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To learn about the act. And then this afternoon is designed for you. To give us open ended feedback.

00:00:03.000 --> 00:00:08.000 About everything you think.

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Your questions, your fears, your aspirations, whatever you want to tell us. That you think the people who are working to implement the act and that needs to include all of you.

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So what actually we're doing today is we're co-creating. We're beginning to co-create.

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Program that is gonna unfold over the next few years. And it's a crucial program. Where is life?

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Without water, there's nothing. Thank you for being here.

00:00:45.000 --> 00:01:06.000 Next one.

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So our, first presenter this morning is Dr. Neli Dunbar. Title of her presentation is the increasing water scarcity challenge.

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Stuff recently, very recently, former state geologist director with the New Mexico Bureau of Geology and now thank you.

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Thank you for that introduction. My name is Nelia Dunbar and I am very recently in Merida, director and state.

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So I worked at the New Mexico Bureau of Geology and Mineral Resources and being in America.

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I am really privileged to be able to continue to work on behalf of New Mexico going forward. So, thanks for the invitation to speak to you today and what I'm going to talk about in the next 25 min or so is a report that was prepared to think about how climate change in New Mexico over the next 50 years will impact water resources.

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And in the context of the meeting today, specifically about the increasing water scarcity challenge that our state will be facing.

00:02:14.000 --> 00:02:19.000 Yeah.

00:02:19.000 --> 00:02:31.000 I'm going to advance.

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Good. It's not. Hmm. It's like we're a little jammed.

00:02:42.000 --> 00:02:57.000 Start my clock.

00:02:57.000 --> 00:03:01.000 Okay.

00:03:01.000 --> 00:03:07.000 Okay.

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No, maybe, I think. Yeah, I think so. Okay, so, the report that I'm going to talk about today is titled climate change in Mexico over the next 50 years, in Mexico over the next 50 years, I'm going to talk about today is titled, I'm going to talk about today is titled Climate Changing in Mexico over the next 50 years, impact on water resources.

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And this report was designed to be a quantitative and comprehensive look at how climate change over the next 50 years will impact water resources in New Mexico.

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Thinking about this broad from a number of different perspectives. This report was done collaboratively between the New Mexico Bureau of Geology and Mineral Resources and the New Mexico Interstate Stream Commission.

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I was the convening scientist on this report, but much of the work on this report was done by an experienced team of scientists who have spent their careers working in New Mexico on a range of topics including hydrology, ecology, geology, and climatology and several of the authors.

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In the room with us today, which is great. The author's names are

listed here. I won't read through them, but I think many of you recognize those names as people who've devoted.

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Their careers to a range of different science topics in New Mexico. There's any really hard questions.

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I'm gonna, and the ground rules of the report was to be an integration and compilation of existing data.

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And the ground rules of the report was to be an integration and compilation of existing data. The point of this was not to do new data, but was really to assess the current state of knowledge.

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Okay. And integrate the existing data. So we started this report in mid 2020 right after kovat started so we had been visiting when we were planning this report doing a lot of face-based meetings.

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In fact, we spend a lot of time on Zoom, which in some ways was for too is because it allowed all of us to be at the table and we met every couple of weeks had all the authors brainstorm talk about the different topics we needed to talk about in the report and really share a lot of ideas.

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So I think that process was quite effective. And then there was a lot of writing and the first draft of the report was sent out for a rigorous peer review.

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And I know some of the peer reviewers are also in this room and I'd like to thank you for that.

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So we had a number of 5 different people who reviewed the entire report and a few people who reviewed specific chapters to really ex the scientific robustness of this report.

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We responded to those peer review comments to the best of our ability and then the report was open for public comment and I know many of you in this room at that point read the report and made public comments on the report which we did our best to respond to.

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The report was published in December, 2022 and I'd like to highlight

something which is that the Geologic Society of America presented us with the Fry Award in which we received at the annual meeting of the Geological Society of America and the Friday ward is for the best environmental geology publication published in the last 3 years by either a state survey or the geological society.

00:06:27.000 --> 00:06:30.000 I think Okay.

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I'm so proud to get that report. Testament to the quality of this work. So you can find a report, by going to the New Mexico, ology website and searching for bulletin 154 and I encourage any of you who haven't had a chance to look at those report to download it look at it also in the handout you got today there are the plain language summaries for all the different

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chapters of the report there so you can just, So the big question is, why do we need to think about how climate change impact water resources over the next 50 years and the basic answer is that impact water resources over the next 50 years.

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And the basic answer is that our climate is warm. And these 2 graphs show why we need to really be thinking carefully about climate change in New Mexico and water resources.

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These 2 graphs are both data. These are not models, but they are. Actual collected data from, New Mexico between 1930 and 2020.

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The upper graph shows the average statewide temperature on an annual basis. So each of the dots on this shows temperature in a given year in Mexico.

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To make this easier to see, we've also included, a, averages. So these bars, each of those bars shows a 10 year average of temperature.

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And I think it's fairly Easy to see here that the decayal averages in temperature in Mexico have been stepping up like a flight of stairs since the 19 eighties.

