

Oklahoma Innovations Radio Show

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Guests: **Linda Lambert**, OWRB chairman; **Ed Fite**, Oklahoma Scenic Rivers Commission; **J. D. Strong**, Oklahoma Water Resources Board (OWRB); **Bill Simms** and **James Gammill**, Oklahoma Rural Water Association

[Music]

>> From the OCAST Radio Network, this is *Oklahoma Innovations*, a weekly science and technology radio magazine brought to you as a service of OCAST, the Oklahoma Center for the Advancement of Science and Technology. OCAST is the state's only agency whose focus is technology – its development, transfer and commercialization. OCAST's mission is to locate and fund promising technologies and allow Oklahoma to compete in a global market economy from our own backyard. This program features some of the state's most gifted and talented scientists and inventors, entrepreneurs, manufacturers and business leaders who all have one common goal: developing technology-based economic growth for all Oklahomans. Now here are your hosts Gary Owen and Steve Paris.

[Music]

>> Right now one of the main things that's on peoples mind is water and we are coming to you this week from Norman, Oklahoma at the Embassy Suites where the 32nd annual Governors Water Conference is going on. Steve, we--I don't know anybody in the state right now that doesn't have water somewhere on their mind whether they're in agriculture, whether in oil and gas, any kind of industry that uses water or whether you're just a resident living rural or in the city, everybody's concern about our drought situation.

>> Absolutely Gary, and of course the drought situation is a picture in a point in time because, you know, next year the year after we may not be in a drought situations.

>> Right.

>> However, you know, everyone has needed water this year. It's been a very difficult year for Oklahoma, Texas the central part of the United States. But that's not the only problems that we have or the only challenges we have in water. We have with us Linda Lambert who is Chairperson of the--

>> State Oklahoma Water Resources.

>> Oklahoma Water Resources Board and we also have a board member who is also the administrator of the Oklahoma Scenic Rivers Commission Ed Fite who is with us from Tahlequah, Oklahoma and we have both of them here representing the Water Resources Board. I want to ask Linda first. Linda as chairperson, can you kinda give us an overview of what this water conference is all about.

>> Well, this is the 32nd Annual Water Conference, so this is not a new--

>> Been going on a long time.

>> It's been going on a long time which also shows how important it is.

>> Yeah.

>> Because year after year to be going on for 32 years is that it really means something to the citizens of Oklahoma.

>> Which means drought is not new to this organization?

>> Drought is not new to this organization at all. But what's important about this particular conference this year is that this is the conference where the Water Resources Board will be unveiling our 50 year Oklahoma comprehensive water plan and tomorrow we'll be formally presenting it to the state legislative water committee.

>> Wow, and that's a big deal because you spend a lot of time and money putting it together.

>> It is a big deal because--and there's a big "we" in that.

>> Yeah, there you go.

>> There is a big "we." This 5 year effort has been a grass roots effort. These recommendations that are in this plan are recommendations that have come from citizens like the 4 of us sitting around here.

>> Sure.

>> This was not--they were developed by the Water Resource Board. They were not developed by the Department of Environmental Quality. They were developed by us of all of our fellow citizens.

>> And you have public hearings all over the state. We had public hearings all over the state in all 77 counties. We've had regional meetings and so we have--we really tried to listen to what our fellow citizens say is important to them and find the common threads that with their thousands of recommendations.

>> Right.

>> But what are the common threads that are important to everyone whether you live in Southeast Oklahoma, whether you live in the Panhandle of Oklahoma there are some common threads and there are some differences, there are some differences.

>> Yeah, well, you know, I've talked to a lot of folks over the years and that, you know, we commonly think that the problems we have with water, we either have too much or too little but we also have other issues. We have to worry about water quality. We have to worry about distribution. You know, you can have lots of water but if you can't get it to people's homes--

>> That's right.

>> Of other people's farms, then you really not succeeded, have you?

>> That's right. And one of the--one of the--we have 8 priority recommendations.

>> Uh-hmm.

>> They are not in order of priority but they are the 8 most important priorities. And one of those of course is our water infrastructure funding.

>> There you go.

>> Which is many of our particularly--our smaller communities in Oklahoma's infrastructure systems are very much out of date. And it's not just for small communities but most of our water, pipes and supplies and all our decades if not close to 100 years old.

