years younger. And they both run the construction company now, the family construction company.

ps What made your father decide to go into construction instead of farming?

la Well, they kept the farm during all this time. And, I think he just got hungry. And couldn't provide a living for the family on a 120-acre farm. He just needed to have a lot more land than that. And, I think his interests were...look at...do some other kinds of things. Got into the construction business and really enjoyed it, and that's where he dedicated most of the rest of his life. And retired as...retired from the construction company, oh, 15, 20 years ago.

ps So you still have the family farm?

la No. Sold most of it over the years. And so...I think we still own about 20 or 30 acres.

ps Well, when you were growing up, what did you think you wanted to be when you grew up?

la Oh...you know, like a kid, many different things. Wanted to be a rancher. Buy a ranch in Montana, raise cattle. That was...I guess...one of the dreams I had when I was a kid. But I was quite small. We used to go up to Montana. Lot of open country, and you'd see the cattle out there. And everybody wanted to be a cowboy, and I dreamed of that, I guess.

And then, as I got a little bit older, I did quite a bit of farm work. Thinned a lot of sugar beets in the area. Went up to Idaho, worked for an uncle who had a larger farm in Idaho and thinned sugar beets and helped him irrigate a couple of times. And, I thought that might be fun, to be a farmer, and hold...or own a larger farm. But, you know, reality set in. Unless you can inherit the land, there probably wasn't much of an opportunity to do that anymore. And, as I went off to school and tried to decide what I wanted to be, I gradually turned to engineering and got a degree in civil engineering.

ps Where did you go to school?

la Went to Utah State University, you know, the local university up in Cache Valley. It,...again, it was a wonderful experience. Learned a lot, and grew up a little bit. And, about half way through school I ended up being drafted and spent two years in the Army. One year in Vietnam in the infantry. And, you know, that's kind of a life changing experience.

First major was, uh, drafting. Always enjoyed doing drafting. And I thought that might be kind of fun, and thought it fell in with the family construction business since we would have to do drawings for different folks - for the projects that we were constructing. I thought, well, maybe that works. And it was fairly easy for me. I...since I enjoyed doing it so much, it was kind of a fun time.

And then, pretty soon I decided, well, maybe that's not the best thing. I might get hungry doing that, trying to raise a family, and decided to go into civil engineering. So I transferred over from drafting to civil engineering.

It was a pretty big change from those two departments. And I just started and went through, and the longer I was in the College of Civil Engineering, the better I did. Especially after I came back from Vietnam. I did very well.

ps You started to talk about Vietnam. How did that change you? Talk to me about...you said it was life-changing. In what way?

la I think when you're, uh....

With people that...you know, some of them died. Some lost their arms and legs. And it was pretty life-changing to deal with people who...different races. Utah was a pretty white community. And to go into the Army, you find that about half the people are black or Spanish. I had many experiences with different races. And I think that was a growing up experience to learn to be around these folks, and learn a little bit about them. And, come to appreciate them, and their...how they think and acted, and found out that we were all very much alike, and we were good friends. And that helped, so that made me a better person.

And then, just the experience of not knowing what was going to happen from day to day. Whether or not you were going to make it. Next to that was something that was...something, you know, that just changed your life. You just realized that there were things in life that you didn't have control of. And, you know, better make the best of the day you have, and better do the best you can that day, cause tomorrow you didn't know what was going to happen the next day. Excuse me. I'm sorry. (wipes eyes)

I just had the greatest respect for everybody I served with. All the guys, consider to be good friends. And, I think we all did a good job. And...in the assignments that we had I carried a radio most of the time. I was, I was just an infantry man, but they needed...somebody had to carry the radio, and I carried the radio. I was bigger than most people. And it was an extra 50 pounds to carry. At least I knew what was happening.

ps So you were on the ground, in the jungle, with the battles over there?

la Yes. Uh, huh. I was full time in the, in the infantry. Had great company commanders. I had...at least one of my company commanders was killed, along with several other good friends. And, that's what I mean. That's a life-changing experience when those things occur.

ps You weren't injured?

la I was not. Felt very lucky. I was married at the time, had a son. I was 25, which made me older than everybody there, except the company commander. And so, that was interesting. The company commander and I are good friends, and communicate back and forth from time to time still.

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ps It must have been a very difficult time.

la It was a...like I said...it was a growing experience.

ps Friends of mine went over there, too. So, when you came back here...did you, did you maintain friendships with some of those people? Today?

la Yeah. I still do. We held the first reunion of my infantry company last year and it was the first time I'd seen most of them in about 35 years. We're holding another one this year. There were some that I corresponded with...sent Christmas cards back and forth.

Have a good friend down in Vernal, Utah, north of us...east of us here. That I served with, and we see each other once in a while. Not very often.

ps So, when you came back, after that experience...how did that change with what you decided to do.

la Well, as far as school, it became very easy. It was a simple thing. Grades were a lot better. Nothing that I think...don't think I was ever going to see anything worse than what I saw in Vietnam, so therefore, what could happen? Nothing could be as bad. So, as it turned out, I had a much more positive attitude. And I knew that I could do these things. That I could graduate...I knew I could... there was no test that I couldn't address. There was nothing, I knew, that I couldn't do after coming back from Vietnam and being in the service. And so, it made...it just made me much more positive in my attitudes, and I had a lot more self-confidence than I did maybe before I left. All those types of things.

ps If you had a wife and a son, how were you supporting them while you were going to school?

la Well...when I was going to school prior to going to Vietnam, I worked while I was going to school. I worked in the construction company. Family construction company.

After I came back, of course, I had the G.I. Bill. I continued to work in the family construction company while I was going to school on the G.I. Bill. My wife worked while we were going there. My grandparents took care of our son that we had at the time. So, it worked out well.

ps So, was your plan then to go into the family business?

la My plan...yeah...my plan was to work four years, in some type of engineering firm, get my professional engineering license, and then go back and work in the construction company. You know, work with my dad and brothers in the family construction company. That was a well-laid plan, and one I had always intended to do. Told my dad that's what I'd do. And, after four years, I was able to take professional engineer's license, and getting my license.

ps Well, how did that work out?

la Well, initially I went to work for Chicago Bridge and Iron. I worked in...kind of their training program. Uh. Ended up in Richland, Washington. Worked on a nuclear containment vessel that they were building up there.

I had previously interviewed with the Utah Division of Water Resources. I did receive a...well, I graduated in March for one thing, so I graduated in the quarter system, before the end of school year.

i went to work for Chicago Bridge and Iron.

But, I had interviewed with the Utah Division of Water Resources. I didn't know who they were. I just had a friend that says, well, while you're in Salt Lake interviewing, why don't you over and talk to the Division of Water Resources. My dad used to be the director. So, I did. I enjoyed the interview. But, I didn't get an offer. And, anyway, about June, when you normally graduate, my advisor happened to see my dad. My old college advisor. And said, I got a phone call from the director of the Utah Division of Water Resources. He wanted to know where Larry Anderson was. He wanted to make him an offer.

And so my dad passed that word off to me. I think it was Father's Day when I called home to see how they were doing. And I said, oh, that's great. You know, I'm not exactly happy with what I'm doing at Chicago Bridge and Iron. Maybe I'll call him.

So, I called the old director, which was Dan Lawrence, and he made me an offer and I accepted and came back.

Came back about the first of July. You know, when I got back I walked into his office and I told him that I was there for four years, and I was leaving and going back to the company, family construction company. And I appreciated this offer and opportunity to work for him, but I was leaving.

And, as it turned out, I enjoyed the opportunities I had at Water Resources so much that I just kept working there, and finally my dad gave up that I was ever going to come back. I ended up working for the Utah Division of Water Resources for...well, from 1972 to...I retired in 2006. So, I worked about 33 years at the Division of Water Resources.

ps What, what was your first job there?

la Just a young engineer going out and doing investigations on little water projects. One of the earliest ones was a little municipal water system, domestic water system, out in the little community of Fairfield, Utah.

And I went out and met with the folks and talked with them. I wrote up the feasibility report on what they needed, and brought it back and presented it to the Board of Water Resources and they agreed to fund it.

I went ahead and designed the water system and got it all ready to go. I think we even bid it with a little community. Decided that they couldn't afford it, and decided not to build it. But, that was the first water project I worked on.

The Division of Water Resources was a great place to work if you liked the water business. I just had many opportunities within the division.

Worked in the feasibility investigation section. But, the really interesting thing of working with the Water Resources when I first went there, was that...you would...had the opportunity, depending on which section you were in...and it was a small division. There weren't weren't 20 people working there when I went to work for them. It was a state agency, and, ...

We had money to fund water projects. And so...but you might be involved in first investigating the project. Preparing the feasibility report. Presenting it to the Board of Resources. The board then would...could approve it or disapprove it, it was their choice. If they approved it, you might be given the opportunity to go out and do the design. If they had their own consultant, they did the consulting, then you'd be more of a project manager. But, you might be the design engineer. And then go through that.

Then you might, when you were ready to build it, if they moved on to the next stage, then you might be the construction engineer.

And, so it was a wonderful opportunity, for young engineers...like myself. To have the experience of doing the entire project. Doesn't happen very often in government. Certainly doesn't happen in federal government. You spend your whole career in planning, or your whole career in investigation, or your whole career in construction.

But, this way we did...were able to do a little bit of everything, and gained experience in all of these types of opportunities.

So I gradually moved up within the division. Became one of the managers of one of the sections. And, then the Assistant Director. The whole time Dan Lawrence is the Director of Resources. He was there about 20 years.

And then in 19...what? Oh, wow. Probably 1985, Dan Lawrence retired and I became a Director of the Division of Water Resources. I served as the Director of Water Resources from 1985 to the time I retired in 2006. Twenty-one years.

ps That was fairly recent...well, over 10 years I guess.

la I'd been there...almost 12 years when I became the Division Director. I had no idea of whether I'd be able to make a career of working for state government, because, you know, I didn't see how you were going to be....it's an appointed position. I didn't know that I could be appointed long enough that I'd ever get 30 years in. You'd have to be re-appointed every time you have a new governor or every four years.

And so one of the nice things is that the Director of the Division of Water Resources had never been a, really, a political appointee. It always been somebody who has worked in the Division of Water Resources, and it's always been one of the engineers who have worked there.

And so it gave me some hope that I might make it. I served under three different governors, and it was a wonderful, wonderful experience. I can't imagine...I enjoyed going to work every day. I just enjoyed it. My wife will tell you that I had more fun at work than at home, and I'd look forward to going to work all the time.

ps It's great to be able to love your job that way.

la Yeah. I often spoke to different groups and college, high school students, and my suggestion to them all the time was, go find a job that you enjoy. Money means a lot, but if you have...make a lot of money but hate the job and don't want to go to work every day, that's sad. You just never will enjoy yourself. But, if you find a job you like, money's not quite as important.

