##### [00:00:09.730] - Speaker 1

I guess I first just want to welcome you all and thank you all for participating. We had a really great response. We had well over 100 people enroll in this, which I was really pleased with and think it just speaks to kind of the importance of this water development issue. Okay. It looks like we have quite a few people logged on, so we're just going to kind of get started here and let people continue to join. I guess I'll start by introducing myself. My name is Preston Ingram. I work for Texas Farm Credit as a relationship manager, and they are the sponsor of this event. Texas Farm Credit, for those of you who don't know, is a borrower owned lending cooperative. The thing that makes us different is, first that we love agriculture and we only lend to agriculture. So we lend to AG land purchases, agribusiness production, basically anything along the food production value chain we can lend to. And that is all we focus on. So we are kind of experts in that field and we do not stray outside of the agricultural field. The second thing that kind of differentiates us is we do have long term fixed rates.

##### [00:01:16.150] - Speaker 1

So especially today, in today's environment where rates are so low, we're able to lock your rate for the life of the loan, which we've made substantial strides for a lot of our customers, both giving them savings on interest rate, but also giving them security of fixing that rate for the life of the loan. And the last thing is we do pay a portion, because we're a cooperative structure, we pay a portion of our profits back to our customers at the end of every year. So everybody loves getting a check from your bank at the end of every year. And so if you're a customer, we send you in April or May, we send you a check based on whatever our profits were, we pass those back on to our members. That's kind of a general outline of Farm Credit. I want to talk just briefly about why we're here today, and a lot of it kind of boils down to my own personal curiosity. Before I was with Farm Credit, I was a manager on a large farm and ranch in the Sulfur River Basin. And we had a lot of flooding issues, obviously in East Texas.

##### [00:02:16.650] - Speaker 1

So when it flooded, we had major crop damage and major impact to our business. And so I kind of went on an exploration to try to figure out why is this happening, is there anything I can do about it? And through that, I was led to the Sulfur River Basin Authority. I went to multiple meetings, met a lot of people there and realized there's a whole another issue going on. And that's reservoir development in Northeast Texas, and it is potentially one of the most important issues happening in land in East Texas right now. The projects we're going to talk about affect way more than 100,000 acres, and that's current projects happening right now. So this is a really serious thing. The other thing that I realized was that I basically knew nothing about any of this. And so I'm a very curious person and just started to dig in to understand what projects are actually being executed, what's the process for executing those projects, and then what's the impact then to our community here in East Texas? What's the implications of those projects being executed? So through that path, I got kind of led to Jim Bradbury, and I am really excited to have him here.

##### [00:03:23.530] - Speaker 1

I'm going to interview him. He is an expert on water rights and landowner rights. He practiced for over 16 years with some of the largest firms in Texas, and then he formed his own firm based out of Fort Worth, where he serves clients more directly. His approach to client problem solving is straightforward and direct. He seeks to find strategic solutions to solve unique disputes that arise in the uncertain world of business and environment where those two things meet. Jim has practiced for more than 20 years, and he represents clients ranging from shareholder disputes to eminent domain and has extensive trial experience. I will say literally every person who knows Jim that I told I was interviewing for this gave me rave reviews. I mean, I have been really impressed with my opportunity to get to know him through this process, but he is a true expert, and I think you'll find his comments very valuable and useful. Again. I'm going to talk to Jim. If you'll type in any questions you have, I will do my best to ask them throughout. And then, like I said, I will post links. And the other thing, just so you're aware, we're recording this, and we will post that recording to the Texas Credit website so that you can view it or share it with your friends if you found it useful.

##### [00:04:47.270] - Speaker 1

Okay, jim, are you ready to get started? You bet. All right.

##### [00:04:50.950] - Speaker 2

Thanks for that introduction. I'm more than happy to get started and really looking forward to this discussion and credit to you, Texas Farm Credit, for putting your finger on a big topic for Northeast Texas and landowners out there. Everybody's probably read at least one article about these projects. But as you found out, Preston, if you start scratching the surface and looking down through there, there's a lot of policy issues embedded in these, a lot of politics, a lot of money, and and a lot of decisions that have to be made. So I'm really gratified you had so many people sign up today to listen to what it is that we're going to cover. So thanks for having me.

##### [00:05:32.280] - Speaker 1

You bet. Yeah. All right, well, let's get started. So I think what we're going to start with is Jim. There are three major reservoir development projects actively being engaged right now. And so I was just hoping that you would give us kind of a high level view of what stage they're in and then any key facts about those projects.