>> Yeah, and Bob.

>> And we can't continue.

>> And then you break it down into ground water, surface water, different types of sources for water.

>> Yeah.

>> And it really becomes like complex issue that begs a lot of technology to get to where we need to be.

>> And a lot of people are concern about environmental issues.

>> That's right.

>> So--

>> And, you know, there's--I think one of the real challenges for us that all know that water is necessary for life, water and air.

>> Yeah.

>> You gotta have. If you see a pothole in the street, I mean you can see it and you know it needs to be fixed.

>> Right.

>> And you will bump over it enough times that you'll get somebody to do something about it. Water is a very different thing. The water--most of the water we don't see. We see it lovely in Ed's area in the scenic rivers but most of the water infrastructure we don't see and if what you don't see you don't think about.

>> Well, you know, I think and a lot of people take water for granted because you turn the tap you just expect it to be there.

>> That's right.

>> And then a line that we've seen--over the years we've seen lots of news stories where rural areas have turned on their taps, there's either if there is a shortage of water. The water is not safe to drink. I mean and a lot basis as she's talked about its infrastructure for a lot it.

>> So let me say, well, Gary just said, talked about safety, we have a safe water supply in Oklahoma. I mean we have issues pop up and you folks deal with it, the Department of Environmental Quality deals with it but we have standards that everyone has to meet. Do we not?

>> That's correct.

>> So your water supply is safe.

>> Our water supply is totally safe. And those that do not drink tap water I think don't realize that tap water is regulated a lot more--

>> Yes.

>> --fervently than bottled water.

>> Absolutely.

>> Yeah.

>> Its regulated.

>> Now that's interesting. A lot of people don't know that.

>> A lot of people do not know that. So if a person says they are afraid maybe the tap water taste different--

>> Yeah.

>> Yeah.

>> But it is in fact looked upon and is regulated more highly than a bottle of plastic water, bottled water.

>> Yeah. Well, you mentioned Ed Fite a few minutes ago. Our dear friend Ed Fite.

>> I did mention Ed Fite.

>> Yeah, who is a cousin to everybody.

>> Yup.

>> Ed is Chairman of the Oklahoma Scenic Rivers Commission has been for many, many years. Has been involved in water issues and has probably been at the point of the spheres for as making certain that our scenic rivers are protected, that we have good quality water flowing through those rivers. It's safe for people to enjoy from a recreational stand point but for other purposes too. Ed, talk about the Oklahoma Scenic Rivers Commission, the role you play there.

>> Well, our scenic rivers program, a lot of individuals in our state don't truly understand what the program is all about. But it was reaction by our state and approximately 30 other states to some Federal Legislation in the 1960's where we as a state adopted a policy statement by legislature that we were gonna protect a certain number of rivers as free flowing streams and protect all the characteristics that are inherent to those streams. And so I've been blessed to work for the state for approximately 3 decades and that role is the administrator of the agency. But we have our 6 scenic rivers are in the Eastern four counties of our state 4 of which had water in Arkansas. But the upper Illinois river above Lake Tenkiller, the Baron Fort Creek in Cherokee and Adair Counties, the Flint Creek in Delaware County, the Big Lee Creek in Sequoia County, Little Lee Creek in Adair and Sequoia County's and then of course the upper mountain Fork River down in Le Flore and McCurtain County's above broker bow reservoir. So they are the best of the best in Oklahoma as far as policy statement by the legislature.

>> Somewhat pristine in a matter of speaking are they not?

>> They are titled to be pristine and be protected for this generations, future generations and there had been challenges. There's challenges with all waters in interstate.

>> Of course.

>> But you know the one thing good about Oklahoma is that we are blessed with water all over this state. And have 12 different eco regions, so if you don't like particularly the state, you can go to another area and, you know, we got water in all these areas.

>> Kind of like little Rogers, don't like the weather, wait five minutes and it'll change right?
[Laughs]

>> Well if you're not Oklahoma you must be camping out. [Laughter]

>> That's all I say.

>> There you go. There you go, well, Linda you as a Chairman or Chairperson of the Oklahoma Water Resource Board you probably get involved with Ed's operation at times. You all have some--do you have some any kind of overseeing function or how does that work?