I got lucky. I found a job that I really enjoyed. I had a wonderful time for the 33 years that I've spent on water resources.

ps And that really wasn't your plan.

la That wasn't my plan. It just happened. Yeah.

ps You mentioned you like...you liked to be able to follow a project through. Do you remember any of the...your first project that you were able to actually see built?

la Well, I saw quite a few. Several of them were dual irrigation systems. Those were secondary water systems that we have in Utah. We have quite a few, where we have a water system that brings quality drinking water to your home. We have a separate water system to provide water to water your lawns and gardens. That's untreated water. It's quite common to have those in Utah.

The little community called Kanosh, down in Millard County. I did the same thing. Did the investigation, uh, did the design, and was Project Manager on the construction of the Kanosh dual-irrigation system. That was one that I remember doing.

There were several sprinkler irrigation systems for farmers that we put in that I did the same thing. One in particular was over in a little community of Boulder, Utah. Maybe one of the most beautiful places in the world, as far as I'm concerned. In fact...almost at the end of the road, and just a big beautiful, just a beautiful valley that I'm glad I had the opportunity to go to, and find.

If you went, you would remember it. It was just absolutely a beautiful little...little valley in Southwestern Utah, right at the edge of the desert. But, it's up at an elevation of about 6500 feet. And it kind of looks down at the desert. And it's just absolutely gorgeous. Boulder. Boulder, Utah.

ps Is it a farming community?

la Uh, huh. It is. But there were probably 150 people who lived there. And they put in a sprinkler irrigation system for them to use the little bit of water they had that came off of Boulder Mountain. It was just a wonderful place.

They didn't have old roads there until probably the 1950s. One road in, one road out, until maybe (sighs) 20 years ago when they put it in over the mountain to keep open during the winter, Cause up to about 10,000 feet, that they keep it open.

It's been found. There's a lot of people now that live there, that have come in from the outside. And, because of the internet, they can do their work out of Boulder, Utah. So, it's a, it's just an unbelievably gorgeous place. That would be one that I saw through.

ps That's an interesting concept of having dual water systems, untreated water for irrigation, and even for lawns. I hadn't heard of anybody, or other states, that do that.

la There are some in other states in the West. Bureau of Reclamation actually started it. In my opinion, here in the area of Davis County where we're at, that's part of the Weber Basin Project. The Bureau of Reclamation put in two different systems.

They have an irrigation system. Much of the Weber Basin Project was for irrigation. Farm land, of course, like many of the Bureau's projects.

But they also have drinking water that's supplied through the Weber Basin Water Conservancy District, who owns and operates the project today. But, the Weber Basin Water Conservancy District also supplies secondary water to all these communities. All of these communities here in Davis County and Weber County, probably 75-percent of them will have two separate water systems.

One that they use to water their lawns and gardens, untreated. And then the other, the municipal water system. In this case the municipal water comes from Bountiful, Utah, the community we're in, but Bountiful may also has a dual system. There's a... Weber Basin has a water treatment plant up here on the hillside behind us, and they sell water to Bountiful. As drinking water. And Bountiful has many wells that it has in the system.

In addition, there's a separate water company in the city. I think it's called the Bountiful Sub-Water Conservancy District. And they buy this untreated water from Weber Basin. And there's a separate set of piping throughout all the community that provides secondary water.

And, uh, we have a tap outside...it would be painted red. Which means, don't drink out of it. You can put it in the sprinkler system, or you can put your hose on it. However you desire to do that. And, there's probably...there might be close to a hundred-thousand connections onto secondary water systems in the state of Utah.

They're popular enough that the Board of Water Resources provided funding for about 90 different communities while I worked at Water Resources for secondary water systems. So they've been put in throughout the state.

What we find is that, in many places in these small communities in Utah, the city has the, has the culinary water system, and the irrigation company in the area provided irrigation water.

But, because the lots initially in Utah were really quite large, and people were encouraged to have a garden, and maybe they even had a calf and some chickens, or something out there, to be more self-sufficient, that the irrigation company also supplied water to these larger lots within the city limits.

And so, over time, you know, as the city started to sub-divide and the city's...the lots became smaller...as less and less people wanted cattle or horses or sheep or pigs in the middle of a city, they would subdivide their land. And, it would become smaller, and other homes would come in. It became quite difficult for these irrigation companies to keep these irrigations systems in the cities. To maintain who's supposed to irrigate, and when you're supposed to irrigate, and to manage those.

And so, it became simpler if you took that water and put it into a pressurized pipeline, and then people have a hookup to that pipeline. They pay their assessment just like anybody else.

But then the irrigation company...and you have a hookup and you can tie your sprinkler irrigation into it, or if you still have a garden, you can still water your garden. Or, if you still have a little plot of land, you have a cattle...or some cattle out back, you can still water your cattle within the city. It became much easier for the, for the irrigation companies to manage their irrigation systems. And so, they've become very popular.

The other thing to do is...because these ditch systems running through cities became very inefficient. Hard to clean. Hard to make sure people didn't take water out of turn - difficult for these irrigation companies to manage that irrigation system.

And they found out in the long run that they actually sent less water into the city once they put the sprinkler system in, than they did when they were flood irrigating it. And it left more water for the farmers to be able to use on their farms.

So, in an area where you're...where you can be short of water through much of this state, then that really became a water conservation effort for their...for the farmers. And became a much simpler way for them to manage their system within the city limits.

And so, you, you see that throughout the state of Utah. There are literally hundreds of these today, in almost every community in the state of Utah. If you drove down through the state, I could tell you the ones that I know about. You'd be surprised how many there are.

ps It sounds so reasonable. I know, in Phoenix, there's some old parts of town that still get irrigation water, but, I've never heard of them actually putting it into the pipeline.

la Yeah. And we would call that a secondary water system in Utah. And, one of the things that's interesting...it's quite difficult to put those systems into a developed community. So, as a community becomes more and more developed, it becomes more and more expensive to try to put those systems in. But, in Utah now, many communities require a new developer to put in both systems when the subdivision is constructed. And so, the pipelines were already in place now when the subdivision is completed.

ps And your secondary untreated water...is it less expensive?

la It is. Yes, it is. It's a lot less expensive is what we find. And that's maybe a disadvantage in Utah. Because then people don't, they don't tend to use it as effectively, as efficiently as they ought to. Because it's such...untreated, the water's not very clean. It's hard to find a meter, an economical meter you can put on to meter it that doesn't plug up and break. So, most of these systems, they don't have a meter system on.

For example, I live...used to live here in Bountiful, but I moved to Centerville a few years ago. To a new home. A secondary system is in place. I pay, I think it's 50-dollars a year for all the water I need to put on my lawn. And it's based on the size of your lot as to how much you pay.

I don't think that's...okay, so that works pretty well. So, it's not very expensive for me to water my lawn. And, most people here would do the same thing...they might pay 90-dollars a year. You could go to places where people are metered, they might pay 90-dollars or 100-dollars a month for their water to put on their lawn.

There are smart, what I call "smart timers" now, and I've installed one of those on my sprinkler system. And my lawn and garden system only comes on when I've used a third...two-thirds of an inch of, of water out of my, my lawn's...the evaporative transpiration of my lawn, I've used two-thirds of an inch of water. It's based on a weather station, locally here, that determines evaporative transpiration of lawn. Measures that by the amount of sunlight, temperature, wind, and if you get any rain – it does the calculation. Sends a signal to my sprinkler system, and it says, you've used two-thirds of an inch of water. Those sprinkler systems should come on and water the lawn. So, the next time I have the system set to come on, it comes on and waters the lawn.

Right now I water my lawn about every four days. If you don't have that type of system, you might water it every day or every other day, which is really a waste of money, and a waste of water. So it just depends on how you want to do this.

I always try to be conscious of our water use, and conserve the water we have in the state of Utah.

ps It does sound like it makes a lot of sense to use it, as water for lawns. Or even for washing the car, or hosing off the patio. Why use...(la – Why use expensive...hmm, hm. Right.) But, most people do in those places. Very interesting part of Utah water.

Getting back to your career with the Department of Water Resources - when did you...or how did you become involved with the Colorado River water issues?

la Okay. As I've said...I worked at Water Resources, in those 33 years.

My first 12 years I had nothing to do with Colorado River. Until I became the Director of the Division of Water Resources, I...you know...I knew we had people working on the Colorado River. I knew that the Division Director went to meetings, but I was unaware of any really...almost any of those types of issues, other than maybe if there was a water project in the Colorado River, I'd pick up a little bit of knowledge.

As a Director of the Utah Division of Water Resources, you become Utah's Interstate Streams Commissioner. And, as the Interstate Streams Commissioner, you serve on the Upper Colorado River Commission in the state of Utah.

In addition, you serve on the Salinity Control forum, which is a program that's trying to control the salinity in the Colorado River. And you are the governor's representative on Colorado River issues. So, you get involved really quite quickly into the Colorado River.

We do have a water resources specialist - what we call our Interstate Streams Engineer, which is one of the engineers at Water Resources who has training and knowledge in the Colorado River system. He works with the Division Director on these types of things. So, he becomes the Division Director's technical person.

He attends all the technical meetings. Attends virtually all meetings with the Division Director on Colorado River issues. So, he becomes a real expert. The Division Director over time becomes smarter and smarter on the Colorado River. But, you've had this engineer that's maybe worked in this particular assignment for 10 or 15 years before you've become director.

We had an Interstate Streams engineer named Barry Saunders, who had worked with the Division Director for about 15 years as Utah's Interstate Streams Commissioner. So Barry was able to help me gain more knowledge, and understanding. And then, as Barry became closer to retirement, then I selected another engineer in our office to work with him for a year or two before Barry left, so he could start picking up some of the knowledge. And, and together, the new Interstate Streams Engineer and I...we tried to, become knowledgeable of Colorado River issues. And we did.

I mean, you go to enough meetings and you become knowledgeable about the Colorado River. You don't gain that knowledge overnight. Nobody does. It takes years of training and experience to really be...know and understand the Colorado River.

Utah's very lucky in that our Colorado River people, once you become Director of Water Resources, tends to hang around a long time. So, you maintain that knowledge for a long time. Many other states, the Division Directors will change quite often. Maybe the role is more political and so, you'll see a lot more of a change.

But, each of those states also have an Interstate Streams Engineer, like the engineer that I would have that had worked, that worked with me. And so, that person generally stays on. And that expertise stays there.

