TRANSCRIPT INTERVIEWEE: Tom Mason INTERVIEWER: David Todd DATE: June 19, 2020 LOCATION: Austin, Texas, by telephone TRANSCRIBERS: Trint, David Todd FORMAT: MP3 REEL: 4022 FILE: Geese\_Mason\_Tom\_AustinTX\_19June2020\_15125894214\_Reel4022.mp3

**Google Voice** [00:00:00] This call is now being recorded.

**David Todd** [00:00:03] Tom Mason,.

Tom Mason [00:00:06] Hey, David Todd. How are you?

**David Todd** [00:00:08] I'm fine, I'm fine.

**Tom Mason** [00:00:11] Yeah. Sure. My pleasure.

**David Todd** [00:00:16] I think our watches are, are perfectly synchronized.

**Tom Mason** [00:00:25] Well, this is a good time. Janis is walking with, visiting a friend outdoors, keeping an appropriate social distance. And I've been reading a history of the United States by Jill Lepore, and it's just been opening my eyes, oh my gosh.

David Todd [00:00:42] OK.

Tom Mason [00:00:42] Anyway, this will be a good break.

**David Todd** [00:00:44] Well, we're all into history over here. And, and thank you very much for helping us understand a little bit of the conservation history in Texas. And I was hoping that, with your approval, we could chat a little bit about water rights and some of the aspects of that that affected the wildlife in the Colorado basin. And so towards that, I wanted to see if I could run through a little preamble about, I guess, the sort of protocol here.

Tom Mason [00:01:25] OK.

**David Todd** [00:01:25] And see if that if it's agreeable to you.

**David Todd** [00:01:30] OK, well, so basically, with your approval, we are planning on recording this interview for research and educational work on behalf of the Conservation History Association of Texas, for a book and a Web site for Texas A&M University Press., and for an archive as the Briscoe Center for American History over at the University of Texas at Austin. And you would have all equal rights to use the recording, as you see fit as well. And I wanted to make sure that that sounds like an agreeable thing to.

**Tom Mason** [00:02:07] Sure. So I'm glad to participate. But I have to give a disclaimer. You know, I was looking at some of the questions you sent over yesterday, the day before. Some of the events that happened after I left LCRA, I'm not that conversant about, not in terms of detail or with any great deal of certainty.

David Todd [00:02:33] Sure.

**Tom Mason** [00:02:35] I just wanted you to be aware of that.

**David Todd** [00:02:36] Yeah. Yeah, I. I thank you for the caveat. That's good to know. Well, with, with all those disclaimers in mind and I think a lot of Tom Mason modesty, I, let's dove into this.

**Tom Mason** [00:02:55] I have a lot to be modest about, let me tell you.

**David Todd** [00:03:01] Well, you're nice. So, here we go. Well, today is June 19, 20. It is Juneteenth.

Tom Mason [00:03:15] Absolutely.

**David Todd** [00:03:15] Yeah. And my name is David Todd. And we are conducting an interview with Tom Mason, who is an environmental lawyer who has worked as a general manager and general counsel for the Lower Colorado River Authority. He was assistant general counsel for the Texas Department of Water Resources. He was a director of the Water Quality Division of Texas Water Commission and a partner with the firm of Henry Lowerre and Mason. And he's done many other good things, but that's just a short list.

**David Todd** [00:03:49] Today, we'll be focusing on discussing the history of water rights and deliveries in the lower Colorado River, with the disclaimers in mind that Mr. Mason mentioned and if possible, to talk a little bit about the overlap with some of those water issues with the fortunes of geese and other waterfowl in the basin.

**David Todd** [00:04:13] And I guess the, the entry point for this is that goose populations on the Texas coast are what, about a quarter of what they were 20 years ago. Snow goose in particular have dropped by maybe 80 percent over that same time period.

Tom Mason [00:04:30] Wow.

**David Todd** [00:04:31] You know, it's a puzzle. And I'm hoping that we can talk about maybe one factor there (probably lots of factors to why that's happened), but water, I've heard it may be part of the issues involved here.

**David Todd** [00:04:46] Anyway, the question I thought we might start with, and it's the standard one for us, is to ask something about your background and your interest in wildlife and the outdoors and conservation. Where did that originate with you?

**Tom Mason** [00:05:08] That's a good question. The older I get, the more hazy that seems. I thought I was going to go to college to become an oceanographer. I've been inspired by Jacques Cousteau. I wrote an endless series of research papers in high school, maybe even in junior high, about him and he was still just at National Geographic, long before he was on television. And later, interesting because my law partner, Rick Lowerre, was also became influenced by a talk he heard in California by Jacques Cousteau, which turned him towards environmentalism, to become an environmental lawyer.

**Tom Mason** [00:05:57] But more specifically, when I was in law school at UT, I got a job clerking with the Environmental Protection Division, courtesy of Jim Marston, who now heads up the Environmental Defense Fund, EDF Texas office, and has for the last 30 years. And it's, I'd gone to law school in part because I want to do something involving the public interest and the group that that worked in the Environmental Protection Division, the state Attorney General's Office. They're just an amazing people and they really cared passionately about the environment.

**Tom Mason** [00:06:40] And water has been an important issue for me for a long time. I grew up in Pasadena, Texas. Where the Houston Ship Channel was as polluted a body of water as you can imagine. I'm not sure that it ever caught fire like the Cuyahoga up in Cleveland, but it's pretty rank. And in any event, those are some of the things that turn me on to that.

**Tom Mason** [00:07:06] Plus, I had some family that really liked the outdoors, came from rural country backgrounds and appreciated the natural world a lot and taught me about it. But that's the long-winded version, I guess, right there. It just sort of felt right and it seemed like something I could do with a law degree that might help things a little bit, especially in the area of water and water quality.