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So New Mexico temperature is increasing. Now the flip side of this is precipitation. What is happening with precipitation?

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And the lower graph shows similar information to the upper graph but shows have average statewide precipitation instead of temperature.

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And you can see that there's a lot of variability, which shouldn't be a surprise to anyone in this room.

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There's a lot of variability and precipitation over year over year in New Mexico. But again, if you look at the decadal averages showing you bar, there's no distinct increase in precipitation.

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Which is too bad. I mean on the plus side there's no apparent decrease in precipitation.

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So the basic message is temperature is going up, precipitation is not.

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Just talking. Yeah. Okay. And what are we going to be looking at in the future?

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So this graph shows how the next host climate is projected to warm in response to increasing. Concentrations of greenhouse gases in the atmosphere.

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So the first part of this, the orange bar, shows the instrumental record that I showed in the last graph.

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In terms of temperature and then the green and the blues or the green and the red swaths here.

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Show 2 different projections going forward. One for a relatively higher amount of CO 2 emissions in the atmosphere and one for a relatively lower amount.

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But in either case. We see the temperature over the next 50 years in New Mexico is going to continue to climb in response directly to added spirit concentrations of greenhouse gases.

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Okay, so now that's kinda setting the stage. Now I'm gonna go back and talk about study again for a few minutes.

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And as I mentioned, the brand was lists are able to assess and synthesize recent scientific literature and we decided to This was one of the first things we talked about is kind of what fields were we going to focus on in the report.

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And the things that we chose to focus on. And these are reflected in chapters in the report.

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Our future climate projections changes to the service water budget. I'll talk about this a little bit more later.

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Ethological dynamics, which is a really important part of this story. Impact on soil. People think much about soil soils are really important from a number of perspective.

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So there is a chapter dedicated Have the climate change that impact soils. Landscape change, fire, and we're already in this world of landscape change in response to fire and erosion associated with that.

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Surface water and groundwater and the interactions between service water and groundwater. Sedimentation and rivers.

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This was not part of the original report. We added this chapter in response to public comment on the report.

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Extreme precipitation and flooding and finding water calling. So here are some of the high level. Conclusions in the report.

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Going forward in in Mexico, we're going to see lower stream flow and lower recharge because of increased aridity in our state.

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We'll see greater interannual variability in precipitation with more very dry years interspersed with some very white.

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We'll see more extreme precipitation events, more hotter and severe drops. We'll see increase or decreasing snow pack and also a change in when runoff is gonna happen.

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We'll see increase or decreasing snow pack and also a change in when runoff is gonna happen.

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Run off is gonna trend earlier and also diminish and run off because it's, greater demands on groundwater because of less surface water vegetation stress increasing catastrophic forest fires, the increased flooding, and rivers.

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Irreversible damage to soils and the rated. So not a great picture. And I think, you know, when Norm talks about the urgency of the situation.

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I think, you know, when Norm talks about the urgency of the situation we're in. This summarizes what we're looking at.

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It's not a it's a challenge, many challenges. Okay, so in the next few slides I'm gonna talk about a few different parts of the report and in one of the early slides I showed future client projections.

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This is another visualization of that. So this shows past temperature, the, 1950 to 2070.

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Past temperature that's historically measured. Future temperature going forward. So we're looking at average of probably about 5 to 7°F increase over the next 50 years.

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And every place in the state will warm, but the warming. Is non uniform across. So the northwest corner of the state, the Sandmon Basin area.

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Is warming at a slightly more rapid rate. But every place is work. Precipitation, again, as I mentioned earlier.

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Our average precipitation is not projected to change significantly. However, the inter annual variability is likely to change.

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I think that's, There is also some modeled information about how precipitation across the state may vary going forward.

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And these 4 maps. So this is obviously in Mexico. Green means higher level of. Brown means lower compared to today.

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My apologies. Awesome. And in the spring, the in much of the state is going to be relatively dryer than it is today. It's going to be relatively dryer than it is today.

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In the autumn, the state may be on average a little bit better than it is today. In the autumn, the state may be on average a little bit wetter than it is today.

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And then in the monsoon in the boot heel is likely to intensify, whereas the northeast part of the state in the summer may be dryer than it is today.

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And while we're sorting this out, does anyone have any questions that I could address? Sure, yeah.

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So. Going forward, the projection, and again, this is modeled, of course, in the future, so we don't really know exactly what will happen.

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But what we can project is that going forward, the where precipitation falls, how much percipitation falls in different parts of the state may vary a little bit more.

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And I think the strongest data indicate that in the winter The northern mountains, the northern part of the state may be wetter.

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And the Southwest, the boot heel will be drier relative to today. And in the summer, it does flip.

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The boot heel may get more intense monsoon rain and the northeast part of the state may be relatively dry.

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Okay. Okay. So the next thing I'm gonna talk about is the land surface water budget in New Mexico's area climate.

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And this work was put together by Fred Phillips who has spent his career as a hydrologist at New Mexico tech.

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Many of you probably know for it. And this This is something that is a non hydrologist I was really not aware of and really kind of surprised me about what happens to water, precipitation that falls in Mexico.