So, as a new Department or Division Director takes charge, then there's at least this knowledge that goes on in what's happening. And so, things continue to work pretty smoothly in the Colorado River.

Anyway, so that's how you gain your knowledge is just over time. And, you know, you sit there and you keep your mouth shut for a little while. And you listen and you learn. And I...there were some great people that I worked with in the Colorado River system when I first took over in Utah. And, I just marveled at the knowledge they had. Unfortunate we couldn't get some of those, uh....

The one person that stands out in my memory is Steve Reynolds who was the New Mexico State Engineer. And, he was just so knowledgeable of Colorado River issues, and what went on. And, you know, I thought maybe he was there when they signed the Compact in 22. I know that wasn't the case, but, he was old enough that you thought maybe he was, but he had been around so long in New Mexico as their Interstate Streams Commissioner, that just was unbelievable in his knowledge.

There were a couple of...that is...I can't remember their names. There was a person in Colorado, as well as one in Wyoming, that had been around for a long time. And the...they were Interstate Streams Engineers when I, when I became Utah's Director and Utah's Interstate Streams Commissioner. So, I had some good people who trained me.

ps From other...and you worked with the people from other states...

la Yes.

You had to trust them a little bit at first that they were keep...taking you in the right direction. As you became more knowledgeable, then you could speak up and you could...you understood what was happening, and so you worked...we worked really close together. All of us, in all seven states.

As often as people worry about the seven basin states fighting and going to court, most people in the West would be surprised at how well the seven Colorado River...uh...governor's representatives maybe is a better name, because the Lower Basin doesn't have a commission. So they have governor's representatives. Which is usually the Director...or someone similar to the director of the Department or Division of Water Resources who was their governor's representative.

And so, we have contacts not only on...as governor's representatives, but as the Colorado Basin City Control Forum members, and, you know, when the Bureau of Reclamation calls meetings, it's the same group of people that show up at those meetings. The Bureau of Reclamation wants you to come back to Washington, D.C., to meet with their, maybe Secretary of Interior or something, it's the same people.

So, it's generally the same people who have, who work together all the time.

So, there's a lot of trust, I think, and a lot of willingness to try to find solutions to some very difficult questions.

ps Very, very complicated system...

la It is very complicated.

ps To learn. But...there's only a few people that probably really understand it in each state. (laughs)

la Usually each state will have someone similar to myself. Their Interstate Streams Engineer, and then someone from the Attorney General's Office who represents them on legal issues. And, we all...on the Upper Colorado River we have a legal committee. Who...then we have representatives from the Attorney General's Office at each of the four Upper Basin states.

And so, we...you have this other area of expertise, too, the legal side of expertise on the Colorado River. And, I mentioned Dallin Jensen to you earlier. And Dallin was kind of my mentor on legal issues on the Colorado River when I became the Division Director.

Because he had served in that role in Utah with Dan Lawrence for maybe 15 years before I became Division Director. And then, he and I worked together for maybe 15 or 20 years before he retired and went... actually went to work as a private attorney. Still does that.

But, I always kept him on my legal committee, as an alternate on the legal committee, so that if I needed I could call Dallin and talk to him. As my new attorney became more knowledgeable, I could do that. Dallin still serves in that role in Utah, and gets all the information.

And, I know the new Division Director calls Dallin from time to time and talks to him about these types of issues that are going on in the Colorado River because of the historic knowledge that he has.

ps It does seem like lawyers play a huge role in all of the water issues. (laughs)

la They do. Yeah. You know, you have to make sure what you're doing is legal.

I think water's played a greater role in different states. Some state a much higher role than in others. In some states lawyers play a, a...their role is way in the background. I think in Utah the attorneys generally are way in the background. But, they're always there when we need 'em. And, we rely on them a lot.

ps Well, they gave me some specific questions to ask about. I think you've sort of already answered some of them. But, one of them was...what is your perspective of the relationship between the basin states?

la In my 21 years, the relationship between the basin states was really one of civility. We got along. We could agree to disagree and still be able to go out and have dinner that evening. As a group.

When somebody retired, we could still show up at their retirement parties and say how much we enjoyed working with them. Because we did. That was the honest truth.

There are some difficult issues that we deal with on the Colorado River, and, not all of the states see them in the same way. That doesn't mean that one state's right and one state's wrong. And, as soon as you understand that, you become a better negotiator in the Colorado River.

You learn to listen to the other state's perspective, and why they believe what they believe. And, in my opinion, most of the times when there's disagreements, they are honest disagreements.

It is not one state being irresponsible, or taking a position that's just not defensible. It's a matter of interpretation of what, what we call "the Law of the River" says. And how that state might interpret...interpret a particular provision. How you interpret it. And they may be quite different.

But, if you were willing to listen, you can see how those...

So the issue becomes being able to develop a compromise that both states can be happy with. I think that's what we've been able to do in the Colorado River, in...among the Interstate Streams Commissioners, for lack of a better term. And so, we've done that.

And, because of that we've been able to solve most problems. You know, there haven't been any...the last major court battle, and I guess it still goes on to some degree, is *Arizona v California*. Okay?

But, yet, you can get in meetings and you wouldn't know that there was a disagreement between California, Arizona. Other times you might pick up there was, in other meetings.

But, again, we're able to sit down nowadays, and resolve these issues. I think we look at the question, do we want to go to court? Do we want to fight over this? What are we going to gain if we fight over this?

I think because we've...tended to answer that question, that it is not time to go to court yet. That we have a responsibility to see if we can find a solution that keeps the Colorado River system out of court.

When you go to court, you lose all opportunity to develop your own solution. You turn it over to an individual, or a set of individuals, to come out with a solution. And, you don't know what they're going to do. Whether they're going to give you what you want, or give the other person what they want, or if they'll just divide it in half and give you both

a little bit of what...and neither one of you are happy. Which is generally, I think, what courts tend to do. Okay?

So, I think we've come to a conclusion that we're better off, if at all possible, to try and develop our own solutions among ourselves. As difficult as it is sometimes, as, uh...you know, I'm sure there's a better word than just "difficult." As trying as it is on our patience, to continue to try and find solutions to our problems...

And, I'm pretty appreciative...and I've learned. I've watched this process in place, and I've learned that if you're willing to keep looking, you can find a solution that you can all agree to.

Now, whether or not we can continue to do this into the future, it's hard to tell. But, right now, we...are you able to do this? People will say...The Colorado River Compact is inflexible. It needs to be modified. It was done in 1922. It no longer represents what's happening today.

But, if you look at what the Basin States have done since 1922, in developing what we call "The Law of the River", you'll see there's been a lot of changes in what people thought could happen in 1922, and what we are doing today.

It...this analogy may not be very good, but I've always said, the Colorado River Compact means exactly what the seven basin states agree that it means. Okay?

If all seven states agree that you can do something, then you can do it. Because if no one's going to sue each other, if none of the states are going to sue each other over it, then you're okay. So, the seven basin states agree that the Compact says "X."

The only other group that can disagree would be the federal government. Why would they disagree? They don't want to...they don't want to go to court. That's the last thing the federal government wants to do. They want us to try to come to a solution among ourselves.

And so, I believe that that analogy is pretty accurate. I don't...if you went and asked an attorney, they might tell you they don't agree with that. Has to be....you have to...has to say what the law says.

Well, it's funny how the law is so flexible (sic) if the seven basin states can come to an agreement on a solution.

In the year 2001 we came to agreement on the Interim Surplus Guidelines. And, just what - a year ago, they came to an agreement on The Interim Operating Guidelines for shortages and coordinated operations of Lake Powell and Lake Mead.

I don't think in 1922 those negotiators ever thought we'd come to an agreement where we would agree to try to operate Lake Powell and Lake Mead, and coordinate how they're operated up and down. Try to make sure that we share in shortages and surpluses, the way they agreed in 2007.

So, I mean, those to me are examples on how we solve problems, difficult problems. And we're able to just stick to it. Meeting sometimes for several days at a time, and working out a solution that we can all live with.

We may not all be exactly happy with it, but we can all live with it, and it was a better solution than going to court.

ps I would imagine in 1922 they never even envisioned a Lake Powell...or some of the other major lakes on the river.

la Yeah, I...you're probably right. They never envisioned Lake Powell. Lake Mead, yes. But Lake Powell, no, they did not.

ps But, if you continue to come to agreements, without going to court, will that put lawyers, all the water lawyers, out of business?

la Oh, no. No, no, no. There's enough disagreements within each state to keep the water lawyers well employed.

ps Have you...seen a change in the relationship between the states over the 20-some years that you were involved? Did that relationship change?

la I think there were times the relationships was strained pretty heavily. It depends...if somebody comes in without much experience, somebody new was appointed by their governor. Starts...shows up at the meeting, and they walk in and they start telling everybody else...who's been around for there for 20 years, 15 years...this is what we're going to do. And, if you don't do it, we're going to sue you. That tends to cause some strained relationships. Those things happened.

To some degree, the rest of us ignored them. We said, who are they kidding? They're not going to...first of all, they're not going to do what they said they're going to do. They're not going to...we're not going to do what they wanted done. We're not going to go amend the Compact to make them happier. Okay? That's out of the question.

And so, if they want to go to court, fine. They'll find that there's...they'll have six other states opposing them. Secondly, they're just new. You know. They just need to calm down. They need to get here and they need to listen, and then we'll solve...we'll see if we can find a solution to their problem. And that's what generally happens.

My reaction is that,...the relationship with the, with...the relationship, among individuals was always very good. I never saw a time that we were so upset with somebody else from the other states that we couldn't go to dinner with them and smile, and have a good time, and ask them how the family was. I think that's important. I think when you get to the point where you can't do that, we may have a problem in the Colorado River system. I never saw that. I think the relationships were always pretty good.

They were strained from time to time, but as we developed solutions, and that strain that we had would kind of go away.

There were times I thought we might go to court. I thought, well, it doesn't look like...I don't want to name a state. But, State X isn't going to agree. And, if we can't come to an agreement, I think we're going to court. You know. We can't get to the point where they want to be. We've got to figure out some place in between what they want, and how far we think we can move. And so, you know...

When I was Director of Water Resources and Utah's Interstate Streams Commissioner, I always kept in the back of my mind, I've got to go back out to the water users in the Colorado River basin in Utah, and explain what we're agreeing to. I've got to explain to these people in Utah that what we're doing is better than the consequence. And I gotta make it so they understand it.

They need to understand that I'm there and I'm protecting them and their uses of the Colorado River. That's what I'm supposed to do; that's what my assignment is. And that's what I'm doing for them. I'm not going to sell them out.