**David Todd** [00:07:34] Well, you know, as we really briefly mentioned during the preface to this conversation, part of your career, I guess one of the real highlights is, was being at the Lower Colorado River Authority, serving as general counsel and then general manager. And the LCRA is, is certainly a big player in managing water storage and deliveries and rights for the basin. And so I was hoping that, again with your caveats in mind, if you could help us understand a little bit of the history of the development of water resources in the Colorado. And maybe one place to start would be just to talk a bit about rice farming and I guess was one of the major early uses of water in the basin.

**Tom Mason** [00:08:30] Absolutely. And you're right, it was rice farmers, irrigators there in the rice industry, played a major role in lobbying the Texas Legislature to create the LCRA. So I think the first rice crops in the Colorado River basin were supposedly around 1880 in the Eagle Lake area. Over time it grew. I think they've been active early on to promote sugar and growing sugar cane, generally along the coast, but rice seemed to be a better crop, because of the soil conditions and other things like that. The big problem in the Colorado River basin was that there were, as it used to be, almost always the case was either too much water or not enough. So droughts and floods were the two banes of rice farmers. And that was also true, or at least the flood part, was the bane of the city of Austin before the Highland Lakes dams were built by LCRA, in the '30s and the beginning of the '40s, the city of Austin got flooded regularly.

**Tom Mason** [00:09:49] So you had these two different groups that were concerned about the Colorado River, and actually joined forces to push for the creation of something essentially modeled after the Tennessee Valley Authority to build dams that would do two things. One, they would help mitigate the flooding that was just really, I mean, just horrible problems for the city of Austin. And, for the rice farmers to give them a more reliable source of water during drought periods, because with anyone who relies upon a river that's not, doesn't have dams or reservoirs on it, it's just, you just have the run of the river, whatever is in the river that particular day or season, it's what you have them. We have dry times and wet times and you have too much of either one, as far as farmers go. So that, the rice farmers really were a major part of the economy in the Colorado River basin, and they did work with the city of Austin and some other central Texas interests, but especially the city, to promote the creation of LCRA.

And because the board membership of LCRA is now appointed by the governor with members, fifteen members, from different counties, most, about twelve of which are right along the river itself. Consequently, the rice-farming community has always had at least three or four members sort of representing their interests coming from oh Matagorda and Wharton and Colorado counties.

**Tom Mason** [00:11:46] So they had that influence for a long time. And rice farming continues to be big. It's just not as big an industry as it used to be. And it goes up and down for a variety of reasons - international competition, Vietnam, Thailand and so forth. The state of federal subsidies, I mean, without the farm subsidies, you need to check with other experts but my understanding is that rice really wouldn't stand on its own. But that may be said about a number of crops at different times across the United States, but that's a big, big element for rice farmers. And then availability of water. Now, of course, it's key as well. So that's sort of the rough overview. I can get into more detail or step away from that. Careful how much you'd like at this point.

**David Todd** [00:12:44] Well, so one aspect, and I really appreciate what you've already told us, but can you talk a little bit about the, those first water rights that were secured by those early rice farmers which I guess became senior and very powerful in negotiations with the LCRA and the city of Austin and, you know, all the upstream users.

**Tom Mason** [00:13:10] Right. Back in the early decades of the 20th century, the state had a water rights system that, and this is going to be a gross simplification, but in essence, if you were using water and you could document that somehow, and I think typically you'd just be, say, a farmer. And we'll talk about rice farmers. You would file something with the State of Texas, a certified filing saying I've been using for the last three years about this much water to irrigate so many acres, of, say, rice. And when you filed that, made that certified filing, statutory filing, then you had your place in line. Texas, and yeah, in Texas, the water rights are based upon seniority - first in time is first in right. Which really is just a shorthand way of saying that, the sooner you make a claim to a certain amount of water that you are diverting from any particular river in Texas (with the exception maybe of the Rio Grande, but all the internal rivers) that you can continue using that water for that purpose. And if someone who starts diverting water at a later point in time and makes a filing wants water during a drought, and there's not enough water for the two of you, you're ahead of, in line, of that that other person.

**Tom Mason** [00:14:54] So rice farmers had early filings, and for very large amounts of water, that would be available from the Colorado River. And what happened was that a number of irrigation companies were created because part of the problem with the water supply in the rice industry is it used a lot of ditches and canals and pumps to get the water from the river to your particular farm. And so irrigation companies were created and there ended up being not that many. I don't remember the exact number, but they became more and more consolidated and farmers would rely upon this irrigation company to provide them water. And so you ended up with Gulf Coast Water, the Garwood Irrigation Company, Pierce Ranch. There's one or two others like that that each one of those served very, very, very large tracts of land with many, many different rice farmers and tons of acreage, lots and lots of acreage devoted to rice farming. So they those irrigation companies ended up holding those water rights for the most part; not that many individuals did. One exception, I think, was Bill Lehrer and his Garwood Irrigation company, that was. But in any event, so they had these senior water rights.

**Tom Mason** [00:16:39] And what happened was that over a period of decades, LCRA started acquiring, they just bought up those irrigation companies, not because they wanted to be in the rice farming business, but they wanted those senior water rights. Because, again, the older, the earlier your filing was, the earlier your water right was dated, it meant that it was more valuable because you would have a better claim on water during, during dry times. And LCRA acquired Gulf Coast, Eagle Lake, eventually Peerce Ranch, also, eventually Garwood Irrigation, and cut different deals with different ones. But it bought them: what they wanted were those senior water rights. And ultimately that was part of the plan for the LCRA to try to manage their part of the Colorado River watershed as a system and help ensure also that those water stayed within the basin.