##### [00:05:52.170] - Speaker 2

Yeah, this, slide that's up here, just give us a little brief overview. Then we'll drop into each of these projects and talk about them in a little more detail. But first, Lake Bodark there is interesting because it's currently under construction, fully permitted, and they're moving dirt and constructing that reservoir. Lake ralph hall, and it's up near bottom. Lake ralph hall there is in Sulfur River Basin It is fully permitted, but basically this year they got all the permits. And then they're going to, during this calendar year, depending on covet and everything else, they're going to start construction on that project. Then the third, which is everyone has probably heard of once before, is Marvin Nichols. And it is a way off, but it is a very large reservoir in the current planning. And it's the subject of a significant and long running dispute between two regional planning authorities as to whether that reservoir is needed, if so, where it might be the costs. And so that one's really got some interesting issues. So look forward to talking about that, maybe. Let's start with Link Bodart that I mentioned on this continuum. If you ever wanted to see a damn go in or a reservoir constructed, now is a good time to take a little day trip up towards Bottom and take a look and see what is underway up there.

##### [00:07:30.190] - Speaker 2

But a few facts about reservoirs, because all of them take a significant amount of time. You don't just put it down on paper and then a year or two later, you start building it like a building. This one took more than 15 years to get permitted. North Texas Water District applied for their water rights permit for this reservoir back in 2006. You want to think about where you were and what you were doing in 2006. You remember how long ago that was. But it worked its way through the system because they have to have a permit from TCQ, our state environmental authority, to build the dam to impound that water and have the water rights there to back it up.

##### [00:08:18.990] - Speaker 1

So let's just clarify here. One thing that stood out to me as I learned about this was how long these projects take. So you say 2006 is when they applied for permits, but they were engineers that had planned these reservoirs long before. That correct?

##### [00:08:36.290] - Speaker 2

Yeah, I'll say the paperwork, the research, the science, and the study is all done before you pull the permit. So that 2006 date would be when they came out and actually applied for the permit. But you would go back many years there in terms of planning, study, looking at the land, how much volume you're going to need designing the dam. You can imagine how much work goes into even the dam construction. And if you look there on the diagram we've got up, look at that blue line there passing down through Leonard and on into McKinney. That's a pipeline. And you can see that the water treatment facility is going to be in Leonard. You've got 13 years since the permit was pulled, and I would bet you probably have close to ten years before that.

##### [00:09:31.910] - Speaker 1

Just for a little perspective, how big is that pipeline, do you know? Roughly?

##### [00:09:37.490] - Speaker 2

Yes. I don't know the exact dimensions of that pipeline. But most of the pipelines that I see build for these reservoir to urban areas. Maybe five to 8ft in diameter. They're huge pipeline down here near Austin that's taking groundwater actually to the city of San Antonio went into one of my clients property. And you can drive an F 350 through that pipeline and not touch any part of it. Huge pipelines.

##### [00:10:12.620] - Speaker 1

Yeah. So tell us a little bit more about the map here. So I see the pipeline running down through Leonard into McKinney. What are the green areas there?

##### [00:10:23.450] - Speaker 2

Yeah, I mean, when you build these, the second permit you need for a reservoir after you get your water rights permit from the state is you're going to need a Federal Army Corps of Engineers permit, and that is also a very expensive and long process. But once you get the core permit, you're good to build. Now, the core will require what's called mitigation for any project. They're going to look and study.

##### [00:10:51.990]

The.

##### [00:10:52.340] - Speaker 2

Wetlands, the stream areas, all those areas that are going to be destroyed by the lake inundated areas. And they'll do a very specific calculation to say you've got to go and mitigate, find other land outside of the reservoir area and rehabilitate that up to core standards. So these two green areas are where the river beach, which was a ranch there, and then that upstream mitigation site just on the sort of southwest corner of the lake itself, those are mitigation sites. That north Texas Municipal Water District. And they've actually contracted that out to a third party to do wetland and stream mitigation. And so those areas will have to be maintained forever in an improved quality to make up for the losses that the reservoir imposed on that land there in the area. So very interesting. You're going to see that sorry to interrupt. You're going to see that in any reservoir site. I mean, even when we build highways or say, large power plants, things like that, when you need a core permit, you're going to have to mitigate.

##### [00:12:06.290] - Speaker 1

Yeah. So there are regional restrictions to the mitigation. You can't go build mitigation in West Texas for East Texas lake. So how does that work?

##### [00:12:17.140] - Speaker 2

Yes, it is up to the core, but their policies and procedures are they want you to mitigate as near as possible to the side of the potential damage in the permit side. In this case here, it's very close other times, it can't be quite as close, but it's got to be in the same region. In the same area.

##### [00:12:43.560] - Speaker 1

And watershed matters, I think, as well, correct?

##### [00:12:46.890] - Speaker 2

Yeah, for sure. And it's a very interesting and precise calculation that the court does in terms of stream miles and wetland destruction. To calculate out a number of acres here, I think this is slightly over one acre to one acre mitigation. That's about 17,000 acres of mitigation, and then the reservoir is just under 17,000.

##### [00:13:13.980] - Speaker 1

Okay. Is that a pretty common ratio, one to one?