And so, they need to understand what the agreement does, that we've just agreed to. And I've got to be able to convince them that this is good for them. That the options...that the other alternatives were not.

And so, I would go out, and I'd hold meetings in the Uinta Basin. And maybe meetings in Moab, you know, Price. You know in that Colorado River drainage. Maybe in Washington County or something.

And I'd meet with the water users. Mostly the Water Conservancy Districts because they tend to speak for the water users, but we'd invite whoever wanted to come. And, we'd explain what the agreement was, and what we were doing and why this is an okay deal. Why it's a good deal for Utah. Why we didn't lose anything.

Maybe we...the issue is...we didn't lose anything, but we stayed out of court, and we've been able to make somebody in the Lower Basin happy.

Usually it's Upper Basin versus Lower Basin on these types of issues that people look at. So, you had to say...you're still as well off as you were before. Yeah, we made...we came to an agreement, but...you're protected.

Good example - 2001 Interim Surplus Guidelines. It was interesting because...they never did work like we thought they would, because we went into a drought.

In the late 1990s, we were in the process of trying to come up with a mechanism to get California... California was using 5.2-million acre feet of water in the 1990s. Their allocation is 4.4.

For many years, they were using Arizona's unused allocation, and Nevada's unused allocation. But by the 1990s, Nevada and Arizona were use...starting to use more and

more of their allocation. So, for them to keep using 5.2, they were going to have to pull storage out of Lake Mead.

That was causing stress to both Arizona and Nevada.

It was also causing stress to the Upper Basin states, cause the more they pulled Mead down, then we'd have to equalize more. Okay? So that brought more water out of Powell into Mead.

And so, the issue was, we have to figure out a mechanism to stop California and turn them around and get them back to 4.4.

Well, California really wasn't interested in doing that. You know, because they had developed a system that needed 5.2.

But, we had a Secretary of Interior and a Director of Bureau of Reclamation...at that time...who said, no, we're going to get to an agreement here, California. You're over-using the river system. We're the Water Masters in the Lower Basin. We need to come to an agreement. Okay.

So that took quite a bit of time. And it was a big battle in California. I mean, there were...the governor had to step in. There were meetings in Sacramento that I went to month after month, because that's where all the California water users were. Because the governor had his thumbs on them. To come to an agreement on this.

And so, we gradually developed a process that we said, okay, we'll call this a Soft Landing for California. You're at 5.2, and we'll give you 15 years to go from 5.2 to 4.4.

And so, we developed what we called these Interim Surplus Guidelines. That each year California would reduce back and back. And they would have to implement conservation measures. As long as we had excess water in the reservoirs...and, by the way, in 1999, the reservoirs were full. 2000 they were full. And then, the drought started in 2000.

And so, we put this process together where they would gradually drop from 5.2 to 4.4 over this 15 year period.

ps We need to change tapes.



Colorado River Water Users Association –UTAH
Tape #4
LARRY ANDERSON (TAPE #2)

ORAL HISTORY INTERVIEW
August 20, 2008

ps This is Tape #2 with Larry Anderson. And, finish your story about California..

la Okay. So, we put this mechanism together that would allow California to use more than 5.2. But at the end of...by 2016, they would be down to 4.4.

And so, I went out and had to explain to the water users of Utah why this was okay. And what we had done to protect them. That if there was a drought started, and the reservoirs started to drop, then California would have to go to 4.4 quicker. That was how it was all set up, and I said, so, you're not at any risk.

While the reservoirs are full, it's not a big deal if California takes a little additional water. But, as long as they're reducing their use of 5.2 down to closer to 4.4...when they get to 4.4, we're all better off. Because, they'll be within their allocation of the Colorado River. So that means there'll be less pressure upon the Upper Basin states, and we should be able to continue to develop our water resources and have them available for us. So, there's a positive thing here.

Well, as it turned out we started into a drought in 2000. And by 2001, when the Interim Surplus Guidelines were finally signed, we were in the second year of a drought, and the reservoirs were starting to drop. Now, no one knew that we were going to be in this significant drought that we've been in.

And so, the reservoirs were still high enough that California could take some extra water. But, if they took more than 4.4, and the reservoirs continued to drop down, if there was a shortage in the Lower Basin, then California would have to pay back the water, extra water, they took.

Because the reservoirs continued to drop, and drop so fast, California never took any extra water. They dropped to 4.4 immediately. Not that...it was difficult for them to do this, okay?

And, but...they dropped to 4.4 immediately, because the drought went on, they didn't dare take the risk of taking any additional water during this time frame. Because, they didn't want to, you know, they didn't want to get to 4.4 and then find out that there was a shortage in the Lower Basin. Right now Arizona takes the first shortage, but under this agreement, California had to pay back all the extra water. California suddenly dropped from 4.4 to something even less than that.

So, California has chosen to date not to take any extra water. And, they're at 4.4. So, they've been at 4.4 since 2001.

Now, that wasn't what we intended it to be, but the results were what we wanted California to do. We just happened to get there much quicker than we thought we were going to get there.

If the drought turns around and the reservoirs were to fill up, California still has until 2016 to get there. So they could take a little bit more.

But each, every...I think it was every three or four years, they hit a new level. And, when they hit that level, maybe it went from 5.2 to 5 to 4.8, to 4.7, to 4.6. Once they hit that level, they, they wouldn't...be able to go back up. So they had to, had to stay there.

So that was a, a...something that we all agreed to, that we were able to protect...I thought we were able to protect our Upper Basin states. They weren't put at any additional risk, which I thought was the important thing. But yet, we give California this period of time to go from 5.2 to 4.4.

There were those people who wanted them to go there immediately. That's all they were entitled to. But yet, that was hard to ask them to do until they developed this area that they needed.

As it turned out, they were a little lucky. They've had a few wet years in Northern California that they've been able to take extra water. That's helped them. They actually finished a couple of other large reservoirs, that they have some storage in them. And that's helped them.

So that's...it has been, maybe a little easier than it could have been for them, But this was a tough, tough deal for California to swallow.

That's just one example that we were able to put together. And it took five years to do that.

And, a lot of, you know, teeth pulling by the federal government on the state of California to make it work. But, the federal government wanted this one really bad.

The other six Basin states thought it was a good idea, too, so we all kind of piled on California. And it turned out okay. And I think California would probably tell you it turned out okay for them also.

ps It's amazing when there is a shortage, and you're forced to do something, how much you can save, or, you know, do without.

la I think the public as a whole, if they know you have a problem...that they know there's a shortage of water...the public as a whole are willing to then, use less water. You willing to do things that they wouldn't normally be willing to do.

I've seen times in Utah when there were such bad droughts that communities just turned off the water on their lawns. Never watered them again the rest of the year. They all went brown. Or white, I guess. Kind of a white.

Normally they would never be willing to do that. But, they, they under...if the people understand what the problem is, they're willing to take some additional hardships that normally we're not willing to do. And I think that's great about the public.

We do really react to catastrophes better than plan for catastrophes. Planning is more difficult. But, when you really get there, boy, I think Americans are willing to go the extra mile to try to, to get over the problem. You see this all the time. And I think it works in the water business a lot. See it happen all the time.

Now whether or not they would go for a long time, who knows? But, for a year or two, Americans are willing to take a lot more hardships than they were, they were used to taking.

ps A choice between water for drinking and bathing, and water for their lawns. (laughs)

la And if they understand that that's their choice, and believe it, then they can make that decision. Yeah.

ps What do you see right now as the most important issue that's facing the whole Colorado River system?

la I think it's...now again, I'm kind of out of the system and been out since I retired. But...

ps I'm sure you still follow it.

la But, to me the issue is... a big unknown today is what is going to happen with climate change. I don't think we really know. We have models that says it's going to be terrible. It's going to be a catastrophe. But, again, they're models.

Most of us who've worked in this in, industry, understand models. And understand that that's all they are. They're just kind of a projection. And, whether they're going to turn out that way, we don't know.

People always ask me, well, what are you going to do about climate change? I really didn't have a good answer for them.

I would always say, you know, I'm going to watch and see what happens. Climate change isn't going to occur overnight. It's something that takes place over a long period of time. And I believe we're going to be able to adapt to it as we see what's really going to happen.

We are flexible. There are things we can do. And, depending on just how significant climate change might be, will depend on, on how much we can adapt.

So I think that's a...to me that's a big unknown that I think we have to continue to watch. I'm sure they will. I mean, I have no doubt that those things are being looked at carefully by the group. I just think it's hard for us to tell the world today, well, this is what we'll do if this occurs.

Because, uh, you know, why look at the worst case scenario that may not occur for 60 years? If it's 60 years from now before this occurs, well, why don't we just see what we

do between now and then. For all I know, in the next 60 years, we'll figure out some other way to create water...you know...I'm going...wow, 60 years from now, I can't imagine how to do that. But, 40 years from now, I'll bet you they'll have some ideas. If that's where it's headed. So, I think that, to me, is the biggest unknown in the area, that I'm, I'm sure people are looking at more significantly.

Which could...you know, if it occurs, I'm afraid that the whole Colorado River explodes, as well as many other river systems in the West. So, we'll just have to see what happens.

ps Well, what about the issues facing, say, facing Utah right now? Without thinking about climate change so much, but just in regard to Utah's allocation of Colorado River water. How do you see that Utah's dealing with that?

la We still have about 400,000 acre feet of water that we haven't developed yet in the state of Utah. When I say that, it's based on a supply of the Upper Basin of about six million acre feet. Not seven-and-a-half. I think the Upper Basin states know that there are not seven-and-a-half million acre feet of water for us to divide in the Upper Basin.

And so, since we divide on the percentage, then we get a percentage of whatever there is. And the Upper Basin states are, are looking at a percentage of about...out of about six million acre feet.

So, Utah's share would be about 1.4 million. Out of six, and, we're currently using maybe just a little bit less, than a million acre feet. So we have four-and-a-half thousand acre feet left. So, how will that water be used?

We have one large water project that we're looking at. Would be the Lake Powell Pipeline Project. And, we're moving...that project's moving along. That would take water from Lake Powell, in the Southwest...about the center of the state. And move it to the Southwest corner of the state to the Washington County area where we've had all this fast...extremely fast growth.

We believe that water will need to get there about 2020, to meet the projections for growth.

So that will be...that's one issue that the state has is...can they put a project together that will be economically, and environmentally and politically acceptable within the state of Utah to move that water there?

Another issue that we'll run into is...you know...what's going to happen with oil shale? Is it really ever going to be developed?

In the late 70s...boy, a lot of things were happening. Oil shale was going to go as soon as the price of oil reached a hundred-and-sixty...reached 60-dollars a barrel, would be economically feasible. And, all of a sudden, one day it just died. One day it was, it was...something was going to happen. The next day you couldn't find anybody that would even want to talk about it in the oil business.