**Tom Mason** [00:18:01] And I don't know if that's enough of the sort of background that you're interested in, or I can go into a little bit about the city of Austin and the adjudication.

**David Todd** [00:18:11] Yeah, I'd be very. Yes, please. I'd love to hear about the adjudication. That's great. Yeah.

**Tom Mason** [00:18:17] OK. Well, and one quick side note. You know, the word, "rivals", comes from the Latin word for people who share a river. And it kind of goes to the point that people are always fighting about water, it seems like, depending on if you are upstream or you're downstream, and what kind of use you want to put to it. Well, in the middle of the 20th century, the state tried to, to settle a lot of disputes about water and who had what water rights. And so an adjudication, a Water Rights Adjudication Act, was passed and implemented. And so the state, through its state water agency, went across the state, through every single river basin and held hearings and tried to sort out all the different statutory, certified filings like the ones done by farmers way back in 1910 or whatever, all the way up to the 1970s, by which point different laws get passed and all. But in any event, they were trying to make sense of who owned what water, in what amounts, and when they were allowed to divert water from, in what quantities, and so forth. And so it was a comprehensive effort to, to settle the pretty unruly system of water rights claims that different people were making.

**Tom Mason** [00:20:02] And different groups and let's say, for example, the city of Austin was making claims about water rights on the Colorado River that differed from what else LCRA thought, along with other people who owned water rights in the Colorado River Basin. So this adjudication finally ended up with a final order that included a settlement between the city of Austin, which had made claims, along with LCRA, for certain amounts of water within the Colorado River basin. So in that order, LCRA was told to develop a water management plan, which it did. And that water management plan had really important principle involved that was key both to the city of Austin and also to irrigators downstream. And that was this notion of firm water supply and interruptible water supply.

**Tom Mason** [00:21:24] So the city of Austin, like other cities, wants what is called a "firm water supply", meaning that's something they can count on through what's traditionally, the benchmark is, through the worst drought of record. So if they want a contract for water supply from LCRA, which could do that because it built these dams to create the Highland Lakes and the two water supply reservoirs. In the LCRA chain of dams and reservoirs are Lake Buchanan and Lake Travis. Those are the only two water supply reservoirs. And city of Austin was interested in having a guaranteed firm water supply from that stored water, so that those dams would impound or hold back the extra water after flush, you know, heavy rain periods and save it for the dry times when otherwise, if you were just relying upon the river, you wouldn't have a whole lot. Without the dam there, you have what are called run-of-river

rights. It's just the water that happens to be in the river at that particular day. Stored water is the water that's behind those dams, what you call the reservoir. And LCRA got all the permits for those dams and that was, again, part of that adjudication. LCRA had asked for a whole lot of water, and this was long before I ever joined them, in their initial claim for the water to the basin. And it got much less than they had asked. But that's typical of a lot of people making water rights claims. You ask for a lot and you get less than that.

**Tom Mason** [00:23:13] But the key point of the adjudication really was this water management plan that had these two types of water. So I mentioned the firm water. And you can only understand that in the context of interruptible water. The interruptible water was going to be the water that could be made available, and really, this is for the rice farmers downstream, who would not pay nearly as much for water as firm water customers like the city of Austin who have to have a guarantee that at least through a repeat of the drought of record, LCRA would be able to supply them water. That's what they were paying for, was that certainty. Rice farmers would be able to buy water from LCRA at a price that was much less than that. But it would also be interruptible water, meaning that if there was too much firm water demand, then LCRA could, could curtail or interrupt the water supply that year for the farmers. And those interruptible water contracts were a year-long contracts. Every year they'd be entered into with, between the irrigators and LCRA.

**Tom Mason** [00:24:38] And the reality is. Big city, well, cities tend to buy 30-year or longterm water supply contracts because you want to lock up water that you can then grow into as your population increases. It's just good city planning. And so you spend more money up front for the long haul, but you may buy, let's say just that, I'm making this number up, one hundred thousand acre feet. But you don't use all that water, that's the first, say, even 25 years. Maybe not until year 30, because you're basing these on projections. So the water that's left over that you're not using - let's say you use only 20,000 at the 100,000 acre feet. That leaves 80,000 acre feet that LCRA could provide to interruptible customers downstream. And that's a bit of a gross simplification, but that's the essence of the firm versus interruptible water supply.

**Tom Mason** [00:25:39] And that worked great because, remember, Austin now has a population point well in excess of a million. When I moved here in 1971, it was not. It was about a quarter of that. It was under 250,000, for sure. Or maybe even 200. And you didn't have to go much before that, that it was a lot less than that. Austin just didn't use much water. So there was plenty of water for everyone. Austin didn't worry about their water supply. The irrigators didn't have to worry about their water supply. There was lots. And the drought of record, back in the day, was the drought of the '50s from '47 to '57, And the water that LCRA promised when it entered into the firm water supply contracts with the city of Austin or other cities or businesses, was based upon the hydrological records associated with the 1950s drought of record.

**Tom Mason** [00:26:47] So you move forward in time. And what happened, particularly, is that the city of Austin grew almost exponentially. And the entire region of central Texas grew incredibly fast in the late '80s and '90s and the first part of the 21st century. Of course, it continues today. And that put a huge demand and strain on those firm water supplies, on the one hand.