##### [00:13:17.790] - Speaker 2

Yeah, it is. Everyone is different because it really depends on, I would say, the quality of the areas that you are deploying with your project. So if you have a very high quality wetland, lots of streams and really unique features which are destroying, it's probably going to exceed that one to one. But one to one is kind of a good baseline for what you could expect. But as we'll talk about in a few minutes on Marvin Nichols, most folks believe that's going to well exceed one to one.

##### [00:13:53.900] - Speaker 1

Okay, well, I've got quite a few questions on mitigation that many of them, I think, will circle back to, but I think one we should ask now. So this says, is mitigation property purchase leased or an easement issued? Can you kind of talk through that process?

##### [00:14:08.850] - Speaker 2

Yeah, it depends on the situation and what the core will permit. Here. It is purchased. They have purchased it in fee. So it's owned outright by North Texas Municipal Water District. You actually can it's very good question. You can do it a couple of alternative ways by easement, and then there's another way to do it where you can actually do it by buying credits. I don't want to get too far off topic here, but many times a project builder can go out and buy what are called credits from somebody who owns a piece of property, who has rehabbed it and been approved to sell those credits. So you don't have to always buy it in fee. But here, in this case, these are fee purchases by the district.

##### [00:14:57.700] - Speaker 1

Good. Okay, well, let's move on to Ralph Hall and tell us a little bit about that project. Okay, so everybody knows I just posted in a link to the group that is involved in the mitigation of Bodark. So you have that as a reference. And I'm about to post in kind of the project timeline for Bodark so that you all can look at that as well. Go ahead.

##### [00:15:21.210] - Speaker 2

That firm is a top firm, does a lot of work here in Texas. So if you're interested in that, I encourage you to look on that site and it'll explain to you a lot about the mitigation process. Okay, Preston. Now, Ralph Hall, which is sort of moving along in our continuum of things coming online, as I mentioned, Ralph Hall just finally got its final permits right in the beginning of this year. So they're in the process of actually letting contracts design the dam, looking at beginning some of the early stages, construction actually this year. Just a little bit about the Ralph Hall dam to maybe compare it a little bit with Bodark. This one is 7600 acres, so it's slightly under half the size of Bodark. You got a different water authority. This is the Upper Trinity Regional Water District. Similar type entity. It's just a different one. Building this reservoir in the Upper Trinity, it's going to be about 7600 acres overall in size, but it's going to be providing 35 million gallons of treated water back to the metroplex. These reservoirs are all being put in place largely to supply treated water back to what it is, a supersized growing metroplex.

##### [00:16:58.770] - Speaker 2

If you can think how Dallas Fort Worth is grown to the north and the east west, otherwise all those rooftops that are coming in there are needing more water. And so that's why these reservoirs are being constructed. Similar thing. You're going to have a big dam, the inundation process, and then a pipeline to take it back. This one is about $490,000,000, which is the estimated cost to build it, compared back to Bodark, which is $1.6 billion. So it's roughly based on the size ratio, about the same type cost. But these are phenomenally expensive projects. But as we know from the rest of our reservoirs around the state, they're going to be there for a long, long time.

##### [00:17:59.310] - Speaker 1

Has the mitigation land been determined for Ralph Hall yet, or is that still up in the air?

##### [00:18:06.570] - Speaker 2

I don't think the site of mitigation has been determined yet. They have their core permit, so there's an amount of mitigation that they've got. You can see right there below the dam there, there's some proposed mitigation zones, but I don't know whether 100% of all the mitigation has been acquired by the district so far.

##### [00:18:30.930] - Speaker 1

So I just got an eminent domain question which will dive a little deeper into imminent domain as we move forward. But can eminent domain be used to take mitigation land or just the water surface land?

##### [00:18:45.540] - Speaker 2

No, it can. The mitigation is part of the project, so there's not a distinction in terms of the ability to utilize eminent domain between whether it's a flooded area or mitigation. It's still part of the project and is inappropriate public use underneath the Upper Trinity's Authority to condemn that. Now, as everybody on this call knows, having a domain is a flashpoint with Texas landowners and these entities constructing these reservoirs. They are difficult enough to do and they are doing the best that they can to do all of the land acquisition on sort of the way property normally trades, which is just negotiating for a sale without going down to the courthouse. Go ahead.

##### [00:19:41.550] - Speaker 1

I was going to say, it sounds like most of the land has been acquired for Bodark. So how did that process work out on Bodark?