And, because, you know, the price of oil has shot up unbelievably high, it's kind of resurrecting a new life. And I think, well, it happened. Is it environmentally acceptable?

It takes a lot of water right now to develop oil shale. It may be necessary to find better ways that take a lot less water in the West - especially if climate change is really going to happen.

I mean, Utah still has water that they could use for oil shale development. But, does it have enough? Is that where they want to put a big block of their remaining water? You know, will there be other...do we need to take another pipeline over to the Wasatch Front? To bring more water in over here. I mean, those are the questions they're going to have to ask.

ps Where is the oil shale located?

la Oil shale in Utah is over in the Uinta Basin, actually between the town of Vernal, Utah and the Colorado state line. And, there's, I guess, millions of barrels of potential oil from the oil shale out there in that area.

You have that corner of Wyoming, Colorado and Utah, and that's where most of the oil shale is located. It changes a little bit different in its...how much you could get per ton of oil shale. You know, I think Colorado's maybe a little closer to the surface. Maybe a little richer. Then I think it goes to Utah, then it goes to Wyoming. And so, you have to...

So, I think you're going to see it happen in Colorado first, if it's ever really going to go. And then Utah. And I hope they develop some processes that will not require as much water if, it goes.

There are things we're still negotiating with our Indian tribes in Utah on their reserve water rights. We do have a negotiated compact with the Ute Indians. I'm not quite certain that the tribes have ever ratified it, but it's been negotiated. And tribal members did negotiate it. I think they're still working on have they or have they not ever ratified that compact?

But, we know what the quantity of water is in it...for the tribe.

The state is now negotiating with the Navajos for a water rights settlement with the Navajo trip. And that's moving forward. And both of those settlements will take a portion of that 400,000 acre feet of water that is left in Utah.

The tribes may decide that they'll lease that water for oil shale, and may decide that they would lease that water to be used along the Wasatch Front, or Southwestern Utah. I mean, they may use it on the reservation. I don't know if the tribe knows what they'll do with their water, but it's their water, once those agreements are signed.

So, those are the issues that I see still left in Utah to finalize.

I don't personally see much additional water being developed for agricultural lands. It's just so expensive. I think the cheapest water has already been developed, and, as you look at the development of new water projects, it will be very difficult to find projects that are economically feasible for agriculture.

That doesn't mean there won't be little projects here or there that will be developed. That will make...that will help agriculture. The Salinity Control Forum is one area that... where we're seeing flood irrigation change to sprinkler irrigation.

That's a big help to the agricultural community in Utah. It makes their existing water supply go further. They're more efficient; they can grow better crops. And we do develop a little water that way for agriculture. That will continue to happen.

There may be a little reservoir here or there that we can still build for agriculture that will still be economically feasible, and where they'll develop a few thousand acre feet of water. But I think most of the remaining water in the Colorado River system in Utah is going to be used for municipal and industrial purposes.

ps When you talk about the pipeline from Lake Powell over to the Southwest corner there...that would be municipal?

la Yeah. It's the municipal, industrial water for the Washington County areas by the Southwest corner of the state, fastest growing area in the state. For Iron County, which is just north of Washington County, and Cedar City area which again is growing unbelievably fast right now, about 30 miles north.

And then, as we come around along the Lake Powell pipeline, the area around Kanab, the pipeline would go right through the Kanab area. We can drop some water off in Kanab, which is Kane County.

So those are the three counties that could potentially benefit from the Lake Powell Pipeline Project.

ps How long a pipeline is that?

la It's 139 miles from Lake Powell to Washington County. Sand Hollow Reservoir is where it will terminate. And then, it's an additional thirty or forty miles to Cedar City.

The pipeline from Lake Powell to Sand Hollow Reservoir in Washington County would be 69-inch in diameter. And from Sand Hollow Reservoir up to Cedar City area, and Iron County ...a 30-inch diameter pipe.

We're looking at about 100,000 acre feet. Seventy-thousand acre feet into Washington County. Maybe as much as 20,000 acre feet to the Cedar City area, in Iron County, and 10,000-acre-feet in the Kane County area.

ps When you talk about developing these projects, would that be working with the Bureau of Reclamation to do that, or how would you do that?

la This is a project that will be totally funded by the state of Utah. We think the chances of getting federal funding are pretty small. We think that the time for new large federal water projects right now doesn't exist - new federal water projects.

I think you can get money from the Bureau of Reclamation to do things on your existing projects.

So, we are not looking to any federal dollars. It will be, right now, totally funded within the state of Utah, by the state of Utah, and by the local Water Conservancy Districts who would benefit.

Now, we will work with the Bureau on...and are working with the Bureau of Reclamation. We have to have a contract with the Bureau to pump the water out of Lake Powell. So, that will be one area that we work with the Bureau on. They've been very helpful, and we're moving the project along.

9:37 We've actually filed a Notice of Intent to file a license with the Federal Energy and Regulatory Commission, because we have to lift the water 2500 feet as we pump it out of Lake Powell, to get over the high point. And then it drops about 3,000 feet, as we drop from the high point, back into the St. George area. So, we'll generate hydropower on the way in.

We're going to try to recover some of the pumping costs. We don't recover them all.

And because we are going to try to recover some pumping costs, after a lot of investigation, we determined that we needed to file the application with the Federal Energy and Regulatory Commission. They in turn are going to prepare an Environmental Impact Statement that will meet the needs of the other federal agencies involved.

That was our problem. Who could prepare an EIS that will meet the needs of all the federal agencies? It became obvious to us that the Bureau of Reclamation and the BLM's process was not acceptable to FERC. Federal Energy and Regulatory Commission.

But the Federal Energy and Regulatory Commission is acceptable to the other federal agencies. They helped them negotiate a process called the Integrated Licensing Process, which will meet their needs.

And so, we filed this Notice of Intent and preliminary application document on March 3rd of 2008, with federal Energy and Regulatory Commission. We're now working on an 18-month process in which we do a number of studies, so that we can file for a license.

And, when we file for the license with FERC, we actually submit to them, all of this material that we've...all these studies that we've done. Which in effect are, are an environmental assessment.

FERC then takes that, and they prepare an Environmental Impact Statement with the information we send them.

In the meantime today, FERC is in the process of negotiating a Memorandum of Agreement between the BLM, the Bureau of Reclamation, the National Park Service, so that their EIS will meet the needs of these other agencies.

And so, it's turned into a kind of a, a learning experience for all of us who are still involved in that...making sure we understand the Federal Energy and Regulatory Commission process. We're very familiar with the BLM process. The Bureau of Reclamation. But most of us have never done this with the Federal Energy and Regulatory Commission. So, we're all learning.

It's really a new process in the federal government. There may have only been one or two projects that have actually gone through this process. Since they've developed this integrated licensing process.

And so, we kind of follow in their ...their steps, and learning what they did, and what they did wrong, and trying to make sure we do it right. So, what....that's one of the activities we're really involved in in the state of Utah, is moving that project forward.

ps That's what you're personally doing with your retirement?

la Yes, I am. I've been hired to be the Project...The Project Manager on the project. And so, I'm spending, oh, maybe 100 hours a month doing that. I'm retired the rest of the time. That's about what I'm doing, and I might do that another...a few more years. As long as I can help to move the project forward.

When I was at Water Resources, I came up with the concept while I was there, and so, I was involved with it at Water Resources as it developed between 1992...that's about when we talked about it the first time.

That... me and our attorney, our Natural Resources attorney, when the...in the Attorney General's Office...and, started talking about...you know, where are going to be the best places to use our remaining Colorado River allocation? Where do we see the pressure? And, we kind of thought, well, gee....that St. George area really is growing. Is that an area that we may need to look at as using part of our allocation? And, that's how it...kind of developed. And it's taken a life since then.

I remember calling Washington County Water Conservancy District Manager, Ron Thompson, and saying, Ron, have you ever thought about a pipeline from Lake Powell to Washington County to help meet your future water needs? And, he says, Anderson, that's the dumbest idea you've ever come up with. I said, well, it might be. You know. But you've got to think sometimes a little bit out of the box. I said, tell you what. I'm going to do a back-of-the-envelope estimate of what it might cost. And you just think about it for awhile.

Six months later he called me back and he says, you know, Anderson, maybe we ought to do a little more detailed investigation into that. And so, we started doing some more detailed investigation. We started hiring some consultants to look at it in more detail for us. And that, until today, has taken us...you know, we've been working at it for about 15 years to get to this point.

We believe we need to have our permits and be ready to go to construction about 2016. So, we're only about eight years away from getting to the point of when we want to build the project. I think we need...that we'll need to build it.

If growth continues, as projected by the Governor's Office of Planning and Budget, they will need to store some water in Washington County around 2020. So we need to have the project in place to do that.

ps Utah wants to use their allocation, so...

la Why sure. Yeah. I mean, we have no reason not to. I mean, if we don't use it.... It's not like the state's going to stop developing anytime soon. So, we have to keep moving ahead. You know, we still have our responsibilities and obligations downstream, which we have every intention to meet as we have in the past.

ps California would be happy to use your water. (laughs)

la They would. But, you know, they haven't used it very much over the years.

ps But, now, it sounds like this project also puts you into the power business. Is that something new for...

la It is new for us. And so, we're just kind of learning about how that all works. We haven't completed all the economic analysis yet on the power facilities.

We're looking at as many as seven different hydro-power plants as we come back and drop from the high point, down. And, we can recover 50 or 60-percent of the power that we, we require...that's required to lift the water. We require about 50 or 60 percent of that.

We're looking at doing some different things with the power, such as using a peaking power, where we would be in place of...where we would drop the water through turbines, maybe only eight hours a day instead of continuously through the pipeline.

We're actually looking at one spot as the possibility of pump-back storage, where we could build a facility, and we would pump water from below Hurricane Cliffs, to the top of Hurricane Cliffs. It's about an 1100 foot drop at the Hurricane Cliffs in Southern Utah. And we'd have a reservoir at the bottom of the cliffs, and a reservoir at the top of the cliffs.

Water has to go over the cliffs to get from Lake Powell to St. George. And, we're looking at the economics of whether that makes sense to go to a pump-back storage. We don't know about that one yet.

But, the others seem to be feasible. And, so, we're continuing to look at it. And learning the process of what we have to do.