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So this cartoon summarizes. What happens to precipitation? It falls in Mexico, whether it's rain or stuff.

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So in an average year in New Mexico, we get about 95 million acre feet of precipitation.

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So where does that precipitation go? If you'd ask me before I was involved in this report, I would have said, oh, probably about half of it goes into recharge and run off and about half of it is a backward transfer.

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In fact, that would have been completely wrong because. Much of the water that falls has precipitating on the is either transpired between just taken up by plants.

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And released through the leaves of plants or it is directly evaporated out of soil so falls onto soil and then directly goes back into the atmosphere.

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So when you add together those 2 terms of evaporation and transpiration, which are often called evaporation.

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That is 92 million acre feet of the 95 million acre feet of precipitation that falls in New Mexico.

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Only leaving a quite small amount, 1.5 million acre feet that goes into runoff, which is precipitation that falls and ends up in years, or into recharge, which is precipitation that percolates down through

the soil and ends up in our aquifers.

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So these are a very small part of the. Water budget in New Mexico and another impact of this if you think about even a very small percent increase in transpiration and evaporation.

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Will have a very big impact on run off and recharge.

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Okay, so the message there is even with no trend in precipitation, no, no decrease in precipitation.

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New Mexico will become more apparent because of the increase in their temperature. And the amount of water that can be held or absorbed.

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By air increases as a function of temperature. And the 2°F increase in air temperature leads to the air being able to absorb 7%.

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So the impact of that is that liquid water will be lost more rapidly from meat and soil and also another element of this thing, any, is it is familiar with, is it dry soil absorbs precipitation more effectively.

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So dry your soil in general. Will absorb more precipitation that then will not end up in run off or recharge.

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So the basic message is, ity will increase and get worse. Now there's a term that atmospheric scientists and hydrologists use, which is called the at the aridity index.

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And what the aridity index is. The average potential, so the amount of moisture that's taken up by plants and expired by plants or is evaporated from soil.

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That number over the average precipitation. And the scale here, they're ready to index, anything that is dark blue means that there's excess one.

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So there's more precipitation than a backward transformation. And you can see pretty clearly. That the parts of New Mexico where they're the

least area are the high mountain regions, which is not a surprise to as the scale gets redder, that means you're looking at increased. So the boot heel, the southeast part of the state and the Sandmon Basin are some of the more arid parts of the

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state and the Sandwich Basin are some of the more arid parts of the state, which again, you know, it's pretty intuitively clear to the state, which again, you know, it's pretty intuitively clear to the state, which again, you know, it's pretty intuitively clear people living in Mexico.

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So. This map here shows historical. So between 1970 and 2020. The map on the right shows a future projection of heridity index in the state.

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And you can see that the patterns. Our place similar between those 2 maps. You know the areas that are red and a little bit redder, the areas that are blue, that little bit less, but the next graph I'm going to show you and this is this is a little bit complicated.

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The next graph I'm going to show you shows you the proportional increase in a rity index.

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So Fred Phillips did these. Basically difference these 2 maps quantitatively. To see where aridity is gonna get the where aridity is gonna increase proportionately the most.

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And I think this next graph is one of the most, a very valuable thing came out. So what this shows darker colors show parts of the state that are gonna get proportionately more arid over the next 50 years.

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And so you see that the parts of the state that are already very arid are gonna get more arid but proportional to lessen.

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The parts of the state that are going to be the most impacted by increased are the high mountain regions.

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And these are the parts of the state that really drive a lot of our big charge. So That's, you know, not a great.

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Piece of information in terms of recharge and in Mexico that the parts

of the statement are gonna get the most proportionally arid are the Northern Mountains, the Sacramento's, and the

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Okay, and now I'm gonna go through a few highlights on the chapters the snow pack and spring stream flow is projected to define 4 different models for how that decline will happen.

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There's variability between the models, but the basic messages that both Snow Pack and stream flow will decline going forward.

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And part of having more air climate is that forest health is impacted. And so you can see this is, these are pineapple near San Fi.

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This is from the pink, die off. This is the dead, that, that resulted from that.

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And of course, when you have a lot of dead forests that leads to wildfires. And wildfires then.

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Whether it's precipitation, particularly extreme precipitation, you get this very extreme runoff.

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You can see these big runnels, suspicious from the Hayes Mountains. This is a really dramatic example.

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You know, this farm gate was not built in giant. That was the result of the precipitation event in an area that had been.

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The extreme precipitation is an interesting part of the whole picture here. And, We do know that based on increased atmosphere and temperature, more extreme precipitation would be it would be expected in New Mexico.

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The 2 climatologists who worked on this. They examined the information from New Mexico and based on the statistical.

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Patterns of rainfall in New Mexico. You can't distinctly project that we will get increased extreme precipitation.

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From first principles we should however They go for was also involved in the international panel on climate change report and they were working on precipitation in the southwest as a whole.

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And when you integrate the entire Southwest US, you can statistically model. That we are getting and should expect more ofstream precipitation.

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Okay. So over the next 50 years, flow in rivers should decline between about 16 and 28%.

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And, the, between about 16 to 28% and due to extreme precipitation and 28%.