##### [00:19:49.650] - Speaker 2

Yeah, I mean the Bodark reservoir. The authority has made a point to say they acquired all that property in arms length negotiations and did not have to go to the courthouse to get any of it, which is, in my opinion, as a landowner and agriculture lawyer. That's a great thing. You can imagine the shock and the change of outlook that a reservoir like this comes to the landowners who are underneath the inundated area, who are on the edge, or who lose part of their property, but not the other part. And that is a tremendous step, in my view, for the authority to go in and say, look, we're going to negotiate with these landowners. We're not going to go to the courthouse and use lawyers to try to acquire this. And yeah, sure. Do they end up having to pay a landowner more for their property than they would if they ran them down to the courthouse? Yeah, probably so. But these landowners are being asked to give up their land in perpetuity for a project that's going to benefit citizens for a long, long time down in the Metroplex. I think that's a positive development to see and hope that other authorities doing projects like this will try to follow along.

##### [00:21:18.110] - Speaker 1

Good. I guess real quick before we move on, because we've talked about some big dollars here. Where does all this money come from?

##### [00:21:24.950] - Speaker 2

Yeah, good question. Pretty elaborate process that we have in Texas, the way these are constructed, and we may flesh that out just a little bit more, but the Texas Water Development Board, which many of you may have heard of in Austin, half of that entity is a science and water planning entity, and the other half amounts to a bank, very sophisticated bank. And so what it is, is they have what's called swift funding that the legislature passed, which is a multibillion dollar corpus there that bonds can be sold against. And so the Water Development Board will sell bonds in order to make a very low interest loan to the authorities building these reservoirs. And so it will be a low interest cost by virtue of the state process for the opportunity to build this reservoir. They can pay the contractors, do everything that's needed and then over time, as they're selling this water back into the Metroplex, they can retire those loans and that debt back to the state. And that's virtually the way it works in almost all of these reservoir projects.

##### [00:22:41.350] - Speaker 1

Interesting. So just to make sure I understood, so basically Texas has a Water Development Board that acts in a lot of ways like a bank, and they issue bonds and then pass that money onto organizations like Upper Trinity River for the construction of Ralph Hall, for instance. And so the financing coming from Ralph Hall is coming from the Water Development Board and then paid back through water sales. Is that the basics of it.

##### [00:23:09.480] - Speaker 2

That's right. And actually, the Water Development Board's program for swift funding, it's not just these major projects. It's there for all of our water needs in the state. So you may have in your area a small water supply corporation, a Sud or a city, and they may need to do a pipeline project or a pump station, something like that. That type of funding is available for those projects, too. It's a fund and a mechanism that applies to virtually all of our water supply needs in the state.

##### [00:23:46.010] - Speaker 1

Interesting. Good. Okay, well, unless you had something else on Ralph Paul, let's move on to Marvin Nichols, the big one.

##### [00:23:54.140] - Speaker 2

Yeah, a lot to talk about here. We're talking about water and politics. Those two things tend to go hand in hand here. So maybe just a little bit about Marvin Nicholls. It's not being built. It's a long ways off, and there's a very hot dispute going on as to whether it will indeed ever be built. There was a meeting this morning at 10:00 between the two regions, region C and Region D, to try to reconcile the absolute opposed views on whether this reservoir would be constructed. But let me tell you just a little bit about the reservoir. It's enormous compared to the others. This is 63,000 acres. Remember, Bodark was 16,000. So now you're talking about a very large reservoir that would be built inundating a lot of that area. Of course, the mitigation area has not been set, but due to the quality of the area where the reservoir is going to be built there, it's believed that that mitigation area would be in the hundreds of thousands of acres. There's very different views on that, but a number of estimates put that at several hundred thousand dollars. So now if you talk about the reservoir combined with the mitigation area, you may be at 250,000 acres.

##### [00:25:26.850] - Speaker 2

That is, in essence, going to come out of productive use out there. Very big issue just to get a.

##### [00:25:37.600] - Speaker 1

Little perspective size wise. So first of all, this is in the Sulfur River Basin watershed, correct? So it looks like it runs along the Sulpa River from basically where Hopkins in Franklin County joined. So I think 37 is about right there running north to Begota, and it runs all the way over to just above Mount Pleasant. Is that about correct?

##### [00:26:01.300] - Speaker 2

Yeah, that's right. It's a $4 billion project. And I mean, that's the cost estimate today. At the earliest. I'm going to talk a little bit about the two regions that are in battle over this. But at the earliest, it might be constructed in 2050. So one can only imagine what that $4 billion number might be. Who knows? But as you can see, it's a very large lake, but it's got a very big price tag given its size. The estimates are that this would let me talk maybe just a little bit about the two regions that are at issue. I've mentioned them a couple of times. But the entire state of Texas is divided up into water planning regions. So every county in the state is defined to be in a particular region. The two regions we're talking about here are C and DC. Is think of that as the metroplex, and D think of as Northeast Texas kind of the general area we're looking at on the map. And their role is to develop water needs and water planning. And that includes projects in their regions for decades and decades ahead. And each of those regions are made up by boards that are various leaders that come from all of the counties within those regions.