Luckily, the Washington County Water Conservancy District, who is one of the sponsors, have gone through this process before. They have a couple of hydropower plants on projects that they've built in Southwestern Utah. So, they understand the process a little bit, and have been helpful in this moving the project forward.

ps Well, I find it interesting that Utah is doing it themselves. And, talking to the Central Utah Water Conservancy District, that, they did not...the project is not being built through the Bureau of Reclamation. Is there a reason....

la Well, I think in the Central Utah Project, it's a little different. They have some legislation that made the district kind of a quasi-federal, federal agency. So, ...the Central Utah Water Conservancy District is both a state agency and a federal agency. And, because of that, they get federal dollars.

So, they get federal money to build the Central Utah Project.

The Bureau of Reclamation was the initial sponsor of the project. Now the Bureau acts in many cases as the engineer for the project, for the district.

We just looked at what was happening in the federal government. And, we just thought that the chances of getting federal dollars to build a new large water project in the West were really slim.

You'd have to go get it authorized first. As a federal project. Then you'd have to go through all of the process that the federal government goes through. And then, you'd have to wait in line to get it funded. And instead of getting enough money to build the project in a five or six year period, you'd get enough money to build the project over 15 years.

You can go back and look at the history of the Central Utah Project. That project was authorized in 1956. They're still working on it today. And in 10 years they'll have the project completed.

Now, the project's different today than it was in 1956. First of all, it's smaller. But, they are doing some different things today than they planned in 56, because time changes.

And so, we just didn't think there was much of an opportunity of getting the money. Certainly not within the time frame that we thought we needed to move forward with it. And so, the decision was made, we can fund this by ourselves. The state of Utah. Then we gotta do that.

CRWUA - Utah
Larry Anderson Oral History

Estimated cost today is a little over a billion dollars for that Lake Powell Pipeline Project. So.

ps I know the Central Arizona Project was built through the Bureau of Reclamation. (la – Hmm, hm.) Before the time when they considered...the state doing it themselves. (laughs)

la Right. Well, I think if we would have been back 25 years ago, we'd have probably...there probably would have been a federal project - for the Bureau of Reclamation.

In fact, the Bureau of Reclamation had a project down in the Washington County area called the Dixie Project. But it gradually, because of problems they ran into, it just gradually died.

So, we certainly have no problems with the Bureau of Reclamation. We have a great working relationship with them. They've been very helpful to us on the Lake Powell Pipeline Project.

And so, it's not that we don't get along with them. I think the Bureau of Reclamation folks...if you stopped and talked to them, would tell you that Utah did the right thing by trying to fund this project by themselves.

ps I've got some other sort of general questions that I'd like to get to here. Looking at the development and growth of Utah today, is there any particular project or development that you think has made Utah what it is today.

la Oh, I expect the early history of the Mormon pioneers, trying to find a place to live where there wouldn't be any persecution. Coming out West, colonizing much of the West. The desert, you know, the great American desert, this is it that we live in. And Mormon pioneers colonized much of it.

Las Vegas, San Bernardino. You know, there were just virtually hundreds of different communities that the Mormon pioneers went out and colonized. The Mormon pioneers developed irrigation as we know it today.

They were the first, well, white, Anglo-Saxon Americans to implement irrigation. There's no reason to irrigate anything in the East, because they had plenty of rain. No reason to irrigate anything in New England, because they had plenty of rain.

When they came out to Utah, they developed irrigation as we know it. Began building dams and canals. And so, I think that that heritage... probably is what has made Utah what it is. It made Utah, maybe one of these places where people tend to go out and try to do some things on their own. Don't sit back and wait. I think those have all been things that have created what we are today.

ps In looking back over your career, in water, is there any particular thing that you're proudest of?

la Oh, I...you know...I'm just happy that I had the opportunity to find a job that I enjoy. To find a job where I actually felt like we were doing good for people.

Most government jobs are regulatory jobs, where you're trying to tell people what they can and can't do.

Division of Water Resources is not a regulatory agency. Our job was to help people develop the water they needed for their communities. I always felt like we were doing something good. Whether it was a little project in Kanosh irrigation company project, or the Lake Powell Pipeline Project...or the West Desert Pumping Project. Another example of something we did in Utah...at Water Resources.

I'm just proud of them all.

The Division of Water Resources, Board of Water Resources, built and funded 1300 water projects in the state of Utah. They vary in size from just a few thousand dollars to hundreds of millions of dollars in costs.

The state of Utah has provided about 550-million-dollars in funding, through the Board of Water Resources for these 1300 water projects. The total cost of these 1300 water projects is about 1.6-billion dollars. All funded...all go through this Division of Board of Water Resources.

So, I'm just proud of all of those. I think we did good. I think we're still doing good.

So, I, I have a hard time picking out just one that I'm most proud of. I just... I could probably name you 100 that I'm most proud of.

You know, I was a Project Manger of what we called Kens Lake, which is a project of Moab, which was developing the waters of the Mill Creek over Moab, to meet the needs of the people around Moab, and around the unincorporated area.

You know, it's a diversion dam on Mill Creek. It's a tunnel through the mountain. It's a storage reservoir. It's a sprinkler irrigation system. It's wells, it's water storage tanks. It's municipal water systems.

I mean, there are numerous types of those kinds of water projects that I could name that I was deeply involved with. And they were all ...they're all wonderful projects.

One thing I've seen change a little bit in Utah, that I'm a little sad about this. Is that, I think as a whole, most of the people of Utah are willing to sacrifice to build a water project. Water projects are hard to make economically feasible.

But, you get in some of these little communities, especially in Southern Utah where it's so dry. And you build...you go in and you'd meet with them. They'd say, well, we need more water. We only have a small reservoir and we're irrigating a thousand acres, and

we don't have enough water to keep our children, or our grandchildren here. They're all moving away. What can we do?

And so, we'd look at their water resources, and could we build a water project? And we'd look at a storage reservoir here, or a storage reservoir here, and we'd come up with what maybe is the best alternative for them.

And, we'd say, boy, I don't know if it's economical...I'm not sure you'd ever make, you'd ever make any money back. You...you know...you contract to re-pay this. And all Water Resource money has to be paid back to the state. There are no grants.

And, you know, their position was...we're willing to sacrifice for our children and grandchildren. It'll pay itself back. We'll pay it off. We may never recognize any economic return from this investment, to build this project, but, our children and our grandchildren will. And I think that's a wonderful attitude to have. I mean....

We're living today, in the West, off of water projects that were built by our ancestors, for agriculture, for example, all these dams and reservoirs for agriculture. That water today is being converted to municipal and industrial use, as homes are going in on these agricultural lands.

Those projects probably weren't economically feasible if you looked at them at the time, but they built them anyway cause they didn't have any other choices.

And I think that that willingness to sacrifice like that...I'm not certain it still exists. I think people today are too much into...what is in it for me? You know, my kids will figure it out for themselves. I think that's sad. And I've seen that change take place in Utah in the 40 years that I've worked in the water business. And, I'm sad to see that.

I think we may regret that some day. I suspect it's taking place all over the West, just not in Utah, cause I think that's what happened in the past.

So, that's something I would hope would turn around. I don't know how we do that. Maybe if we find ourselves running short of water, people will start asking themselves "why?" And hopefully the answer...they'll be able to figure it out. We weren't willing to build some projects because maybe we were just too selfish.

ps In the projects that you did work on, are there any particular people that you'd like to name, that were your allies that you worked with and helped you make these things?

la All the Water Conservancy District people. The managers. Members of their boards. Irrigation companies. And, the Board of Directors of irrigation companies. I mean, they were all wonderful to work with. They were all allies. I mean, they were friends.

I remember when I finally became Director, I remember meeting with my staff. I sais, now when you go out to look, to meet with these irrigation companies in these cities...I mean, the little communities you go meet with. You listen to them. You know, you're all engineers and you all think you're really smart, and you are. Okay?

We know how to build things, and we know how to do it so it won't fail. But, you listen to what these people tell you. Don't blow them off. These people understand their water resources. And, if you listen to them and work with them, they'll respect you. And they'll listen to you if you tell them, you ought to think about doing something different.

Don't go out there and tell them that they're stupid. They don't understand engineering principals. And you'll be surprised at how much you'll learn as an engineer if you do that. And you'll be a much better engineer from doing that.

And I really believe that. And so, I had great relationships with all of these, with all these folks. You know. Unfortunately, many of them are longer here.

But, you know, those who are alive today, that I considered great friends and allies...allies would be like Dallin Jensen who was in the Attorney General's Office, who was so helpful to me. Ron Thompson, the manager of the Washington County Water Conservancy District, and Don Christianson, the Manager of the Central Utah Water Conservancy District. Ken McDougal who was the Manager of the Grand County Water Conservancy District, who's since passed away. I could go on and on and name...

I could name presidents of irrigation companies who I just thought the world of. And we were on first name basis. And, I tell you, you could go back there, and they'd see you drive into their town. They'd stop you, they'd want to visit with you. They'd want to take you to dinner.

They are so appreciative of what you were able to do for them - at Water Resources. You know. And we were nothing more than just an instrument in the hands of state government. And maybe we learned to do our jobs well.

But, I believe that the employees that I worked with at Water Resources were wonderful. I think they, I think they loved the job, too. We had very few people ever leave Water Resources once they came and started working. It was a family, and we all believed the same thing. That we were doing good, and we were helping the citizens of the state.

I know it sounds silly, but we really believed this. And I think it made us better employees for the state of Utah. There were just so many good people. I just...I hate to name any names. Cause I've left names out.

Dan Lawrence who was my boss for 12 years before he retired. What a wonderful man. I loved him. He taught me so much. You know.

And Board members who served on the Board of Water Resources. Same thing.

They're all citizen Board members. They don't make anything. They do this out of the love for serving the state of Utah. They were all so dedicated to making the state a better place to live, providing water.

We understand, in Utah, the importance of water. And, the people I worked with understood it better than anybody else. It was wonderful. It was a wonderful experience.

Still is. But I realize I'm getting older, and my role is going to be less and less. I'm okay with that. I'm happy for the little bit of...the little role I had in the success of developing Utah's water resources. It, it was wonderful. Couldn't ever imagine...ever, being able to do some of the things I did, as an engineer.

ps You had a long career there. You said when you first started there were like 20 people? (la – Yeah.) And how many...after 30 some years...how....

la Oh, there's still only about 55 employees at Water Resources. Still one of the smaller divisions of state government. But it's, it's not like California. They probably have 2,000 employees at Water Resources. Or Arizona's.

But, it...pretty similar to several other states in the West...lot of states in the...really, in the mountain region of the West. Very similar to Colorado, Idaho, New Mexico types of areas. Wyoming. Most of us are all around the same size.

Some states combine their Division of Water Resources and Division of Water Rights into the same organization, so they're a little bigger. Others have two separate organizations.