**Tom Mason** [00:27:25] And on the other, we've entered into a period of climate change. We don't have to get off into that unless you really want to. But more to the point, we ended up with what LCRA has defined, and the state of Texas, the Texas Commission on Environmental Quality, the state water agency, has agreed is a new drought of record, which is pretty much

from roughly 2000 or so, to 2015, that was worse than the drought of the 50s. And the reason that was important, or is important, is that it reduced the amount of water that LCRA could make available through, if there was a repeat of the new drought of record. So suddenly there was even less, there was less water available.

**Tom Mason** [00:28:19] And, and couple all that with during that new drought of record. And unfortunately, when I was general manager, towards the middle and early end of that new drought of record, lake levels were dropping precipitously. And we had a huge, huge outcry from people who had businesses, and more especially, expensive real estate on the Highland Lakes. When LCRA was created in the 30s, pretty much the only people living on those lakes were ranchers and farmers. And you had a few fishing cabins and things like that. You know, a lot of people were raising goats and some cattle, but it wasn't this destination getaway place, or a place where people built multi-million dollar mansions. That's a very new development. And many of those people were outraged to see lake levels dropping so much. And even though, LCRA, they still felt like it could provide the city of Austin, for example, honor its commitments for firm water, recreational users and real estate interests were really upset when they saw those water levels go down.

**Tom Mason** [00:29:46] And they became even more upset when they realized they were going down so what looked like so quickly, because LCRA was still making releases, under year-long interruptible water contracts, to rice farmers downstream. And this reflects a huge shift in our basin and within our state's economy, frankly. We were moving from one era to another. Rice farming was a huge part of the Texas economy for a long time. It's not so much anymore. I've seen figures that claim that hemp is more valuable to the Texas agricultural community than rice is. And it's far behind wheat and corn and cotton, things like that, sorghum. But in any event, you had this cultural shift. You had this economic shift. And things got really, really hot during that new drought of record.

**Tom Mason** [00:30:51] And what has happened is that LCRA, in consultation with stakeholders up and down the basin, everyone from golf course operators to environmentalists and conservationists to municipalities, to farmers, to ranchers, cetera these different stakeholders. They provided their input in the water management plan, which was revised yet again. It's been revised pretty regularly from the beginning, and to try to reflect new user concerns, to reflect better hydrology, to reflect changes in the law in some cases, but to make sure that it's current in every respect and still is working well for everyone. And what has happened to rice farmers is that, and I think this is a broad, arguably overstatement, but I think many have felt that they have been shortchanged terribly, or at least dramatically, because they were there at the beginning with LCRA, say they thought they would always have this water supply. They helped create LCRA. They are a longtime tradition. There are multi-generation families in the rice farming business in, in our basin. And the vitriol that was expressed by upstream interests, particularly people around the Highland Lakes, and folks in the city of Austin area, was pretty remarkable. And those meetings to update the water management plan were not often pleasant. But the latest, the later versions of the water management plan effectively put more restrictions on when rice farmers could count on getting that interruptible water.

**Tom Mason** [00:33:07] Now, I need to make one side bar, a digression, here to explain something. Under the firm water / interruptible water scheme, the reality is that at some point in the future, essentially, all, or most, of that firm water was going to be spoken for. And even though, as different cities in the economy and the region grew into that water (so city of Austin started using, you know, 80 percent of the water they had reserved and were paying

for in the 30-year contract), that would leave a lot less water available for interruptible farmers. And over time, there won't be that much interruptible water left. I just don't think many people envision this happening this quickly. And then you couple that with the new drought of record, with climate change issues, with, again, this dramatic growth in central Texas that was just unprecedented. And things changed so fast that the rice farming community, was, they got to a place where they could envision in theory, I think, way down the road, much, much faster. It just seemed to happen all of a sudden to them.

**Tom Mason** [00:34:46] Could you talk just a little bit about how you see climate change affecting this sort of acceleration, this change in the water balance between upstream and downstream, and the present and the future?

**Tom Mason** [00:35:06] Well, I can't say a lot about it. So, I just I don't know. My sense is, from what I was briefed on, from what I've read, is that it makes water planning and forecasting and management much more difficult because more than likely, regardless of what's causing climate change (and I have my own opinions about that, and I think it's pretty settled). I tried not to get into that part of the discussion with the LCRA board. I just said, the fact is there is climate change, no matter what you think, causes it. Here are the consequences. And it's kind of, in the shorthand version is, more intense floods and rainfall events, hurricanes and things like that, coupled with more intense and longer duration droughts.

**Tom Mason** [00:36:02] So, that makes it a little bit difficult to, to manage this, this really pretty complicated water supply system with a pretty decent, large-sized watershed. The sort of assumptions that people made for many decades, I think, are just having to be adjusted pretty dramatically. And that's, it's a moving target. It's just, it's very dynamic. And we just don't know. Couple with, on top of climate change, I'll just add that we know more about droughts of record, having more information about tree-ring studies and things like that in the Southwest. And we have realized, or scientists tell us, that there have been 30-year droughts before in the last 500 years and at least one major drought of roughly 10-years duration, I think, every century for the last five to six hundred years.

**Tom Mason** [00:37:05] So, again, in shorthand, things are worse than we thought even without climate change. And then your throw climate change on top of that, with this greater likelihood of intense flooding and heavy rainfall events, but longer droughts and much more intense droughts, meaning you will have this huge demand for water during the drought periods in which every drop's incredibly important because you don't know how long it's going to last. And by the way, surface water supplies, the evaporation rate on a reservoir is huge during a Texas summer. I mean, you can lose as much water from evaporation as the city of Austin uses. And it's just pretty astonishing. But that makes water, guaranteeing water supplies for anyone, much more difficult to predict with any sort of precision, or I should say, with reliability. And so I think that's forced LCRA to be more conservative in terms of predicting when and for how long they'll have enough water to offer their firm water customers.