##### [00:27:40.690] - Speaker 2

And it's a very elaborate process to utilize consultants to determine how much water are we going to need and where is it going to come from. It's going to come from groundwater, surface water. So that's the function of regions where this dispute is. Regionc wants Marvin Nichols and has for quite a long time. Marvin Nichols has been discussed extensively, battled over in the Legislature battle between the two regions because Region D very much doesn't want it. And it is, in essence, that reservoir is being constructed in that region to supply water back to Region C. And that, in a nutshell, is the dispute. The dispute has grown so large that the Legislature actually created an Interregional Planning Council, which is yet another entity designed to bring Regency and Region D together to try to look at this problem on water supply. Is the reservoir the right approach? If so, how? Or the region needs position is there are many other ways that we can supply that same amount of water back to the metroplex without inundating all of that acre. That is a very brief description of what has been a decades long dispute over this particular reservoir.

##### [00:29:12.150] - Speaker 1

So tell us what help me understand the role of the Interregional Planning Council. Are they purely for mediation purposes? Are they going to force decisions? How is that going to work?

##### [00:29:24.950] - Speaker 2

It's a little more elaborate than just a mediation, because one of the primary roles of any region is to develop its water plan. And that's a long, extensive document that would include a whole variety of projects. They submit that water plan to the Texas Water Development Board, which is then again reviewed and then incorporated into the Texas Water Plan, the statewide water plan. And Region C has always included Marvin Nichols in its water plan. Region D has always not included it and opposed it. And this has become an irreconcilable conflict down at the Water Development Board. And so this Interregional Planning Council is to combine portions of each of these two regions. Bring them together. And start looking and studying in a paired way alternative water supplies rather than two people in Dallas and then out in East Texas. Kind of given the steely glare at each other. They bring them together in a room like they did this morning at 10:00 to get out and start talking about alternative water strategies. Science. How can we solve this problem and whether we can solve this problem. So those meetings are open to the public. Many of them are streamed.

##### [00:30:50.030] - Speaker 2

So if this particular topic is something of interest to you, it's something you can follow. And I will say beyond the Interregional Planning Council, the legislature actually put in place a process at the Water Development Board. If these two regions can't get it worked out on their own, there are procedures at the Water Development Board that they can take to resolve this conflict. But there's honestly a lot of good thinking that's going on in that Interregional Planning Council to look at the ability of groundwater elsewhere, aquifer storage and recovery, which is an interesting technology, and then desalination to try to supply that water over to the metroplex.

##### [00:31:42.650] - Speaker 1

Interesting. So just so everybody knows, I did post a link to both the Region D and Region C website. So if you want to read more about that, you have access now to that and then it also has their meeting schedule. So I think that's a great way for people to stay involved, especially if they're streaming those videos. That makes it a lot easier to pay attention to. Okay, so this clearly is a complex issue. Who else is involved? So we got Region C and D. And by the way, on the links that I provided, there are maps with county, so you can really more clearly see where Region C and Region D fall. But who else is involved in the approval process here? So we got Region C and Region D. They basically come up with the plan and then who's involved after that?

##### [00:32:34.670] - Speaker 2

Yeah, well, in a number of other players, it's a very interrelated process. I've mentioned the Water Development Board and their role that kind of sits there above the regions. You've got Texas Commission on Environmental Quality down in Austin who keeps the registry of, is in charge of all surface water rights. So they grant permits to build dams, they grant permits for water rights, and then they maintain a registry of all water rights in the state, which are based on priority date. So they're involved. And likewise, you've got the Army Corps of Engineers I mentioned. You've got river authorities like the Sulfur River Basin Authority, who is also charged with managing that river basin, and what happens within that river basin. Then others, you've got the big entities who supply kind of wholesale water like North Texas Municipal Water District, the Opportunity Regional Water Authority, tarrant Regional Authority out of Fort Worth who operates there are some very large pipeline projects going on to bring water from further south down in East Texas back to the metroplex that they paired up with Dallas. So you got to think of it as all of these layers. Here going on, which are interwoven to carry out these very large projects.

##### [00:34:09.890] - Speaker 1

Yeah. So let's change gears a little bit, just because I read about Senate Bill Three that was passed in 2007. That did change a little bit of, from a regulatory standpoint, the ownership structure of these reservoirs. Can you just give us a high level view of what that said and what the impact is?

##### [00:34:27.890] - Speaker 2

Yeah, good question. cinemail Three was a major piece of water legislation, did a lot of things environmental flows, studying. But because this dispute was so big in between Region C and Region D at the time, that legislation included a very unique provision for Marvin Nichols and Lake Fastrel. If one region is going to build a reservoir in another region, then it mandated that the region where the reservoir is going to be built that 20% of the permitted water rights are allocated to, I'll call it the locals. It could be held by entities within that region, but you got to leave 20% of the allocated and permitted water rights within that region. Then the other interesting thing is, of course, the region building the reservoir has to pay 100% of the cost of the reservoir, but yet there will only be entitled to 80% of the water in it. And that's a way to try to bridge this divide that has existed over Marvin Nichols, which is why would we in Northeast Texas want to give up all of this productive acreage in exchange for water that's going to go through a pipe back to the metroplex?