Utah has two separate organizations. Colorado is two separate divisions. Idaho's one division. I mean, it just depends on where you're at. But, the states around us were very similar in size...to what we are.

ps Talking to a lot of places...we've heard people say that the water people...refer to them as "water buffaloes." (la—Uh, huh.) And, did you consider yourself a water buffalo?

la I was always referred to as "Utah's Water Buffalo." Or "Utah's Water Czar." I took that as a compliment. The more I, the longer I was able to serve, the more I looked at it as a positive. That people would say that. I know it was said sometimes as a negative aspect.

But, yeah, I'm a Utah Water Buffalo. There's no doubt about it.

I think we're better stewards of the environment today than we were 50 years ago. And, the reason we're better stewards of the environment today, is we understand it better.

I don't think those people 50 years ago, or 80 years ago, meant to do anything that would damage the environment. They didn't understand what they were doing. Maybe it would have some damage to the environment. They did their best job.

And I think today we try to do the same thing. And I think we're more conscious of doing projects that will have the least amount of impact on the environment, and try to mitigate those impacts. They're not always mitigatable. You sometimes have to choose.

I think we choose today, if we can't mitigate them, we don't do them. I sometimes wonder if that will change over time. If we'll go back and say, well, maybe we need to do some of these...depends on if water supplies get smaller, or we keep having children and the areas keep growing. Industry keeps...you know, needs water. We'll have to go back and re-evaluate that.

I'm happy where we are today. I think we do things the right way and for the right reason.

ps I was going to ask you about...you talked about the allies and your supporters of the projects. But, who were your opponents?

la You know.... I don't... I guess they've...I guess it's how you define them as whether they were opponents or not. They...they're groups with different...differences of opinion

Honest...obviously, the environmental community has a different opinion of what needs to be done than I do. Hey, yeah, and you'd probably define them as opponents.

I don't so much as to look at them in a negative way as an organization... organizations that have a, a role in water development. And, I guess you could say maybe they're your conscious sometimes. They raise issues that maybe you wouldn't look at as much, and maybe you should.

So, you know, taxpayers who don't want to raise taxes to do things. You know, taxpayer associations. But, again, they are looking at it from a different perspective. As I've got older, and maybe a little bit wiser, I understand...you know, taxes are an issue. The environment's an issue. And we need to make sure that we're...whatever we build can, be defensible when those questions...when these groups raise their questions.

I really didn't see any other, really, groups that I would call opponents. I have good friends in the environmental community. I hope we're still good friends. We talk. We can kid each other.

ps Looking back, is there anything that you would have done differently?

la I wouldn't have changed my career for anything, but would I have done things differently? Yeah. We had a few failures here and there, that, if you...in hindsight probably would have wanted to do differently.

I'm not certain we'd have known they were a problem at the time. I guess if we'd known they were going to be a problem, we could have...

You know, we've had dams fail. You know, those are, those are eye-opening experiences, when you see a dam fail. And, you're going, what could I have done different? Well, I suspect, in hindsight, there were things you could have done different. At the time you didn't think you needed to do those. You thought you were doing everything right. So...

No, ...there are projects that maybe created too much of an economic hardship on people. Luckily the Board of Water Resources has the ability to restructure their loans. And when there was an economic hardship...droughts, downturn in the economy and people had a hard time making their payments to Water Resources, they came into Water Resources. Water Resources would work with them and restructure the loans.

Of the 1300 water projects we built, Water Resources, we've never had any of them not make their payments. We've been able to...now, some of them had difficult times. They got behind. And we'd have the restructure of their loans to do that.

I think sometimes our enthusiasm to build a water project can sometimes come back and, and you question...should have looked at economics a little more on that project. Maybe that's something we should have had better discussions with the local people on. Maybe it wasn't something they could afford. Maybe it's going to be too difficult for them.

But, luckily, the Board can stretch out a loan for a few more years and they can...so they can make their payments.

ps Talk about the politics of your job. Um. Four governors? Actually, that's not too many.

la No, that governor's served a long time. That was pretty good in that period of time.

ps But, do you have to become a little bit of a politician, too?

la Oh, I think if you're going to be a director of any state agency, you become a politician.

You have to go up the legislature...they call you up. They have questions. They want you up there to answer their questions. You have to go up and defend your budget. You have to go up and report to committees.

I served on several different task forces that had state legislators.

I think you have to develop the respect of the legislature. And, I think that's becoming a little bit of a politician. You need to know who your supporters are in the legislature, and maybe those who aren't as familiar with water projects, you need to know when you need to go talk to somebody in the legislature. You need to understand who you work for. I work for the governor. Okay?

If the governor had a position that had to be my position...I didn't really have a choice. My...I always looked at that. I always wondered what would happen.

Well, I always said that, if I can't support the governor in his position, then I should resign as the Director of Water Resources. I should never...my role is to explain to the governor the best I could what I thought the right decision was to make on an issue.

And, if the governor wanted to make a different decision, then he was the one who was elected, and I had a responsibility to support that decision. And, if I couldn't, then I

should resign. I never had a governor that I couldn't support the position. A couple of them were pretty stressful, but I looked at 'em pretty carefully, and I thought, okay. I can support this.

I explained maybe why it wasn't really a good idea. The governor said, I still...I still think this is the way to go, Larry. Can you support that? And either I said yes or no. And, if I couldn't say "yes," then I need to...I think I needed to leave, and give it to somebody that could.

So, I was lucky in that I didn't really have anything that I really thought was extremely bad, and that I could (sic) support. Most governors were great.

I remember Governor Bangerter, the first governor I worked for. Never had any experience of really going up and...how does the governor work?

We were in the middle of the West Desert Pumping Project. And, what do we do? We had all this flooding going in Utah. Do we build the West Desert Pumping Project, or do we do something else? Of course, there was a pumping project...we'd pump water out of the Great Salt Lake out into another big flat area, and let it evaporate.

And, we're just evaporating water out of the Great Salt Lake. We, we were creating a bigger Great Salt Lake to increase evaporation off the lake.

And I kept going up. And I'd give him options, and I was waiting for him to pick a solution. And he finally just said, Larry, he says, you're the expert. I've hired you to make these decisions. You just make damn sure you make the right decision. Okay? Cause you really are my expert. And that helped me so much. I understood where I was with the governor.

And, he was great to work for. I knew my role. And I knew I was his expert and he was looking at me to make...to recommend to him what he ought to be doing.

Did he ever call me up and wonder what the heck I was doing? Certainly he did. But, it was a wonderful relationship, and I enjoyed so much working with Governor Bangerter because of that.

Each governor's a little different in how you work with him. I forgot...I guess I worked for four governors.

I worked for Governor Walker, who was the first lady governor in the state of Utah. And we had Governor Leavitt resign to become, uh, Secretary of ...where did he go first? Illinois...and...Secretary of Health? And so forth today. But he initially went some place else, in the Bush administration. And OLene Walker became the governor. I worked with her for about a year and a half before Governor Huntsman became governor.

That was kind of fun working with Governor Walker. I remember one day spending about three hours with her, talking about water projects. And, I went up thinking I'd have 15 minutes, and three hours later, at 6:30 at night, I'm going, I wonder when she's

going to go home tonight. It's Friday. Is she going to go home? And she just wanted to talk about water. And I had a wonderful time, sitting down with her. It was great.

ps You were actually at the Department of Water Resources...you were the Director. But, during the Carter administration when a lot of the water projects in the West were targeted, were you involved in any of that?

la I really wasn't. I was just...I was there. I had been, that would have been about 1978, I believe, when Carter became...when that Hit List came out.

I remember the issues that the current director had. Dan Lawrence. There were a lot of discussions about that.

Governor Matheson was governor at the time. And he was...not happy about the Hit List. And, I remember my boss...Dan and Governor Matheson meeting several times, and Dan would come back and tell us what was going on. And, how the governors in the West were doing everything they could to make sure that that Hit List didn't make it through Congress, and that they would win that argument.

It was kind of from the sidelines. Just watching what was going on at the time.

ps Well, Arizona's governor at the time was Bruce Babbitt. (la – Yes.) Who later became the Secretary of the Interior. (la – Yes.) How was he as Secretary of Interior for your perspective, having a westerner who understood water issues as Secretary?

la You know, a lot of times, a lot of people didn't agree with Bruce Babbitt. But, I found in my relationships with him was during the Interim Surplus Guidelines development when he was Secretary of the Interior. I thought he was wonderful. I thought he did a great job in that assignment.

I thought he was fair. There was, there was no politics. But, he just thought it was the right thing to do, and he moved it through. I think in his heart of hearts, he knew this was the right thing to do and it didn't make any difference whether you were Republican or Democrat.

One of the interesting things I've seen in Utah is that politics...that water is neither a Republican or Democratic issue. I never saw any politics. My Board had four Republicans and four Democrats on it. I could never tell who were the Democrats and who were the Republicans.

I never saw a governor or the legislature as a whole, make water development a political issue. It never was, in my opinion, in the state of Utah.

The people in leadership always understood the importance of water development. Good water law. And were willing to listen to the technical experts, which I think, I was one of those. Our State Engineer is another one. And, they listened to us. And we became their experts on what should be done in the water community. And, I always appreciated that, from those in a leadership role.

Yes, I think they did that because they trusted us. We never lied to them. We always told them the truth. That's so important when you're dealing with people, not to lie. Always tell them the truth.

If you make a mistake, let them know you made a mistake. If they ask you a question you can't answer, don't make one up. Tell them you don't know, but you'll go find an answer for them and you'll get back to them. Those are...that's so important to develop trust by Democrats or Republicans.

I had good Democrats, and I had good Republican friends, in the legislature. I could always trust them if I went to visit with them. That I...

And, they were, usually, they were good friends among themselves in the legislature. And so, it was always great to be able to deal with them. Okay?

ps I think we're through with this tape. I've got a few more questions, if you have a little more time?

la Yeah. If we could hurry.

ps Okay.



Colorado River Water Users Association –UTAH
Tape #5
LARRY ANDERSON (TAPE #3)
ORAL HISTORY INTERVIEW
August 20, 2008

ps This is Tape #3 with Larry Anderson. We were talking about water and politics. Was there anything more you wanted to say about that?

la I, I just didn't see a lot of politics with water.

ps Well, what has been the, the greatest surprise for you regarding water in Utah?

la As an individual coming from Northern Utah, in Cache County, where we seemed to have plenty of water, and go to the Southern part of the state where they didn't have hardly any. That was a surprise to me.

We never traveled to the Southern part of the state when I was a kid growing up. We always kind of stayed in Northern Utah. We went on vacation...we went to Yellowstone, or Madison River, fishing. That was our vacations.