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And due to extreme precipitation, wildfire, about 16 and 28%. And due to extreme precipitation, wildfire, and disruption of watersheds, the amount of sediment delivered to reversible.

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And the beds of Monday and Rivers will build up reservoir capacity will be reduced and channels will know.

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On water quality, this is a chapter Bruce Thompson worked on and Bruce took a look at a lot of information from the Mexican environment department and in terms of one of the one of the conclusions that we've had is there's a lot of information about water quality but that hasn't been particularly synthesized.

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However, what I'll mention is that temperature impairments are something that we're really gonna face going forward.

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So the things that have that really stood out were temperature impairments, eutrophication between excess nutrients and E.

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Coli are the things that may impact water resources going forward. Now I think all of you who live in Mexico know that we don't have a flat state like Kansas, you know, we've got a very topographically complex state.

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It's also a pretty, you know, from north to south, Mexico is a pretty big state.

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So we decided as part of the report to really examine statewide and regional impacts around the state. And we broke the state into 4 parts.

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So the first part was the high mountains which are in northern New Mexico here. The Dallas will be on volcanic field here.

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Healo Mountains and Sacramento. And we think that the impacts of climate change in those regions will be similar.

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Region 2 is the northwest highest. So the Samoan Basin and running south, down towards 3 is, here, and this should say southwest base.

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And it's the southwest base. But the southwest base, it's basically the booth heel and the Violent.

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And then the eastern planes are divided into one region. That should all, we're divided into one region.

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That should all, we thought about splitting this into 2 different regions, but it seemed like the in one of the chapters of the report we go through and examine how time change is gonna impact water resources in parts of the state.

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And again, I think, hearken back to this map that shows where he is going to increase the most.

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You basically see that same pattern of the way we divided up the state in however the next. So very quickly, I'm going to summarize the dominant impacts by region in the high mountains, these will be the most impacted by climate change in Mexico.

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So water resources in the high bounds are going to be most impacted. There will be less snow out and there'll be higher raple transpiration.

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Changes to plant communities and increase wildfire are gonna really impact the high mountain regions, but the impacts of that will be felt throughout the state because when you burn the high mountain regions, you increase runoff.

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You decrease infiltration and in the Northwest high desert, the main impact is there's the.

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In the northwest high desert, the main impact, lost soils, there'll be increased dustiness as a result of that, in the lost soils, there'll be increased dustiness as a result of that, the loss of soils, there'll be increased dustiness as a result of that, increased royal decision and possible transitions from grasses to shrubs, which actually are a little bit of positive because shrubs

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consume less water than the grasses. So they'd be more water infiltration. In the southwest bases and the Rio Grande Valley, they'll be lower river flow.

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So projected 25% lower flow in the river. 50 years has and there'll also be changes in time you run off trending earlier.

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There will also be greater loss of water from restaurants. So with a 5 degree temperature increase, elephant mute will lose an additional 2 feet to evaporation.

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In Premier, which is a lot. The Eastern Plains, Eastern plans are going to be this part of the state most impacted by extreme precipitation events.

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As in the Northwest High Desert, they'll also be awesome soil, increased desertification, and increased.

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So I think I am about out of time here, but I think one of the important parts about doing your report like this, next time, okay.

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I think one of the values of getting together a bunch of scientists, worked in New Mexico and really examining what we know and what we don't know is that.

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By knowing what we don't know, it provides a roadmap for young scientists to embark on their careers and do things that are really going to be society relevant to New Mexico.

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And so as a group, we brainstorm, I ask each little authors to think about what are the biggest unknowns in their field.

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And in the next 2 slides I'll just summarize those. Precipitation is a big one.

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And I think better assessment of extreme precipitation in New Mexico and also the seasonality. I showed that one, slide that had the 4 maps of New Mexico showing have seasonality.

00:28:21.000 --> 00:28:33.000

A precipitation may change. Better understanding of that would be really valuable. Also a better understanding of snow and snow melt and snow melt run off and how that is gonna impact the water balancing.

00:28:33.000 --> 00:28:50.000

Models are a valuable way to kind of look into the future. However, fine tuning climate models would be very valuable way to kind of look into the future.

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However, fine tuning climate models would be very valuable for us. And this is not only thinking about global circulation models like global client models but also hydrologic models.

00:28:59.000 --> 00:29:17.000

So having more finely calibrated hydrologic models for recharge and runoff in New Mexico would be, understanding of clouds, something that the climatologists also pointed to, something that would be that needs to be better understood in our state.

00:29:17.000 --> 00:29:32.000

Also, simpler vegetation dynamic models that incorporate disturbance processes. And I'm not a colleges, so that doesn't make sense to me, but Craig Allen was the ecologist on this so anyone who's interested in that feel free to reach out to Craig.

00:29:32.000 --> 00:29:43.000

He's wonderful and and then there are also observational data. And I think this is something that we need to start, you know, my mantra is.

00:29:43.000 --> 00:29:52.000

Any day you don't collect today will never be collective. And so, you know, thinking about focusing on data and what data is important.