**David Todd** [00:38:31] OK. Well, this is, this is all really interesting and helpful. Thank you. So I think the way you sort of cast the plot, there's this tension between upstream and downstream, residential, commercial and then agriculture downstream. And junior folks, or recent comers upstream and senior folks downstream.

**David Todd** [00:38:55] And I was wondering if you could also talk a little bit about folks to the, to the south of the Colorado River basin, who I gather have also looked at the Colorado

River water and coveted it - folks in Corpus Christi and San Antonio. And how has that sort of played into the balancing act that LCRA has had to play?

**Tom Mason** [00:39:24] Well, two things. One, Corpus Christi actually bought some water rights from the Garwood, some of the Garwood water rights, and as part of their water supply planning. And so that's a done deal. And special legislation was passed to allow it. You don't need Robert Caro, but someone could write a really good, interesting story about how that happened, some of the players involved. LCRA didn't want to see water leaving the basin. And not just because, while LCRA would like to own those water rights to manage it themselves, it's still better, from an LCRA perspective as the main water manager, to have as much water, no matter who has rights to it, to stay within the basin. In part, because of water that is being used within the base can be used for much more purposes, like instream flows, for example. And it can conserve the amount of water that you would have to release from storage, even if a third party is using this. But when Corpus is taking it out of the basin, then you have a lot less that you can play with and much less flexibility.

**Tom Mason** [00:40:50] The bigger issue in some ways was the city of San Antonio, when it was also seeing this explosive growth. During the state-mandated water planning process, they submitted plans for their future water supply that included, I want to say, a half a dozen proposals to take water from the Colorado River basin, which is really, really difficult to do under current law, under traditional Texas water law. In essence, you had to, absent special legislation, which was granted for that Corpus water rights transfer out of basin, in essence, you had to say that there will be no net harm to the basin of origin by taking water from there to another river basin. And that's pretty hard to do. And no one's really been successful in any significant way in doing that. Absent, again, a special narrow bill for that one water rights Corpus deal, for example.

**Tom Mason** [00:41:59] So as a defensive measure (this is, I think Mark Rose was general manager and Joe Beal succeeded him right before me, I think Mark saw and then Joe Beal followed through on this notion), that if you worked out a deal with San Antonio, maybe we'd all end up with more water through a water-sharing agreement. Better to joint forces rather than fight. And I think the thinking at the time, also, among some of the LCRA, was that San Antonio has a larger, then had a larger, legislative delegation than the city of Austin. And again, why not work together? So a proposal was made, a really complicated contract was created, where San Antonio would study and pay for different water supply studies to seek. We build reservoirs downstream and come up with ways to maximize the amount of water so there'd be enough water for, for San Antonio to transfer and use and also increase the water supply for the Colorado River basin.

**Tom Mason** [00:43:18] Unfortunately, the studies in LCRA's view, when you really looked closely at the population demands and projections and what the study showed we'd like to be available, the LCRA board was not convinced that it was a good thing for, for LCRA. And that in fact we would be put in a place that we thought we could, that there just wasn't enough water available. This is also during a time when this drought was going on, and it's becoming more and more apparent that we need to be really careful about this in terms of making these projections and assumptions. And so the board said, after looking at the studies that were completed, that they didn't think there was enough water for both San Antonio and LCRA as contemplated by that contract. San Antonio sued. LCRA initially won in court and the Supreme Court changed the law in another case, in the middle of all this, that ultimately led to LCRA settling with San Antonio over that, their lawsuit on the water-sharing proposal. And in essence, paid San Antonio for the studies that, that San Antonio had had footed the bill for.

**Tom Mason** [00:44:48] But that kind of, I mean, that was a pretty dramatic effort by San Antonio, because what to me, it just really underscores when a city is growing, what you really don't want to happen is for you not to be able to say to businesses that are moving there, you know, say a new Toyota truck plant, let's say, or real estate interests who want to develop you know, giant tracts of property for these new employees who are coming in, residents of any city. If you want to issue bonds, bond, bond holders, are going to say, you know, can you really pay this? Will you have the taxes? Can you support, and water supply is really important for long-term growth of any major city. And so cities in particular are going to fight incredibly hard and look at any possible source of water to help maintain their growth. And that was part of what San Antonio was doing through that effort.

**Tom Mason** [00:45:49] But, in any event, those were the two major efforts by San Antonio at the time. Since then, San Antonio has drilled or has purchased groundwater rights from well outside your basin and has been building pipelines to move groundwater to San Antonio, as opposed to surface water. And that's something we may see more of that. But anyway, I'll stop with this.

**David Todd** [00:46:25] Yeah, no, this this health sort of set up the stage for how contentious things got over what was a, I guess, a limited resource and becoming more and more dear as, as you know, the cities and economies and populations all grew.

**David Todd** [00:46:43] Can, can you talk about how this all came to a head? And I guess this would be 2012 when the LCRA had to cut off these interruptible water deliveries to the rice farmers?

**Tom Mason** [00:47:03] I can only talk to the, to my general understanding, as I'd left, I left in July of 2011. But the curtailments, as I recall, and you can check with other people at LCRA, David, to get, to verify this. The trigger levels that govern when interruptible water will be available or not available, had been adjusted to the various water management plans, again because of better hydrological data, increased demand projections based on actual usage, acreage to be expected or not expected to be put into irrigation, the same thing with business demands from other water rights holders, and so forth, or people who are buying water from LCRA. And in essence, LCRA revised the water management plan and the Texas Commission on Environmental Quality approved changes in some case, there were emergency orders. But also, made the water management plan, had been changed to make it to maintain higher levels of water in the Highland Lakes, or Lakes Buchanan and Travis.