Until I came to work for Water Resources, I...other than a trip to Las Vegas once...I'd never driven much past Nephi in the state of Utah. So, it was a big shock to me to go out and see how dry the state was. And that...not everybody in the state was blessed with as much water as we were in Cache County. In Northern Utah.

And so, you know, it was a learning experience to see people try to develop every drop of water they had.

ps Well, what do you see today dealing with shortages on the Colorado River? Is that one of the most critical things for Utah, or are there other water issues that are more important?

la I think, within Utah, it will be providing water for growth. Because the state is still growing so quickly. We still have the nation's highest birth rate. In addition, our economy is still pretty good. And, probably better than most of the states still even in this...even in 2008.

So, we're still growing in Utah, and I think the biggest issue will be, how do we provide water for the people who are going to continue to come into the state of Utah? That may come out of the Bear River or Sevier River, or the Colorado River. Just, how are we going to do that?

ps Are you looking at augmenting or developing any new water supplies?

la Well, we...one of the things we did at Water Resources...we ran a cloud-seeding program out of the state of Utah. And, it was funded out of Water Resources. We did permit that. We've run a cloud-seeding program for about 25 years in the state of Utah, along the Wasatch Front. And...Southern Utah. We tried to increase the amount of snowfall we have in the winter. That's about the only augmentation program we've had.

It's hard to, you know...I guess as water becomes more scarce, do we look at using reverse osmosis to treat some of the more saline waters in the state that we're not using today? We might have to do that. We're not at that point yet in the state of Utah. So, I don't think we're really looking at that at this time. But, it might be something that they'll have to do.

We're doing a little bit of groundwater recharge where we take maybe some water in the winter months that we're unable to store in the reservoir, and it's in excess of what we need for minimum instream flows, and take it and run it into the groundwater and try to re-charge groundwater basins. Do a little bit of that. We may likely have to do more of that into the future.

But I think those will be gradual things that will take place as we move forward in our water development in Utah.

There are still opportunities to develop water, especially for municipal and industrial purposes. But, it will still become an economic thing. Groundwater recharge, reverse osmosis. And, we've got a new reservoir some place else. You know. How much agricultural land do we try to buy out to meet our water supplies for municipal, industrial purposes? Those are all still going to be fun questions that the state will still get to play with and decide as, as time marches on.

ps Would you consider taking some of your Colorado River water and using that for groundwater re-charge? Arizona's using some of theirs to do that.

la The problem is that our Colorado River water's so far away from where it's...maybe the big population centers are.

ps That didn't bother Arizona. (laughs)

la Well, we didn't have a pipeline to move it. Okay? Or a canal.

They do. And they made that decision to put the water to use instead of letting California take it. Okay, that's one of the reasons they did it.

But, the other things we have is...the locations where we can do groundwater recharge. We've got to look into Navajo sandstone probably to do that, and that's in Southern Utah. So, whether or not it's economically feasible to pump water is a question.

You know, first of all, you've got to look at the Colorado River. You've got so many endangered fish that you've got to meet those needs. You just can't go do it.

Central Arizona Project was approved in the time you could approve large water projects. You may not get that water project approved today.

So, you have some water projects out there operating...where that was an option. I'm not certain how many projects you're going to build in the future, but you're going to build it to re-charge the groundwater basin for the next 30 years and then after that you'll, you'll take it and use it.

You know we could end up doing some of that with some of our Lake Powell Pipeline water. It's not all going to be needed the same day that the pipeline is in place.

And, there may be some opportunities to do some groundwater re-charge, with that in Southern Utah. Southwestern Utah. I suspect that will be looked at as this project moves forward. But, right now, we'll probably...won't get really serious about it until the pipeline is certainly under construction. Then we'll look and say, okay, are there some places we can do this? Does it make sense? Are we willing to pay the money to pump it over and not need it for a few years. Should we do that? Will it still be there when we need it? Those types of questions. What happens to it? Can we put it into a groundwater basin where the quality doesn't deteriorate? Those are things we're going to have to look at.

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ps Still rather experimental, I think...

la Ah, well, I don't know how experimental...but I think it's still out there. It's still something we're going to end up doing.

ps (can't hear at first) ...contaminate the groundwater with the Colorado River water.

la Right. And there's some laws that we have to comply with in the state, on the quality of the water we do, we do use to re-charge.

ps Do you have advice for people today that are dealing with the Colorado River water issue? You still are, but...

la Just show some civility to each other. Try to listen. I think those are the most important things we can do. Listen to the position of the other people you're dealing with and be civil. Let's not get in the yelling and the name-calling business. I think you'll find out that they can be very successful.

ps Already sort of addressed this, but...many people say we've seen the end of big water projects. Do you think that we'll ever see big water projects again? You're running a pretty big one! (laughs)

la Well, I...my gut reaction is we won't... Right now I can't conceive of a time where we'll see the federal government fund any big water projects. It might occur. I mean, it's a long time into the future, so it could occur. But I...right now don't. I don't see it happening.

ps Some people say they'll never see any more big dams. There'll never be another Hoover Dam. Or a Glen Canyon Dam. Or anything of that size.

la May be true. I think most of the good dam sites are taken. And so, it is hard to see a dam....

We're looking at new dams in Utah, but, none of them really what you'd call big dams. They'd be smaller reservoirs.

ps Does the Prior Appropriations Doctrine of Water, the first in time, first in right doctrine...do you think that's going to continue to survive population growth and drought. Do you think that doctrine will survive?

la It's going to survive for a long time. I think it will. I think that water...water laws are important. It gives us an idea of how water is divided. It gives us a reference point. It helps us in administrating water law. I don't see the first in time, first in right being changed any time in the foreseeable future.

I think it will be modified a little bit from time to time. We maybe see that in Utah. But it's a slow process. And rightfully so. I think it has served a good purpose, and is, and is still a successful way to administer our water law.

In Utah we have a very open water market. Water can be moved from municipal...from agricultural to municipal uses very easily. If there's a willing buyer and a willing seller, water can be moved in Utah.

That's not quite the same as some of the western states. There's more opposition to that. But, in Utah, there's...you know...if I own a farm with...500 acre farm and water on it...and I want to sell it and I can find a buyer, the state engineer will...you know...as long as a buyer wants to use it, the state engineer will approve it being moved. I can do that. There's nobody to stop me. No one's going to.

I think that's why I think that the Prior Appropriation Doctrine still works.

ps And some of the other issues that have been brought into play with the Appropriations Doctrine are the Indian water right...recreational and environmental issues now are being considered.

la That's why I don't think it's going to be changed. I just don't see it being changed, because I don't think we have enough water to deal with that.

ps So you don't...you see any other issues coming in? I mean...I'm sure that when you started in this, you hadn't thought of Indian water rights. (la -- I did not.) Or recreational.

We are a little lucky in Utah. We don't have a lot of Indian tribes. We have negotiated with the Utes, and have a compact. We are negotiating with the Navajos. Those are the two big ones. And then remaining tribes are just bands in Utah, so they're very small.

I think the state will continue to try to resolve those issues. The big ones are....you know...cause we're talking a few thousand acre feet for most of the other little bands. But the Navajos and Utes, we're talking over 100,000 acre-feet on the average, for both of them.

ps In Arizona I believe they are leasing them now.

la Well, I think they want to make some money. You know, why not? Why wouldn't you do that? And, most states are willing to let them lease them within the state. I think Utah's already said that they will do that.

ps Talk a little bit about the, the Colorado River Water Users Association. How...what role have you played with them. How do you see that organization?

la You know, my role has been nothing more than a member. I've spoken two or three times at their annual meetings in Las Vegas.

I think it serves a wonderful opportunity for the water users to get together. I think it helps because....this is a big enough organization, they can draw major speakers, from the federal agencies. Those are EPA, or Bureau of Reclamation, or Secretary of Interior.

Secretary of Interior has been really good about coming, speaking almost annually, last 20 years at the Colorado River Water Users Association.

I've enjoyed my relationship there.

In Utah, the Water Conservancy Districts have played the lead role. In some states, the director of the water agency have taken a...on a greater role.

I know Dan Lawrence and I...I don't think either one of us thought that the state of Utah needed to play that dramatic of a role in the Colorado River Water Users Association. We thought that the districts, within the boundaries of the Colorado River were the ones that ought to play that lead role, and that's the way it's been in Utah.

ps Looking back up here...how do you see western water...long range?

la How do I see western water?

I just see a gradual change in the West, from water being converted from agricultural to municipal, industrial uses. I don't think that means that agricultural uses are going to go out.

In the state of Utah we have about a million acres of farm land. I see that maybe that farmland will be reduced in the next 50 years from a million acres to 750-thousand acres as water is converted. So that means we still have the majority of our agricultural water, still being used.

And, I think that as long as we're willing to do that and not get into big fights, we'll be able to maintain our agricultural diversity, in areas that aren't growing as fast, and areas along the Wasatch Front, where we live here, you're probably going to see less and less ag. There's very little ag in Salt Lake County today. There won't be any probably about 2040. It'll all be gone.

In Davis County, we still have, uh...unfortunately...it's prime ag land, but it's where people want to live. So, ag land's going out, and there's less and less all the time, and every time the Division of Water Resources did a land use inventory, the number of acres were decreasing.

When we looked over at the Colorado River Basin, the number of acres of agricultural land hasn't changed in 30 years that I've worked in Water Resources. Still the same number of acres. In the Sevier River Basin, it's the same number of acres.

So, I think there are some areas that the agricultural community will still play a big role in the economy of the area. There's other regions in the state where we have much growth. Here, Washington County. Here...I mean the Wasatch Front. It's going to play a less and less important role.

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ps In Utah, then, ...an acre of agriculture become an acre of houses. Does that use less water?

la State Engineer in Utah has concluded that he will convert the water over...if you had three acres of irrigated farm land, you can bring that to a sub-division... he says you can use the, the same quantity of water. Therefore you can...it's a straight conversion from ag to municipal water. And you can have same, same number of homes there. To cover the land as before.

ps Is there anything I didn't ask you that you wanted to talk about?

la Oh, not me. I'm just happy that this is about over with. (laughter)

ps Okay, well, I think I'm about out of questions.

la I thought you'd ask me the question...is the Colorado River Compact going to be amended?

ps Well, I was going to, but you already talked about it. Do you think we should open it?

la Oh, absolutely.

ps You asked, answered that question before I could answer it.

la Okay. I just didn't know if you were going to go back to it, because I...

ps No, I thought you'd covered that.

la Yeah, yeah. I just don't think we, we can open it. I think it would be crazy to open it