 $00:29:52.000 \longrightarrow 00:29:59.000$

And one big one is quantitative and geographically distributed measurements of New Mexico's awful water levels and making those data accessible to the public.

00:29:59.000 --> 00:30:11.000

I put that not just because I work for, because I think it's a really important thing. Is as there's less surface water, people are gonna be looking to groundwater.

00:30:11.000 --> 00:30:18.000

And many of you probably saw that great article in the New York Times that showed have brown water, not just in the air, Southwest, but across the nation is being depleted and it's invisible.

00:30:18.000 --> 00:30:30.000

It's It's below the surface and people don't think about it. And that's something that I think New Mexico is actually a heavy curve in a lot of ways and we need to be even.

00:30:30.000 --> 00:30:40.000

We need to do it more and more. Better understanding of soil moisture and how solemn moisture impacts, impact, impact of climate change on your quality.

00:30:40.000 --> 00:30:52.000

This is something that Bruce Thompson really pointed out. Hi, hydrologic response and watersheds to vegetation changes.

00:30:52.000 --> 00:31:00.000

Antillery and works for USGS was the main person working on this. And she recognized that there's a long way to go in terms of really being able to predict how.

00:31:00.000 --> 00:31:10.000

Extreme precipitation is going to affect. But, how

00:31:10.000 --> 00:31:27.000

How vegetation changes in watersheds. Okay, impact runoff versus free charge. Timing of landscape readjustment to studies of soil plant communities, landscape characteristics in high mountain.

00:31:27.000 --> 00:31:36.000

Hi, elevation, mountain ranges, where recharging rough occurs another observation. And long term, ecological monitor can research that better understand responses to New Mexico's ecosystems to climate

change and associated ecosystems.

00:31:36.000 --> 00:31:55.000

So thank you very much for your attention. And I think we might have a few time.

00:31:55.000 --> 00:32:04.000

One of the things that I've been wondering about is whether reservoirs are no longer a good way to store water.

00:32:04.000 --> 00:32:11.000

And, I know, Albuquerque has been accompanying the extra wire it's been getting.

00:32:11.000 --> 00:32:31.000

From the Colorado distribution into its aqua. When possible. And I don't know enough about, I'm like, what under their lives, I'll shoot them through water.

00:32:31.000 --> 00:32:42.000

But is it possible to pump water back and do an awkward for more directly than just a number of states around New Mexico.

00:32:42.000 --> 00:33:01.000

Have been doing for quite a long time. It's something you can't do. You have to be very careful when you do this because the last thing you want to do is to contaminate or perturb an existing high quality.

00:33:01.000 --> 00:33:06.000

However, I do think, I mean, I'm seeing that New Mexico is starting to move in this direction.

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Interestingly, so the whole topic of managed our community charge and whether that be passive. By slowing down the water or active pumping.

 $00:33:13.000 \longrightarrow 00:33:25.000$

There is a lot of information in scientific literature and I was there was a national academy 3 day webinar.

00:33:25.000 --> 00:33:31.000

About managed off for recharge and if you really want to dive into it I would recommend looking for that.

00:33:31.000 --> 00:33:37.000

Interestingly, Hey, pre, people, we're doing manage off for recharge.

00:33:37.000 --> 00:33:44.000

This places in the landscape in New Mexico where you see small rock dams built that were designed to slow down.

00:33:44.000 --> 00:33:58.000

Overland water. Flow and put water back. I think I mean I wouldn't go as far and I might I might also see or Phil has anything to add to this.

00:33:58.000 --> 00:34:15.000

But I'm not, I do think that Management will recharge. In whatever form it takes is something we need to think very carefully about and thinking as part of our future.

00:34:15.000 --> 00:34:23.000 Okay. John.

00:34:23.000 --> 00:34:31.000

Hmm. They've tried to do that all my life. 1630. It's like you say is.

00:34:31.000 --> 00:34:37.000 You'd be very careful. Okay.

00:34:37.000 --> 00:35:00.000

So you can make big mistakes. Like the Also, the phone is placed in, you know, the old alone, there are places where it's very good.

00:35:00.000 --> 00:35:18.000

Nice. This is my channel. I think I think a positive aspect of this from New Mexico's perspective is that California and Arizona is doing this for years and we can learn from other.

00:35:18.000 --> 00:35:24.000

States and that have been. Embarking on this process.

00:35:24.000 --> 00:35:31.000

Would you please state your name before asking the question for the people who are on the hybrid session?

00:35:31.000 --> 00:35:40.000

Would you please state your name before asking your question so the people on the hybrid session can know who's speaking.

00:35:40.000 --> 00:36:03.000

I was okay. One thing I would say is that I don't see, Go back to before of your damn, it's really wild river and you can see that.

00:36:03.000 --> 00:36:11.000

As a matter of fact, we've made a lot of room in our offices where we can use that.

00:36:11.000 --> 00:36:24.000

So there's a lot of potential for that. I don't think there's a I

think, You know, another part of the next.

00:36:24.000 --> 00:36:29.000 Okay.

00:36:29.000 --> 00:36:40.000 Last question.

00:36:40.000 --> 00:36:50.000

Apologize for being in the background. Yeah, just, I'm just kinda looking at this.