>> Well there are 9 members of the Oklahoma Water resource Board and I feel honored to be able to serve with Ed Fite and 7 other great people. We represent different geographical areas in Oklahoma as well as different industries and some of us serve at large. So, while we might be representing a particular industry or a particular commission we are really working for all Oklahomans.

>> Yeah, there you go. Okay, so we have issues in Oklahoma that we're dealing with but that doesn't mean that they're not less challenging. Go back to Ed for just a minute. We've had a lot of issues with keeping the water clean in the Illinois River among the other--the rivers that you mentioned. Where are we on that right now?

>> Well first, I wanna go back to the Water Resources Board. The Oklahoma Water resources Board sets the water quality standards for our state.

>> Uh-hmm.

>> To meet Federal Regulations and it is their role to implement and protect the water quality in the Illinois River.

>> Sure

>> You know, every one credits the Scenic Rivers Commission. We are basically just a beat cop on the street at night checking the door make sure their locked and then if we find trouble then we rely on bigger agencies like the Water Board.

>> You're in the enforcement then?

>> No, well--

>> Kind of sort of it.

>> Kind of sort of.

>> We're all cousins.

>> There you go.

>> But the--you know, I just had a senior moment, what was the question?

[Laughter]

>> Well, we're taking about the role that you play with the Oklahoma Scenic Rivers Commission and where I was going with that was we've had issues in the past. I mean

everybody knows about the chicken litter issue that's been in litigation for some years now. We're not here to talk too much about that but you all play a role in making certain that the rules are followed and the rivers kept clean and that the facilities are used properly.

>> Well, back from the senior moment here the role of the Scenic Rivers Commission is to take the purposes that were outlined in the policy on in the legislation state level to protect these streams for future generations, to be vigilant in overseeing that purpose.

>> Sure.

>> And as our population is growing, as lands are being developed from upland hard woods and vegetation to impervious materials such as homes and roads and airports and shopping malls and so forth. Issues come to bear and certainly the poultry waste issue has been one that's been in the news last few years and before that, that's a non-point source issue.

>> Uh-hmm.

>> And before that in the 80's and 90's the issue was about point source issues, waste water treatment plants and quite frankly Oklahoma is growing.

>> Yes.

>> We are developing more and more every day.

>> Creates a lot of pressure, doesn't it?

>> Well it brings pressure, yes and so those are the issues that we're dealing with.

>> There you go.

>> Well, as we talk about these issues and go about--I'm trying to understand the role that you folks play in regulating and making certain that the resources used properly kind of give us overview. And Linda, I'll go back to you on our future issues and I think we know some of those but kind of tell us, what's the biggest challenge for Oklahoma down the road?

>> Well I'd like to say there's just one challenge.

>> Okay.

>> But there are really several challenges and they're pretty much encompassed in the 8 priority recommendations of this comprehensive water plan. One, we've already talked about which is the absolute necessity for infrastructure funding over the next 50 years.

>> Oh yeah.

>> That is going to be very significant but totally essential for us. Conservation and how do we reuse our water. Conservation should not be looked as punitive term. It really should be-- hopefully changing our attitudes toward and the way that we use water.

>> Linda, let me interrupt you. We got to take a break. Let's come back and talk about that in the next segment, coming to you from the 32nd annual Governor's Water Conference on *Oklahoma Innovations*.

[Music]

>> We've all heard the old adage, when life gives you lemons, make lemonade. Well, when life gives you eastern red cedar trees, make mulch. These invasive trees are not a welcome sight for

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>> We now return to *Oklahoma Innovations* with Gary Owen and Steve Paris on the OCAST Radio Network.

[Music]

>> This week we're coming to you from Norman, Oklahoma in the 32nd Annual Governor's Water Conference and right now we're talking with Linda Lambert and Ed Fite who are with the state of Oklahoma's Water Resources Board. And Linda before the break you were talking about this comprehensive water plan which obviously is the foundation for Oklahoma's water future and you had touched on two of the issues and you've got several more, so go ahead and--

>> Okay, so let me talk briefly about the need for infrastructure funding.

>> Right.

>> We've talked about reliability. The reliability is gonna be a big issue. Are we gonna have the water, when we need it and where we need it. The Tribal Water claims are going to be an issue and are a high priority to negotiate and to consult with the tribes. This is not a role for the Water Resources Board. The recommendation suggest that the Governor and the Legislature form a consultation group to work with the tribes to resolves this. There are a lot of questions that cannot be answered.