**Tom Mason** [00:48:32] That translates into meaning it's going to be more likely that irrigators downstream will be curtailed more quickly. In years past, if the water levels were at that point, they would have gotten that water. And I think LCRA saw that, and TCEQ, think, agreed, or had to agree with these, these new trigger levels. That was a better approach because the firm water supply is basically just, it's, it's a higher value or priority for a water supplier than interruptible water. And you have to maintain the integrity of your firm water supply. And if there's a doubt that you'll be able to honor that commitment, then, well, you're in big, big trouble. And again, I can't speak to the specifics of the 2012 decision, but believe me, that stuff was incredibly controversial. The rice farming community was really, really unhappy. Of course, people upstream were unhappy.

**Tom Mason** [00:49:47] And I guess it became a joke at LCRA that I hear all the time. Ninetyseven percent of LCRA's revenues, roughly, come from electricity generation or transmission income. Only about three percent from water, but probably 97 percent or more of the controversy comes from water.

**Tom Mason** [00:50:17] This just, you could not keep the lake levels high enough on a regular basis to ever satisfy the interests around the Highland Lakes. And the rice farming community almost always seems to feel that they're getting just more and more pressure and pushed further, further away from the water that they have counted on for all these decades. And they didn't agree with the new triggering levels of what, you know, how low or how high the lakes had to be in certain periods before they could be allowed to take the interruptible water. They fought that. But the reality is, there's only three rice farming counties represented on the LCRA board. On a 15-member board, when you could only have at most, four, for technical legal reasons, board members from the rice farming community, those interests can get outvoted pretty pretty quickly. And, those board members fought really hard for rice farmers.

**Tom Mason** [00:51:37] But the pressure from the city of Austin, from people upstream who have businesses, people who are involved with the Highland Lakes real estate industry, homeowners, marina operators, recreational interests, etc., it just kind of goes on and on and on. They were adamant that the lake levels had to be maintained and we couldn't risk draining the lakes just to support them, using their language, just to supply those rice farmers downstream. And one of the big differences, and throughout this, is just, even when the lake levels went down, there still was going to be enough water to maintain, to honor the firm water supply contracts, but people had gotten culturally and economically accustomed to, higher lake levels for recreational purposes, for real estate purposes, for esthetic purposes, etc. And the rice farmers just didn't have the clout to fight that. Now, again, on the 2012 decision, you'd have to, you might talk to someone like Myron Hess or Lynn Clancy, Lynn at LCRA, Myron used to be with the National Wildlife Federation. They were both, they're both really good water lawyers, and were involved with that process. And they could give you, they could give you the specifics of the 2012 decision, which I just, the truth is, I can't. I wasn't there.

**David Todd** [00:53:21] Well you know, it's interesting, because it, it sounds like there was. There's kind of a legal dispute here about how to interpret firm versus interruptible, and then there was this political fight, you know, between the upstream counties and cities and the downstream ones. And, you know, twelve board members versus three. And I could see how contentious it would be. I guess the other player in this that we haven't really talked about is interests, as you've mentioned Myron Hess, is the instream flows, estuarine flows, the environmental flows, that I guess were part of this, this whole dispute. How did how did that play in?

**Tom Mason** [00:54:19] Again, I can't speak of the 2012 decision, but leading up to that, environmental flows were viewed, I'll just say, by most river authorities, not necessarily all I would say, San Antonio River Authority's probably an exception, along with LCRA, very few River Authority managers or boards, in my view, had seemed to demonstrate a very serious commitment to dedicating flows for inflows, environmental flows to the bayes and estuaries. And LCRA, I'm proud to say, I think, was a real exception to that. It, it took it seriously. Not as much water was committed to instream and environmental flows as some environmentalists would have wanted, but I think more was provided than they probably would have gotten from most other river authorities. And LCRA talked to those people. But they were, I think they were viewed by many at LCRA as, well, they're just one other stakeholder, just like rice farmers, like municipalities, like the city of Austin, like businesses, golf course operators, et cetera. **Tom Mason** [00:55:48] But the state of Texas had dictated that environmental flows had to be considered, and that helped a lot. It gave advocates for environmental flows have better, better standing in a sense to, to insist upon it. And so there are environmental flows essentially set aside in the water management plans that have been adjusted periodically based upon hydrology, studies of different bay salinity or aquatic life and things like that. But most, or a lot, of the arguments, or some of the disputes, I should say, also were similar to the rice farmers in the sense of if there is a really serious drought, when do you say, well, we're just not going to release any more environmental flows or water for formerly had been aside for environmental flows. And how you came up with that number and what that number would be, and what conditions would trigger no longer releasing those waters, became incredibly important. And it was argued like crazy.

**Tom Mason** [00:57:10] I mean, there's still people in the state of Texas, some of them in, I think, still in the water management business, who view water that reaches the Gulf as wasted water. For me, that's hard to imagine. If you stop and think about how important that is, if you understand science, and know anything about ecology, but there's still some of that mentality. So, and it certainly exists within the Colorado River base. It's not unique. I mean, it's just kind of everywhere. But the, the fight often turned upon the specific terms of how much, when, and how curtailment would take place in a really bad drought situation if the storage in Buchanan and Travis Lakes was so low, when could or should LCRA stop releasing water for Matagorda Bay, the second largest bay system on the Texas coast, and also for instream floods. And that's what a lot of that fight was about.

David Todd [00:58:23] These trigger levels. What, what is, what is too dry?