00:36:50.000 --> 00:36:59.000

It's a very linear geology mining. Seems to be very attractive in its nature. Concept and it's all.

00:36:59.000 --> 00:37:17.000

What consideration are you in incorporating from? Conditions. We've always had this, in and then people always bounce up against.

00:37:17.000 --> 00:37:36.000

Sorry, the. How we consume. How we use the word that comes to the word that Kobe Hasan and, NATO, which means that it's water that's running over the edge.

00:37:36.000 --> 00:37:43.000

And what you do to maximize what you need to capture, facilitate a secretness about.

 $00:37:43.000 \longrightarrow 00:37:55.000$

I don't hear that. And this is more, very linear. Perspective.

00:37:55.000 --> 00:38:05.000

But we, we haven't really examined. Sort of a, He's the ecological culture.

 $00:38:05.000 \longrightarrow 00:38:15.000$

That has been here for eons. And have determined how to coexist. With these natural forms and that assistance.

00:38:15.000 --> 00:38:26.000

And it seems like, So, you know, what is process? What is scarcity? So I think I would like to see more of this.

00:38:26.000 --> 00:38:34.000

Indigenous world, you do is lenses, the technology, semantics, use for that as more of what nature is trying to do this.

00:38:34.000 --> 00:38:47.000

So my question is, you know, how are you incorporating these?

Marginalized perspectives into what the mainstream crisis has taken place.

00:38:47.000 --> 00:39:00.000

And to us, it's an opportunity. To us, it's always been adaptive and then moving to transformative ways of cooperating.

00:39:00.000 --> 00:39:16.000

Yes, and actually speaking to that, this study was definitely envisaged as a Western science perspective and there is a parallel group working on Indigenous perspectives.

00:39:16.000 --> 00:39:25.000

And Hannah, can you help me out here? I'm trying to remember the name of the woman who was taking a lead on this and her name has gone out of my mind.

00:39:25.000 --> 00:39:37.000

I'll look her name up and find it for you, but we, when we were first setting up this study, We worked hard to try to broaden perspectives and we weren't able to.

00:39:37.000 --> 00:39:43.000

To get the engagement in this study. And so the path forward just to have a parallel study from looking at things from indigenous perspective and traditional knowledge.

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And I talked a lot. There's a person named Steve Seemkin at Arizona State University who his model is too wide seeing you know you have the Western perspective you have an indigenous perspective you consider both of those perspectives in parallel.

00:40:01.000 --> 00:40:12.000

So I think that's something that we had very much on our minds and it's something that I do hope comes together with this working with that and I can give you more information about that.

00:40:12.000 --> 00:40:16.000

The woman's name just left my I'm sure you know. Lori, that's it. That's it.

00:40:16.000 --> 00:40:25.000

Laurie Riotti. Yeah. So you might want to reach out to her and see where things are going.

00:40:25.000 --> 00:40:34.000

Western Apache there was an indigenous medicine that recently died on that can predict 2 years into the future.

00:40:34.000 --> 00:40:54.000

How that they what the weather was like that day. So there's a specification. Yes, and I think that the group that we have the group that I was able to engage in this process did not have the tools to assess that and that needs to be done by people who do have the tools to assess that.

00:40:54.000 --> 00:41:06.000

Thanks for the question. Thank you. We do not, but at the break would be a good time.

00:41:06.000 --> 00:41:14.000

Okay. Thank you.

00:41:14.000 --> 00:41:18.000

Yeah.

00:41:18.000 --> 00:41:26.000

Hmm.

00:41:26.000 --> 00:41:47.000

All right. Next, speaker is Christine Whitney Sanchez. The title for a talk is Real Change is possible and she's with the innovation partners international of the southwest and the chief culture officer.

00:41:47.000 --> 00:41:52.000 Okay.

00:41:52.000 --> 00:41:59.000

Okay. Okay.

00:41:59.000 --> 00:42:04.000

0kay.

00:42:04.000 --> 00:42:09.000

We don't need another key role.

00:42:09.000 --> 00:42:23.000

The I wish I could bring that to like Tina, but can't quite pull that off. The human history is really a grand story and it's filled with juicy plots and dramatic overtones.

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And interesting characters, lots of obstacles to overcome. And our stories from the past tend to have been hero stories, the hero journey kind of story, especially in the West.

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And that hero goes out and slays a dragon by himself. I don't, I guess today we have to include women in that.

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And also, kisses the princess awake, that kind of thing, brings wire to battle.

00:42:59.000 --> 00:43:08.000

But what we're being called to do right now is get our collective act together. And that has to include all the voices and all the perspectives.

00:43:08.000 --> 00:43:16.000

It's already arisen in the room. So we're living inside that human story and the plot has thickened as Dr.

00:43:16.000 --> 00:43:20.000 Dunbar just, illuminated for us.

00:43:20.000 --> 00:43:33.000

What we need is being strategic, being collaborative. And thinking about influence and impact and how those are laid to each other.

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So strategic has the roots of 2 spread. And leader in that word. So imagine that part of what we're doing when we're being strategic is spreading leadership.