>> Sure.

>> Until this one is answered.

>> Absolutely.

>> So that's what we're looking forward. One of the strengths of this water resource plan has been the grass roots efforts that really came from all of our fellow citizens. It did not come from an agency or from a small group but--and our fellow citizens want to continue to have input and we as a Water Resource Board need that, so one of our recommendations is that regional planning groups be formed. They are non-regulatory but they are a continuation of the water resource plan that people had been involved in the 5 years and they want to stay involved and we want them involved.

>> Sure.

>> So water conservation is a large issue which we talked about. How can we really look as our key note speaker said today, how can we really think about water differently? Do we really need pure, clear water to wash our cars, to water our lawns? To bathe our dog, you know, so let's take a look at how we use water differently. And let me think, what are the other--we have in stream flows.

>> Uh-hmm.

>> In stream flows which add and of course we're all very interested in how do we protect our streams and our scenic rivers for the third largest industry in Oklahoma which is recreation and tourism and still have enough water if possible for other uses as well.

>> Absolutely.

>> So we have a lot of priorities, they're all important. They all need to be done. They all need to be done today.

>> Its sounds like a lot of work to do here.

>> They will not be, but this plan I think is really not just for Ed and me but it's for my great grandchildren in this great state.

>> There you go.

>> I mean this I believe for the Oklahoma Water resource Board and the 9 members and all of it have been involved in this plan. This is our legacy to the state of Oklahoma, so that is my hope that this will be the legacy that we will leave to our great grandchildren.

>> Outstanding.

>> That brings up Ed, we were talking off during the break a little bit ago about, you know, everyone's heard about the issue Texas wanting Oklahoma water, well, that maybe an over simplification because we have roughly 22 million acre feet of water that flows through the state every year. We only use a portion of it but you talked about compacts and what that means, tell us about the history and how that all works out?

>> Well the state of Oklahoma in years passed has had the wisdom to enter in compacts that had been approved by Congress with put neighboring states. And one particular compact that comes to mind that we were discussing is the Red River Compact that not only involves Texas and Oklahoma but also includes Arkansas and Louisiana, right? So even as a state if we were willing to just say give us some excess water to Texas we would need to be aware that we need to consult with Arkansas and Louisiana as to what the ramifications--

>> They have an interest in it too.

>> They have an interest in it and we negotiated that long before we've done this recent update to the water plan.

>> Uh-hmm.

>> What's important also about this water plan is that it represents the work of the water resources board and a number of citizens from our great state that have taken over their time and energy's to be involved and for the 9 member board to approve it and give it its blessing. But at this point, the challenge is that Oklahomans has collected body need to go to the website or go to the water resources board and get a copy of this water plan and read it.

>> We can only--the 15 minutes that we have, give you kind of the tip of the iceberg. They need to read, every Oklahoman needs to read this water plan and then tell their individual representatives and state senator what their thoughts are because we are through with our work now per se as a board.

>> Uh-hmm.

>> We've have got to polish up the document, get it submitted to the legislature and the Governor for the consideration. But it's going to have a number of requirements for funding and other issues that are necessary for its implementation. And it's important that the local representative hear from their constituency--

>> Right.

>> About the impacts or the positive issues about this water plan and how to fix those regions of the state because as we've heard this morning Doctor Fishman when he was giving his overview, this is a local issue. JD Strong even talked about this. We could designate whatever you want in Oklahoma City for a water--a supply system, but if it doesn't percolate down to the local level.

>> Hmm, hmm.

>> Then it aint gonna get implemented.

>> Right.

>> And so that's what we've got to do and as Linda has mentioned, this is not just about this generation being able to have potable water available to every Oklahoman, it's about the future of Oklahoma. It's about at the end of the day do you whether you go fishing, whether you suing it for irrigation, whether you're using it for drinking water, spiritual, cultural purposes, whatever the purpose of water--

>> Or run those factories that hire Oklahomans.

>> Right.

>> You bet.

>> Everyone's got to get involved.

>> Absolutely.

>> And we have been very thankful as a collective board and the team members that work for the Water Resources Board that we had approximately 3,000 individuals that came out and attended our meetings and gave us feedback. And now we have wrapped that up and were throwing it back to the public at large through their members of the legislature that they elect and send to represent them as to what were gonna do now.