##### [00:35:51.450] - Speaker 2

And this is not a total solution, but it is a way to move in the right direction, to say the 20% of that water is going to remain there for local use.

##### [00:36:04.830] - Speaker 1

Yes, I was going to say that does seem like a positive move for our area, at least from a regulatory standpoint. And just to clarify, this is not up for negotiation for Marvin Nichols. Like, if Marvin Nichols happened, that law would stand, correct?

##### [00:36:20.910] - Speaker 2

Yeah, that's right. Now, in law, and in Texas, all laws can change. So I want to add that caveat state of law right now. And as I mentioned, there are enormous political and other resources being pointed at this to try to reconcile this dispute, because we'll have other disputes in the state. I mean, Marvin Nichols has been the first, and we're designing a dispute resolution procedure. How are we going to ensure that all over our state, we've got the appropriate amount of water? We're in an interesting phase in Texas. If you look at the overall water numbers, Preston, with the amount of people moving to Texas, development, oil and gas, everything that's going on, we need a substantial amount of more water added to our system, say, by 2060. And Water Development Board has got some great charts on this. And so the question is, how do you get that water? Where do you get it? And that's what all this water planning is designed to do. But if you look at the graph of water demand, municipal demand is by and large the largest and it's growing at an increasing rate. And so agriculture is on a slightly downward slope.

##### [00:37:47.610] - Speaker 2

So you're going to have this replacement. We're going to see water moved away from agriculture to urban use over time. And that's a distressing dynamic to some folks, but it's going to be reality. So the question is, how do we get that done in the smartest way possible?

##### [00:38:11.130] - Speaker 1

Yeah, absolutely. So that might be a good transition to kind of our next topic, which is what's the impact to our local area, both from an economic standpoint and otherwise? I mean, clearly there's going to be a lot of land given up that is I'll use the wrong term, but ours like our East Texas land. So is there any benefit to us to even see these reservoirs go in the other?

##### [00:38:36.880] - Speaker 2

There is. And you can imagine each side has got its own estimates and its own way of looking at the other side estimates. But what I've got up there now are some economic estimates that are really, I will say more from the region seas side. But looking at okay, if you went ahead with Marvin Nichols and built it, what kind of economic benefits are you going to see from the construction of that reservoir? So the top portion of that chart, Preston, is construction. Then the bottom is after the reservoir is built, looking at benefits from annual operations and just to kind of collapse that, you see the dam and the transmission and housing and commercial that's built around it. If you look at the overall total out there, the right hand upper portion of that chart, you got $10 billion there. And that's adding in jobs, indirect aspects of it, and tax revenues, which is estimated to be about $160,000,000 there. So there's a flow that goes back to the locals associated with the project. Similar but smaller numbers there. Once the reservoir is constructed, you can see the economic activity and you're going to have people coming out there and visiting the lake, recreating on the lake, buying homes out there to be near the lake.

##### [00:40:09.890] - Speaker 2

So there's definitely dollars associated with that. Now back on the other side.

##### [00:40:16.720] - Speaker 1

Yeah, go ahead. Well, I was just going to ask a little bit deeper question about that. So I've noticed when you go to lakes around Texas, sometimes there's homes sitting right on the lake and sometimes you can't see the homes they're set way off. Why is that and is there some reason that drives that and what is it?

##### [00:40:34.420] - Speaker 2

Yeah, good question. It really deals with whether the reservoir is controlled reservoir versus some other type of reservoir that's operated by a state based entity. And the Army Corps of Engineers, when they build and operate a reservoir, we'll call it a setback. So those are the lakes that you go on and you look around and there are no houses right there on the water. You can see rooftops, but they're back there in the trees. That's a core lake. Non coral eggs. Are those where you've got houses? Right up there at a water line. They've got a dock. And property owners can buy and sell a piece of property that is truly lakefront property, which carries a tremendous value compared to owning a piece of property on a court lake where you're set back off. Still a great place to spend time, but very different in terms of the true dollars for a piece of property on the lake.

##### [00:41:40.030] - Speaker 1

Yeah, absolutely.

##### [00:41:41.310] - Speaker 2

One other thing to mention, to be fair back on this, where are the economics? The reason the position on Marvin Nichols is to say, well, hey, wait, hold on. This is some prime forest land which is very productive use agriculture land that is in productive use private hands. And that's a big piece of the economic engine out in that particular part of Texas. And so that matters, and we don't want to lose that economic productivity from that particular reason. So they've got their own statistics. Acres of timber, 22,000 acres of agriculture. That doesn't even include the mitigation. So you can imagine there is going to be a cost of seeing a lot of land coming.