**Tom Mason** [00:58:28] Yeah, yeah, and, you know, part of argument might be, well, you droughts happen in nature also. And so if we're having a drought anyway, why would we be releasing water? That was one of the classic people who wanted to keep water in the lakes would make that argument a lot. And the science is not settled and probably never will be. The studies are always being updated and so forth. And every time there is a water management plan revision proposed, that's always brought up - the whole issue of, well, how much water do we have to set aside. Or, on the other side, you know, how much more water can we set aside and in what way? Series of pulses or continuous, etc. And it was just debated every single time. And the circumstances, perhaps because of better hydrological data, because of scientific studies on bays and estuaries or aquatic life, et cetera, it has to be reevaluated. And it's going to change every single time on it's likely to. And that fight just doesn't seem to go away.

**David Todd** [00:59:55] Well, it sounds like there's very little you can do about trying to encourage it to rain and so it, it sounds like a lot of the emphasis is just how do you slice the pie in a more equitable way, or least one that recognizes the political forces and legal realities. But I know LCRA also tried to use or encourage folks to use water more efficiently. And I was curious if you could talk a little bit about things like groundwater use and field leveling and these automatic canal gates, pricing models, the Arbuckle reservoir, any of these things that tried to sort of mitigate the supply, kind of, limits that you operated under.

**Tom Mason** [01:00:49] Yeah, that's, and the water conservation part is, I think that's a really good story in a sense like that. It didn't start that way. But it also is a testament, testament to how much water was available back in the early days of LCRA. That water was released not and sold to rice farmers, or provided to them, not based on a volume of water, but on how

much acreage someone had. So they could be incredibly inefficient, but they would pay a rate based upon the number of acres they were farming. And they could, they could put in two inches, they could put in six inches of water on it. And there's a huge difference if you have, you know, 30,000 acres between those two levels and the volume of water simply wasn't measured.

**Tom Mason** [01:01:43] And then as a side note, remember that the original concept behind LCRA was flood control and water supply, and the way to pay for it was to put in hydroelectric turbines that generate electricity to sell to co-ops in small cities around central Texas. And that worked great. And in fact, when they needed electricity, there was so much water and so little demand for water, they just made releases from the dams. Well, you don't do that anymore. In fact, the water management plan specifically forbids, except in an emergency to help restart the electric grid. You don't release water from the dams for the sole purpose of generating electricity.

**Tom Mason** [01:02:27] And you know, water's just become, because of the increased demand, so much more important. Thankfully, we started changing, LCRA changed its systems so that you paid if you're an irrigator, you were going to pay for water based upon how much you took, not the acreage. And it would actually be measured. And LCRA promoted and helped pay for laser-leveling to make rice farmers' irrigation efforts a lot more efficient. Because you don't want to have six inches deep here and one inch deep here. Just might get it as flat as you can, and a little, you know, the same amount of water will go a lot farther. You don't waste as much. And that was a really, really successful.

**Tom Mason** [01:03:23] Pricing mechanisms, but especially simply switching from buying water based upon how much, how big your farm was, as opposed to how much water you used was huge. It seems like a no-brainer, but in reality, I think a lot of people for the longest time, thought it was just no need for it, because we had so much water and so little other demand for it. And plus there was that element of what we've always done it this way. And there's a bit of a hard sell, because it was just a major change in policy for the farm community. But it was it's been accepted in a major way.

**Tom Mason** [01:04:06] And then on top of that, LCRA has been acquiring some groundwater supplies, they have constructed the Arbuckle Reservoir downstream to help capture water that, in essence, would not have been captured behind the dams, say, Mansfield Dam, Lake Travis , or Lake Buchanan, but instead say rainfall comes from the lower part of the basin, you can capture some of that water, put it in Arbuckle Reservoir, hold it for irrigators and some other uses, without affecting the levels of the Highland Lakes. And it improves the efficiency of the management of the whole river basin. Because you have more tools at your disposal. You're not taking water away from upstream, but you're giving greater reliability to people downstream, which is really almost entirely, not completely, but almost entirely rice farmers. And those efforts have been pushed really, really hard. They're not cheap. I think they, the LCRA was helped in terms of some; federal money is another source of financing assistance and things like that.

**Tom Mason** [01:05:32] The groundwater part of it: I resisted it when I was there. I was under a lot of pressure to acquire some specific groundwater resources that I won't go into the politics of. But, as I told the board at the time, the groundwater law was so unsettled, I didn't want to spend 30 million dollars on something that might not be reliable 15 years from then, because there were still some questions at the Supreme Court about groundwater rights and

uses and all. And that's become largely settled by now. So LCRA has moved forward and has used some, is using some groundwater supplies.

## David Todd [01:06:17] The Day decision?

**Tom Mason** [01:06:17] There's still a question, are you really just robbing Peter to pay Paul because groundwater supplies, actually, some of the flows for the Colorado River and other surface streams. But that's not terribly quantified, I think, at this point, but... Sorry go ahead.

**David Todd** [01:06:34] One other conservation thing I read about was the idea of automating canal gates. How would that work? And I think also lining canals. Are either of those big parts of the solution?

**Tom Mason** [01:06:49] I think they could be I don't know enough about automating the canal gates. I guess throughout my time at LCRA, it did seem as though we were still in the 19th century just in terms of the technologies downstream. Those irrigation canals were managed by water bosses and people who go out and check these gates and let them out manually and so forth. It's really an old -fashioned way of approaching things, which is unfortunately not that uncommon in a lot of water supply systems around the country.