>> So we can find that web site, Gary--

>> Yeah, the website is owrb.ok.gov that's www.owrb.ok.gov and we'll give you that website again before the end of the program. Linda and Ed, you guys have been great guests on this segment of the program. We have a lot more to talk about when it relates to Oklahoma's water future from the 32nd Annual Governors Water Conference in Norman, Oklahoma. Stick around, we've got a lot more to come on the back side of the hour on *Oklahoma Innovations*.

[Music]

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>> Research and development, technology transfer and commercialization creating high paying jobs in Oklahoma is what OCAST is all about. This is *Oklahoma Innovations* on the OCAST Radio Network.

[Music]

>> Welcome back to Oklahoma's Science and Technology Radio Magazine *Oklahoma Innovations*. We're coming to you from the 32 annual Governor's Water Conference in Norman, Oklahoma this week. And the focus on the conference is Oklahoma's Water future. We've been talking to members of the state of Oklahoma Water Resources Board and this time were gonna talk to their executive director JD Strong, Steve.

>> Absolutely, JD, welcome to *Oklahoma Innovations* and you know the last time we talked to you, you were on the governor's cabinet, Governor Henry's cabinet. Now, you're with the executive director of the Oklahoma Water Resources Board. A little different role but very much related and you have a lot of water issues you're doing with to this water conference. I know there's too many to talk about but kinda pick on some of the ones that you think are more pertinent maybe at this point.

>> Okay, well certainly were exploring what we believe are sort of the priorities that came out of the comprehensive water plan that be infrastructure financing, the needs to preserve some flows in streams in lakes, in stream flows, regional planning groups, how other states tackle those issues and some of those issues are definitely ones that come out of the water plan and ones that we wanted to delve into at the Governor's water conference.

>> Very good, when you talk about these water issues there's not a person in the state of Oklahoma all 3.6 million of us are gonna be impacted by the development of water into the future. And so, when you talk about this you're talking about something that impacts everybody, every future Oklahoman too. Give us kind of an overview. I know we have roughly 22 million acres feet that goes through Oklahoma every year. Some of it we have to let go through compacts. Some of it we get to use. Some of it, it just goes anyway and so it's quite a challenge to manage all that.

>> Its certainly is and it's certainly, you know, the greater challenge is making sure you've got water where you need it when you need it. We certainly have a huge volume of water that flows through our state on an average year. But we know--

>> We didn't have it this year, did we?

>> We're now looking at a year like this year we don't always have average years in fact this is one of the driest years on record.

>> Absolutely.

>> And so, definitely challenges present themselves when you're in a drought year such as this. But even in an average year, you have areas of growth and growth and water needs that are not necessarily in areas that have sufficient water supply of those needs. So really it's all about at the end of the day infrastructure to be able to move the water from where it is to where it's needed, treat it and provide it in a reliable fashion to our citizens and industries and businesses and agriculture community on a daily basis. I'm certain probably the biggest challenge we face as a state.

>> You know, some people may be listening to this program and they say, "Well, what does water have to do with science and technology?" And when you look at research, when you look at the future planning of how we're going to handle different issues related to water, there is a lot of technology involved. And just--and like I know one of the things that Linda brought up a while ago was some of the rural infrastructures, they're looking at over hauling their water system and the funding that's gonna take to do that and innovative ways to do that.

>> So can you address some of those issues just in a general sense what the board is looking at?

>> Sure. Science and technology definitely play a huge role. I'm a scientist by background myself and science--we believe is critically important to making sound decisions going forward that's why millions of dollars and countless hours were spent developing data and analyzing that data and understand what not just where we've been with water in the past but with the next 50 years may hold.

>> Uh-hmm.

>> Technology wise certainly innovations will have driven and we'll continue to drive what we do in water. And one of the things that we're going to talk about later this afternoon at the Governor's Water Conference is the innovations and new technology, desalination technology. The ability to treat waste water and reuse it, recycle it for-- especially none potable uses. All of these things are beginning to come about because of innovations in these areas and technologies that are being developed that make those opportunities much more feasible and available to average citizens at a much cheaper price. You know, it wasn't that long ago and in fact even today we talk desalination technology, a lot of people think about what's going on in California, we're trying to use the ocean water.