##### [00:42:44.890] - Speaker 1

I did get a question. Someone asked for the link for that economic chart. Can you just tell everybody where you got it from? I actually don't have the link for it, but I think it would be useful if anybody wanted to look it up in the future where those numbers came from.

##### [00:43:01.090] - Speaker 2

Yeah, and I can send you the link offline and share it with anybody else, but that is actually it's brand new data. Region C is working on their 2021 Regional Water Plan, which is publicly available. And that chart came out of that plan, which is a draft plan right now for Marvin Nichols in those estimates. They would have had economists prepare those estimates, but it's included in there. Same thing out on Region D. I mean, Region D is working on its 2021 plan. So you can dive into either one or both if you're interested enough to look at their draft plans. And it's going to talk about Marvin Nichols and the various perspectives on those economic numbers, but that's where those came from.

##### [00:43:51.730] - Speaker 1

Okay, good. Perfect. So let's just wrap this up. I'm trying to pay attention to our time here a little bit. I know we started late, but if I wanted to stay involved, if I wanted to stay informed about this, what's happening, where can I go? Give me some places to watch, places to get news. Who should I pay attention to?

##### [00:44:14.410] - Speaker 2

Yeah, I mean, good question, because I hope we've intrigued some of you in every aspect of water policy in Texas. We need more voices involved and more people who are knowledgeable. So I encourage people to do that. If the Marvin Nichols issue is your passion, I would say the Interregional Planning Council is one to watch. And then your own region. We talk about it as a region, but if you actually pull it up on their website and look who the Board of Directors are, you'll probably see people from your county that you know and you recognize. Most all of them are volunteers. And so I would encourage you to pull it up, that website, study it a little bit, and then look at the individuals who are on the board and reach out to them, whether you know them personally or not. Tell them you're from whatever county you're interested in. This most of these meetings are streamed. You can watch them online just like this. Or when everything gets a little better, you can go to a meeting. They'll probably be having open meetings again. So I encourage you to do that. The Water Development Board actually has very good materials that are on their website charts, graphs, reports, science.

##### [00:45:39.740] - Speaker 2

And you can kind of tighten down into your particular part of the state. But I always think connecting with an individual is easier than just getting lost in a forest of paper. So I suggest folks to look at somebody where you see an email address, tell them who you are, why you're interested, and let them kind of guide you through additional information. But it's honestly very important to us in Texas, and it's pretty interesting stuff.

##### [00:46:09.470] - Speaker 1

Yeah, absolutely. Yeah. I will say on the Water Development Board I've done kind of my own research on the Water Development Board, and it's a fascinating organization, both from scale standpoint. The number of dollars that they have control over, but also the way they execute. I think I'm proud to be a Texan that they have thought through it in this way and are looking forward in the way they are to try to keep us able to grow in the years to come.

##### [00:46:38.630] - Speaker 2

No, it may come as a surprise to many of them, but the Texas Water Development Board was significantly overhauled several sessions ago, and when Swift funding was passed, I mean, it is held up as the absolute model for statewide water funding. And the Water Development Board is very well known in the financial community in New York and beyond because of the integrity of the process that they have and the sophistication that they work with. So it's an incredibly impressive state agency to check out.

##### [00:47:13.670] - Speaker 1

Yeah. Good. So I have received a ton of questions on Mitigation. I'm trying to figure out how to consolidate them in a way that would be useful. And I think truthfully, because we had such good interest here, I am totally open to do one of these again. And I think Mitigation might be a great topic for that. So maybe just give us a real high level breakdown on mitigation. And then I will try to either respond to your questions or set up another webinar where we are interviewing somebody who is deeply involved in the mitigation process to kind of help shine light on that because truthfully, the mitigation land is kind of the forgotten child of this process. Everybody's focused on the surface water, but there's just as much land tied up in mitigation and there are a lot of dollars kind of involved in that process as well. So I think it's an important topic.

##### [00:48:11.630] - Speaker 2

Yeah, I know it is a super fascinating topic and I'm glad that people are that interested. But maybe just a 101 here on that is a program that is operated by the Army Corps of Engineers. And its principle is that in order to build infrastructure, it could be a power plant, a highway, a reservoir, any type of structure where you're going to disturb jurisdictional, waters that may be wetlands, that may be a stream, anything that is under the Clean Water Act. In order for them to permit you to build that, you will have to satisfy the core of engineers by either mitigating, by going out and improving other area to core of engineer standards or buying credits. And the credit process is also very interesting. And what that is there are private entities who will go out and do mitigation projects, find pieces of property, build them, rehab them, and then the core of engineers permits them to sell their credits. And so a project that's underway, like techstop buys lots of credits. If they're putting a highway through and disturbing a bunch of wetlands, they'll have to buy a certain amount of credits and then they will go out into what is a private market by wetland banks and they have those available for sale and then they buy those credits which satisfies their core permit.