**Tom Mason** [01:07:31] But the, a lot of water is lost due to seepage. A big problem with that, and we investigated that, because lining those canals would save so much water, but it's just expensive up-front. And I think ultimately you'll see more of that. But probably you'd have to have some kind of federal or state dollars to help subsidize some of that, at least, because it's just not cheap. But if you make the canals more efficient, you save so much. A classic example of that was, decades ago, Zach Lilly with Environmental Defense Fund, an economist, made an argument against a proposed dam in California saying, for the cost of this dam, you could line these canals that farmers are using now and they would get as much water at a lower price than it would cost if you build a dam to supply this. So it's kind of a win-win situation. But coming up with that money up-front to line the canals is, I think, the challenge. And it should be done. And when it is, it'll, it'll make a huge, huge difference in the amount of water that is used by the by the rice farmers. But financing that is, is tricky. And I think that's, that's the hard part of that one.

**David Todd** [01:09:16] Well, you know, it seems like, you know, water in the Colorado and everywhere, really is such a contentious mix of, you know, politics and habits and money. I was wondering if you, maybe as we wrap up our little visit here, if you could, sort of look back on and tell us if there's any, take-home lessons you have from being in the midst of these water controversies for a number of years at LCRA?.

**Tom Mason** [01:09:48] Oh, boy. The thing that I think works best is., and I'll say, I think that that it was employed during many, not necessarily all, of the water management plan revisions, is when you really do get as many stakeholders as possible, at least people representing the different stakeholder interests, together and over a period of time get them past shouting at each other and listening, instead listening, to each other so they understand, you know, why do farmers have legitimate concerns. And here's what they are. And similarly, the city of Austin has legitimate concerns. And here's what they are. And will everyone be satisfied at the end of the day when the LCRA board decides, well, here's how we're going to slice up the pie? No. But people will be a lot less unhappy. And usually you will get at least some of what you advocate for if you're part of a process. It is messy. It is prolonged. Some of those meetings are agonizing and they're almost all contentious, at least for the first half of

them, or series. But you end up with a much better product. And sometimes you get some great ideas where people actually work together. To me, that process was a really, really important one, because what I realized was that we all see the world through the prism of our own experience.

**Tom Mason** [01:11:41] And if you're someone who's moved to Austin, say, 10 years ago, when you bought a house on Lake Travis, you look at that water differently than if you're a rice farmer whose great-great grandparents started that farm, and you've been doing the same thing, work, working really hard all this time. And you like to, well, anyway. Getting those people to see what, why that water's important to everyone. And then, you know, for the environmentalists to try to explain, this is why it's important to the bays and estuaries. It's just hard for people far upstream to visualize the importance of, you know, basal flow. That sounds like a techno jargon to them. But when you hear someone talk about their livelihood, that's a different issue.

**Tom Mason** [01:12:34] So that water management plan revision process, when it's done right, really stood out to me on the positive side. The negative side was the new drought of record was just horrific, just, just terrible. And the one good thing about it was it drove LCRA to make some changes that I think they would have been a bit reluctant to do, and force other people to realize that, you know, the world is not static and we're gonna have to have essentially an adaptive management plan, where the water management for the, for the Colorado River basin is going to be pretty much in flux because things are constantly changing and we don't have a handle on all that. But those were both hard lessons in their own way. But interesting times and interesting experiences.

**David Todd** [01:13:34] So, yeah. Well, it's fascinating to have an agency and a resource for you to plan for, you have to look forward many, many decades, but within.

**Tom Mason** [01:13:49] A hundred years was our planning horizon.

**David Todd** [01:13:51] Really? Yeah. But, you know, there's going to be huge changes between then and now.

Tom Mason [01:13:56] Absolutely.

**David Todd** [01:13:58] Well, so I don't want to take all your day, but is there anything more that you'd want to add before we break to go back to our normal COVID exciting time?

**Tom Mason** [01:14:14] You had talked about your interest in snow geese and waterfowl and I was thinking you might ask about that. I don't know a lot about that. I've seen, I've, I've watched tens of thousands of geese come in. I'm trying to think was it Eagle Lake? Anyway at a board member's place on the water. That was just amazing. And when you see that many birds coming in as a full moon is rising, at dusk. It's just phenomenal. And what's accounting for the changes in the waterfowl population? I don't know, because the amount of acreage that's being actively irrigated for rice farming, every time I hear a prediction that the rice farmers are about to go out of business, it seems like within a year or two they're having their best year ever. And I don't have the numbers anymore on how much the irrigated acreage changes from year to year. And that would be worth exploring. Coupled with whether or not there is a second crop, the ratoon crop that's planted, because I don't know what the waterfowl need in terms of how long and that sort of thing. But the relationship between those migratory birds and this farming industry that's been in place for over 100 years is, you

know, it's, it's complicated. But again, most people don't know about that. There's not that many advocates for, for nature, as you well know. But I hope if you do find out some more about that, you let me know. That would be really interested.

**David Todd** [01:16:12] I will share what little I know. And you've been very kind to share a lot of what you know. So I'm just scratching the surface. Thank you so much, Tom. It's always nice to learn from you, and I appreciate your time.

**Tom Mason** [01:16:27] David, it's a pleasure, as always. Hope it's been helpful in some way. Hope I haven't misstated too much. Good luck during the Great Paus, as you say. And best of luck with this whole enterprise. My hats off to you for the amazing work you're doing in documenting all of these environmental issues in Texas. That history, it's really, really important. And we're going to be so grateful for you for a long time for having organized it, put it together and made it readable.

**David Todd** [01:16:59] Oh, well, thank you. Well, again, many thanks, and best of Janis.

**Tom Mason** [01:17:05] All right. Will do. Same to Wendy. Take care, David.

**David Todd** [01:17:10] All right. Bye now.

Tom Mason [01:17:10] Thanks. Bye-Bye.