>> Yeah.

>> And that it's extremely expensive and unfeasible here. Truth of the matter is its being developed and utilized and employed all over Texas for example and out at Foss Reservoir in Western Oklahoma where I grew up. We had one of the first desalination plants essentially.

>> Really?

>> That was ever constructed in the United States out there with the technology employed out there to utilize the rather sailing water and flowing in the washed out river out in that area. So certainly science and technology, huge drivers and I think moving forward will provide us with even greater opportunities to face water challenges that we may face in the future but face them head on and be able to resolve them quickly and efficiently.

>> JD, we know that history shows that some of the biggest battles in the history of mankind had been fought over water. And, you know, that necessarily doesn't happen here to this day in age except maybe in the court systems, what would you know that cities and rural water districts all compete to some extent? Here's where I'm going with this question, as we develop our water plan for the next fifty years, do you see the more cooperation between different entities of governments that provide water service and what maybe we've seen in the past 50 years.

>> Well, we certainly I believe have seen and especially prior to this when I was in the Secretary of Environments Office, I believe we saw in precedent in cooperation really in all of the agencies of the state and Federal government involved in various aspects of water. Certainly, one of the primary goals of the 50 year water planning effort was to make sure that we look very prospectively at water issues and challenges we may face as a state so that we could hopefully get political support and financial support to begin addressing those issues now because we know that there's nothing that creates more stress and breaks down cooperation whether your agencies, whether municipalities, rural water districts, ag producers, fisherman, hunters, any of these various users of water. If we wait till the crisis hits, cooperation is gonna be at all-time low--

>> Sure.

>> As we try deal with these issues going forward.

>> Absolutely.

>> And you've touched on it right there touching with paying for that infrastructure. Those infrastructure needs for the future. Obviously, we've paid for them in tax funds. We paid for them from grants from the Federal level. We've paid for them from water fees, things of, you know, things that municipalities and water districts charge their customers. As we go into the future and we look at the challenges of providing funding for such things, give us kind of your take on the overview. How are we gonna handle these challenges?

>> Well, one of the biggest challenges of the next 50 years that we identified in this comprehensive water plan update is the fact that we will have--we estimate 81 billion dollars' worth of drinking water and waste water infrastructure needs over the next 50 years.

>> For the state of Oklahoma.

>> For the state of Oklahoma alone. We have at the Water Resource Board, we operate one of the best financial assistance programs in the country in terms of providing assistance. We have funded 60 to 80 percent of that water waste water infrastructure across the state since the inception of the program in the mid 80's, we have financed 2.6 billion dollars' worth but looking at the 81 billion dollars of need in the future, our programs really only set up to handle about 5 percent of that need. So clearly we're going to have to really sit down and figure out the best way to address that significant need or else were gonna leave towns, communities, rural water districts across the state fending for themselves. And one of the beauties of our program is that with its triple A rating with a little bit of subsidy that we get from state and federal government we are able to provide interest rates to finance those projects that are much lower than market

rate. So it definitely, we believe is critically important for us to figure out how were going to address that challenge going forward if we do nothing else out of this water planning process.

>> Well, just from a personal stand point I can say this if were not for the Water Resources Board, they'll be a lot of thirsty Oklahomans out there right now.

>> Certainly.

>> And you all play a major role in providing as for the funding for the infrastructure needs that's probably going to increase and not decrease. And, you know, were all gonna be challenged with paying for it I guess.

>> Exactly. And so it's definitely the challenge for us to figure out some of the solutions and were looking at those and even tomorrow afternoon as part of the Governor's Water Conference we'll have some financial assistance, experts talk to us about ways that we might explore how to address that program and particular ways that we can possibly do it without having to have tax payers dig ever deeper into their pockets to help finance the problem.

>> We've got just barely just about half minute left so I'm gonna ask you about, you know, the issues with the Native American Tribe, the Indian Tribes, we have some litigation going between--they think they have own the water, the federal thinks it owns the water and I guess we all own the water but how that shaking out?

>> Well, were in the very early stages of litigation but certainly out of the 39 federally recognized tribes we've been sued by two. We have as part of this water planning process said that we must get together and address these competing claims over water so that we don't create greater havoc, greater crisis for Oklahoma citizens going forward.