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We're finding leaders wherever they are in our system.

00:43:51.000 --> 00:44:01.000

And the roots of collaborative are to work with or literally co labor to work with. And influence comes from a flowing in.

00:44:01.000 --> 00:44:12.000

Which is a nice thing to think about when we're considering water. And then the impact is about having a forceful effect.

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I think that's what we all want. If we're gonna have our collective act together, we need strategic, collaborative influence and impact.

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And there's a term for that in the field I come from. I am the chief culture officer at Arizona State University.

00:44:25.000 --> 00:44:36.000

And I also have been doing large scale change work for a very long time. We call this large scale strategic collaboration.

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And in this little diagram, you might be able to see that it starts with a couple of people in conversation, having conversations that matter.

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And I'm gonna give you an opportunity for that later, in the talk. And then it builds into small groups who start to have some perspectives that are coming together of different ideas.

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But the real impact is when those small groups and multiple groups create networks. And have influence across large systems.

00:45:09.000 --> 00:45:13.000

I believe is that attraction is much more. Strong and resistance. And I was trying to get these guys to come over to me.

00:45:13.000 --> 00:45:23.000

This is in Madagascar. These are lemurs if you don't happen to know the.

00:45:23.000 --> 00:45:31.000

Disney version of it. And I, but I decided to do eventually was just stand there and be very still.

00:45:31.000 --> 00:45:42.000

And they became curious and they started coming over to me and obviously mingling with me. So there is a flow of change that we're headed towards.

00:45:42.000 --> 00:45:54.000

So we want to attract change. And it really starts with when we come together initially with an inquiry or several inquiries.

00:45:54.000 --> 00:46:02.000

And then that takes us to looking for divergent points of view. And there are many, many ways to do that.

00:46:02.000 --> 00:46:11.000

It is very important that we can collect all the divergent points of view before we say this is what's true.

00:46:11.000 --> 00:46:12.000

Then something starts to emerge in that process. That's really important to take a look at.

00:46:12.000 --> 00:46:25.000

That's really important to begin noticing. You can't predict it. Well, maybe you can predict 2 to years into the future.

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We have the right people. But you normally can't predict what's going to emerge.

00:46:28.000 --> 00:46:46.000

You have to be responsive to what's emerging. Then coming back together with all of those new insights with all those responses to the inquiry with the themes that have come together with what you sort of know collectively that's called convergence.

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So we do need to begin the journey together. In the beginning if we can set the stage right the waters are relatively calm.

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We are connecting with each other. We're beginning to learn about each other. We have good will.

00:47:02.000 --> 00:47:14.000

Towards each other. When we go begin to go out into the, divergence stage. Then we are looking for all those different strains of consciousness.

00:47:14.000 --> 00:47:24.000

Like what is it that you know and you know and you know from your own expertise but also from your own lived experience.

00:47:24.000 --> 00:47:46.000

And then that emergence I was talking about like a spring that comes right out of the mountain. I'm a hiker and one of the most astounding things I've ever seen was in the western part of the Grand Canyon where there is a river that springs right out of the rock at the top and becomes this pretty big river that goes all the way down to the Colorado.

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And then when we come back together in convergence, by the way, this is. This is when there are a lot of rapids usually when you're in the divergence stage.

00:47:58.000 --> 00:48:07.000

This is when it gets exciting and like kind of sacred and amazing. And this is when we come back together and have to do the hard work.

00:48:07.000 --> 00:48:16.000

Of deciding together. What is it we learned? What is it we know? And then what is it we're going to do?

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So I just wanted to share that I had the privilege of working around

the world and being able to do this kind of collaborative strategic change with a bunch of different groups.

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So this is the 2 the. Girl Scout National Convention. Any of you in here, Girl Scouts?

00:48:35.000 --> 00:48:55.000

There's always some Girl Scouts and this gathering as a whole put brought together 14,000 Girl Scout volunteers and girls and this event was called an open space where the Girl Scouts were trying to figure out what the new organizational structure.

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Was gonna be so that they could serve every girl everywhere. And this is a process where everybody creates the agenda on the spot.

00:49:03.000 --> 00:49:10.000

Based on what they want to talk about. And then we have that kind of convergence at the end.

00:49:10.000 --> 00:49:20.000

I did that work in Madagascar with a mining company. They told me that everything we were teaching them, they actually already knew, but they had been told they referred to them as the developers.

00:49:20.000 --> 00:49:31.000

They've been told by the colonists and the developers there that what they knew was wrong. Or inconsequential.

00:49:31.000 --> 00:49:39.000

Working in Latin America with a bunch of wonderful women who are trying to change the world through their practices with their children.

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In Singapore for the facilitators that were learning these large scale methodologies.

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We had a big conference. That's when I was talking about where I didn't think I'd ever do a conference again where we brought together change agents from all over the world.

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I did some work on the Hila River Indian community. In their department of environmental quality and that's the leading the steering group for that.

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We had a we still have on the books SB 1070 in Arizona, which is basically an anti-immigration profiling.

00:50:15.000 --> 00:50:25.000

Law. And so we brought together people from across the community with very divergent perspectives. We at that time we had some tea partiers.