##### [00:49:42.790] - Speaker 2

So that's the regulatory process. The fascinating part about mitigation is you buy and acquire pieces of property and then you rehab them. You update the water quality of the wetlands, the vegetation, you improve them. And so it's an overall when we're building these infrastructure problems and sort of tearing up dirt, if you will, to do those. On the other side of it, it's creating a balance where you're going to be conserving property, improving property and habitat for wildlife and otherwise. So it's a really interesting deal and I'd encourage you to maybe look at doing another webinar on that topic.

##### [00:50:30.840] - Speaker 1

Yes. So we've got a couple of questions on eminent domain also and again, I'm having a hard time within our time bounds here trying to figure out how to ask them all. So just give us an idea. If I'm a landowner and I've fallen in one of these regions, what can I do to better my position to manage this in a way either to help me meet my individual goals or for maximum profit if that turns out to be my individual goals, what's the compensation process, et cetera. So kind of walk us through a general high level view of that.

##### [00:51:05.660] - Speaker 2

Yeah, I'll give you a brief view on that because spend a lot of time working in that area. But, I mean, if you get the knock on the door as a landowner and they say, look, you're going to lose your portion of your land to a reservoir or some other project, you got to understand, one, that's a complex negotiation. It doesn't mean that the other people are bad, but they're not looking out for your interest. So you have to initially decide, do you feel comfortable negotiating this trade on your own, or do you need outside help from a lawyer, an appraiser or otherwise? But what you're working on are a couple of things. One, compensation, and that is one, for the value of the land that you lose that's just going away. But then the second category, which is many times overlooked by landowners, is, I'm keeping a portion of my land. What is the lost value on the portion of the land that I'm losing? State law provides that you're compensated for both. One, the land you lose and then two, lost economic value of the land you keep. And so you have to make sure that you're getting an appraisal or you're coming up with numbers to justify what your claims are on those.

##### [00:52:25.200] - Speaker 2

But I see too often landowners who don't know about that second category of damages overlooking it because, of course, the other side, they're not going to bring it up. And that's very important to know and understand. The other piece is in any property acquisition, there's going to be uneasement, deeds and legal instruments to ensure that you've got the amount of protections in there that you need regarding access for the authority or whoever it is that may be coming and going on your property in perpetuity to define those rules of the game.

##### [00:53:08.250] - Speaker 1

Good. Again, I think that's probably one of those topics we could spend a whole webinar on. Absolutely. But that's at least high level view.

##### [00:53:16.620] - Speaker 2

I'll mention one thing just as a resource, Preston, that I teach as an adjunct at A and M Law School, and we taught two years ago now special projects course on eminent domain. And our 26 students did research nationally on all eminent domain laws, and they prepared a report which is available online. If you want to type in Texas a law school eminent domain, that should come up, but it gives you a good overview, kind of an unbalanced look at certainly the policy issues and how it works. And there's some other good AgriLife publications out there on negotiating when you're in an eminent domain context. So think about that.

##### [00:54:01.410] - Speaker 1

Good. All right. Well, I feel like we're kind of wrapping up our time. Jim, is there anything we didn't cover that you want to make sure we say before we close out here?

##### [00:54:13.830] - Speaker 2

No, I don't think so. I really, again, credit to you personally for recognizing how important this is to your area out there in Sulfur Springs in Northeast Texas. I always like to see landowners and AG producers getting more involved in the process because they're so busy. It's difficult for them to do that. But it's very helpful to have many voices involved in projects like this to ensure that the final outcome is balanced, because you can't wait too long to let folks hear your voice. So thanks for having me.

##### [00:54:50.170] - Speaker 1

You bet. Thank you so much, Jim. Just so everybody is aware, there will be a few next steps when we hang up here. Pretty soon you'll get a survey from us. This is the first webinar I've ever done, and I would appreciate your feedback. I personally love interviewing experts and would love to do this in the future. So if it's something that you're interested in, if there's a topic you want to hear, even not limited to water, I'd love to hear about it, but also give us feedback on this particular webinar, let us know how it went. Also, we did record this, and we will post it to the Texas Credit website once we have all of that done. I'll send out another email, probably at the end of this week or beginning of next week, so that you can view and share the recording as desired. So we really appreciate everybody taking the time to join us here, and I hope you found it informative. If there's anything we can do for you, my contact information will be both on the event right page, but then on these follow up emails as well, so don't hesitate to reach out.

##### [00:55:50.670] - Speaker 1

We really care about land in East Texas, and, yeah, I don't think we can find an issue that affects more acres in Northeast Texas than water development. So thank you, Jim, for your time and your expertise and your willingness to share here. You bet.

##### [00:56:07.500] - Speaker 2

You all have a good afternoon.

##### [00:56:09.150] - Speaker 1

All right. Thank you, everybody.