>> Yeah, you know what would be nice is to see partnerships develop.

>> Certainly.

>> You know.

>> And there's plenty opportunity for that I believe.

>> I think so.

>> Yes.

>> [Inaudible] on both sides to that.

>> Sure.

>> It seems like over the last year or so.

>> Yeah, it seems like that if you could get partnerships going that would in a variety of ways particularly on the finance side and people partner it 'cause we all on these together so, you know.

>> Exactly.

>> Alright, JD, you've been a great guest this hour, we appreciate you coming by. We're coming to you from the 32nd annual Governor's Water Conference, taking a look at the foundation for Oklahoma's water future. One more segment to come so stick around and hopefully were answering some questions about what you have about water in Oklahoma on *Oklahoma Innovations*.

[Music]

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>> Many *Oklahoma Innovations* listeners live in rural parts of our state and we have a segment now Steve dealing with water that is going to address rural residents, ranchers and business people because we now have a couple of representatives, the Oklahoma Rural Water Association.

>> Your absolutely right Gary, here we are at the 32nd Annual Governor's Water Conference and we have with us Bill Sims whose President of the Oklahoma Rural Water Association. Bill is from Mountain View Oklahoma, the Southwestern part of the state. We also have with us James Gammill who is the Executive Director of the Oklahoma Rural Water Association. So we have the elected leader and we have the chief staffer of ORWA and brings up some wonderful questions Bill when I ask you first when you talk about rural water you're talking about a very vital important part of the Oklahoma economy. 40 percent of the people of state of Oklahoma live in rural areas.

>> Absolutely.

>> And so they have to have water too, I mean we understand the need for cities and towns but when we deal over water it's a whole different type of need that has to be dealt with a little bit differently doesn't it?

>> Rural Oklahoma really has dramatically changed over the last 30, 40 years because of the building of rural water systems all over the State of Oklahoma, that's where I got involved about 37 years ago when we formed a cattle rural water district number 3. I lived in a water depth scenario and didn't have enough water to water for the home or for the livestock and gonna head up 23 to build a water system out there. I got involved and helped get easements and begin serving on the board out there and served as President of that association for several years.

>> How big is your water district?

>> We cover parts of three counties Caddo, Comanche, and Kay, well, we have over 2,000 miles of line and we have about 2500 users, members.

>> So you're talking about a water district that's actually larger than some cities and towns.

>> Yeah, we're relatively large water district not in number of benefit users but in area we cover where a big area and--but it's a water deficit area and its critical to the development of some of our small towns and provide water for farm and ranch families all over that 3 county area.

>> And you bring up an excellent example, it's not unusual for cities and towns in the rural part of the state to work for with water districts as far as using some of the same resources.

>> Yes, we provide water. Our water district for --well, 3 small communities actually the City of Cyril, Elgin and at Gotebo Oklahoma, and--

>> And where would they be without water?

>> Why absolutely.

>> Perish the thought, we don't even want to talk about that.

>> Well, the one town we furnish Elgin is one of the fast growing areas down in that area near Lawton because of fort sale

>> Right, serves fort sale areas.

>> Yeah.

>> Absolutely. James, you--as Bill and the members of the Board of directors of ORWA work together to develop policy, you get to carry out those policies and I know that creates some real challenges down the road. Talk with us about some of the challenges of rural water and developing the infrastructure in the future.

>> Yes thank you, you know, rural water as far as water systems go there's approximately 800 public water supplies in the state of Oklahoma of which about 350 are rural water districts. You could actually say all but about somewhere close to 50 are under the size of 10,000 what most people would consider rural.

>> Sure.

>> So, you're looking at 90 percent of the systems here in Oklahoma at least are considered rural and the benefits of having rural water out there has caused economic growth out in the rural areas.

>> Yeah.

>> You know, everyone has heard the saying where you have water people will follow.

>> Absolutely.

>> Electricity, houses that is what it takes in order for development to actually happen. It is very challenging as far as regulatory goes. You know, we're facing with --faced with many, many strings at regulations. When I started way back when there was approximately 20-25 regulations. Now there's over 100 that water systems have to do.

>> Wow.

>> Infrastructures for these rural water systems were actually put in place a lot of them back in the 50's and 60's. And now you're looking at deteriorating infrastructure and you having to start to look at replacing those plus increase to meet your growing population in the rural areas. So there is some things that the cities and the rural water districts can work towards to providing for the area to help overall economic incentives.

>> Absolutely and it's always better to work together than to be fighting one another and, you know, the reason I bring that up is because water can be a divisive issue when it comes to who has it and who doesn't have it. And that's one of the goals I think at least I think I'm right in this water conference talking about the state water plan is to break down some of those divisive issues and provide water for everyone all 3.6 million Oklahomans.

>> Yes, Oklahoma has been blessed. We do have and I wouldn't say an overabundance but we do have water where other states, countries, cultures do have problems with possible water supply.

>> Absolutely.

>> We need to be looking towards all segments to help the growth continue. Oklahoma is very viable state. You've seen what's happened in Texas along say the I35 corridor.

>> Uh-hmm.

>> And once you cross into Texas from Oklahoma, it's just one straight business all the way down to Austin.

>> Absolutely.

>> You know, here's an area that we've not really touched on a lot and there's a big catalog here on display one of the vendors here about how many rural lakes there are in our state. I mean I did not know until I just browsed, I mean it was pretty good size book showing the lake reservoirs we have in this state.

>> And a lot of rural water districts who treat water, pull water out a lot of those lakes, they're vital to helping provide many of the rural water systems around over the state with their source for water. And of course they have went to the expense of building treatment plants and transportation system to take that water to small communities into rural water districts all over the state and that's about the source. The drought though is really in Western Oklahoma particularly lowered the level of those lakes. And so we have some problems coming up having enough water for those systems or out of those lakes.

>> Congressman Lankford spoke at this event at the luncheon today, what did you get out of his commentary that you feel is gonna have an impact on the future of rural water?

>> Well, a lot of the over regulation and the mandates which don't really add to our built in to provide water and don't really add necessarily to quality, they just over burden and cost a lots of dollars to carry them out. And so I think he addressed the fact that we need to pull back on some of those mandates that are not necessary and to go slow on some of the regulations that are detrimental to water systems not only Oklahoma and other parts of the country.

>> Bill, you talked about water sources and you talked about reservoirs being one of those sources and a lot of rural water districts get their water from wells too. And of course there's different rules how you treat the water if it's a surface facility like a lake you have to do certain things to it to make certain that the water is clean.

>> Yeah.

>> And of course if its--if you pull your water from a well, you know, there's lots of different EPA and DEQ standards that--

>> Right.

>> --they're quite challenging at times because things that we were able to do just a few years ago, the restrictions are more stringent now and what passed for a water supply then may not make it today and that puts some--a lot of burdens on rural water districts.

>> That's true.

>> One of the things we were concerned about is--and were all well watered, we pull out the rest, we're paying aqua for--and another aqua for north of there and we really--we have increased our water rides and had have adequate source of water and room to grow but we're concerned that there's a Tennessee or some suggestions that underground that's plenty good enough quality and with chlorination is potable water.

>> Yes.

>> Making us treat all of that ground water which would be ridiculous to do, mixes the qualities there. And the way we maintain that quality is that the wells we use on that underground water are, you know, 6--700 feet deep and we--well, off the top 400 feet--

>> Right

>> --to keep contamination and those kind of problems, so its quality water.

>> And it also keeps you from competing for water from individual land owners who use it for its portions. So there are all kinds of issues coming down the pipe.

>> Yeah, lots of 'em.

>> Both of you gentlemen, let's talk about the state wide rule 50 year plan the rural water plan is gonna be talked about the rest of this conference. How's that gonna help?

>> Well, I think the--we're setting--they've done a lot of study and built some baseline information about the supplies of water and where they're at by various basins and it will help those various groups a plan for their future water needs.

>> Very good, James?

>> Well, I just like to compliment the legislature and the Oklahoma Water Resource Board for their undertaking of a 5 year plan to bring together thousands of people, businesses, all types of interest and formulate this plan and try to put this out there and, you know, now that the plan has been implemented or been put in place it's up to the legislature to try to implement this with all of our help so we will continue to press forward in working with them.

>> Guys were out of time, in fact we're late. We've got to get out here. It's been a great opportunity to be a part of this conference and we thank you our listeners for listening. We'll see next time on *Oklahoma Innovations*.

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