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They were still kind of the name they were giving to themselves. To have a community conversation on immigration.

00:50:32.000 --> 00:50:50.000

There's a national. Organization called the National Conference of Dialog and Deliberation. They work together and open space on open space in working with Israel Change Consultants.

00:50:50.000 --> 00:50:58.000

The US Merchant Marine Academy where we had a big summit at the end of our time with them and they decided on their strategy.

00:50:58.000 --> 00:51:07.000

Together with industry partners and midshipman and the all alumni parents all the people that needed to be involved.

00:51:07.000 --> 00:51:17.000

And then this is a event I recently did in Arizona State University where it is. These are technologists who are thinking about what they're going to do in the next year.

00:51:17.000 --> 00:51:26.000

So how do these groups do this? So my belief is that it starts with with presence, personal presence.

00:51:26.000 --> 00:51:33.000

So I'm gonna do a little experiment with you and see, how this goes. I have a bell.

00:51:33.000 --> 00:51:43.000

Okay. I'm gonna ring the bell. And I invite you to do whatever you do to get in touch with what's going on inside of you.

00:51:43.000 --> 00:52:01.000

What you're thinking, what you're feeling, and for some of you, you'll want to close your eyes others just find a spot let your eyes rest and the experiment here is can you in less than a minute become present?

00:52:01.000 --> 00:52:31.000

Fully present right here, right now.

00:52:39.000 --> 00:52:49.000

That was 30 s. So what did you notice? Call it out. What did you notice by just being still for 30 s?

00:52:49.000 --> 00:52:59.000
Your heart. It's cold. It's cold. Correct.

00:52:59.000 --> 00:53:10.000

One more, yes. Your mind was racing. Great observation. That tends to be the case for us more of the time than we would like.

00:53:10.000 --> 00:53:21.000

Thank you for the joining in that experiment. The second piece that groups. Can do when 2 or more people are fully present.

00:53:21.000 --> 00:53:31.000

There's a kind of connection that happens. That's different than the connection that we often experience when we're coming from the very top of our front brain.

00:53:31.000 --> 00:53:41.000

And when that connection occurs, and so imagine 2 people, 4 people, thousands of people. Then an opening occurs.

00:53:41.000 --> 00:53:53.000

Something can come in to the field into our consciousness into our awareness together and we can begin to our articulate what's emerging.

00:53:53.000 --> 00:54:01.000

So I'm going to invite you into a connection moment if you'll stand up real quickly. Find a partner.

00:54:01.000 --> 00:54:31.000 Okay. Okay. Yeah.

00:55:45.000 --> 00:55:50.000

And other people are quieter. And think before they speak. And we want to make it really possible for both of those styles to interact.

00:55:50.000 --> 00:56:04.000

They're also people that are kind of one foot in once that out. I'm a bit like that myself.

00:56:04.000 --> 00:56:16.000

And so the opening that we want here is for us to pay attention to what we do. Know and for us to to create the curiosity, the collective curiosity.

00:56:16.000 --> 00:56:24.000

For what we don't already know. It is my belief that we if we start by noticing what's working.

00:56:24.000 --> 00:56:37.000

It's antithetical to our Western way of doing things, really. We look at at the Arizona State when I first got there, the hardest thing for me was I would talk about something they'd say, what's the problem you're trying to solve?

00:56:37.000 --> 00:56:49.000

That's where they always would start. There are indeed problems, but if we can if we can figure out what the opportunities are within that problem, what is it we do want?

00:56:49.000 --> 00:56:55.000

Rather than what we don't want, all the bad news. We have a chance to build a foundation.

00:56:55.000 --> 00:57:02.000

On what's really most precious to us. What we always, already value. Okay. So I'm gonna invite you into another little experience.

00:57:02.000 --> 00:57:13.000

If you would find it another partner, a neighbor. And since there's some of you that are just threes, that's just fine.

00:57:13.000 --> 00:57:28.000

This is an opportunity to tell a 3 min story to each other. This is like an interview. Okay, with a good interview or doesn't talk about themselves by the way, so just to ask your partner this question.

 $00:57:28.000 \longrightarrow 00:57:39.000$

Remember in time. When you sense that you were in the right moment with the right people. To collaboratively create real change.

00:57:39.000 --> 00:57:46.000

And sometimes it takes a minute, especially those. Do you think fully before you speak people? So give it a minute.

00:57:46.000 --> 00:57:52.000

And then if that person is not finding a story, you might ask them. What steps did you take?

00:57:52.000 --> 00:58:01.000

What was going on in, in that situation? And, you have about 3 min each. So turn to your partner.

00:58:01.000 --> 00:58:31.000

I'm gonna time it. I'll let you know when the time is up and then I'll ask for what that was like and what you thought.

01:06:03.000 --> 01:06:15.000

So we have people online and for that reason, we're really gonna try and I'm just gonna take a few pop up and tell your story here not your story.

01:06:15.000 --> 01:06:27.000

So what did you get? What's the highlight? What stood out for you in that interaction? And we've got a couple of people who are gonna run the mics so if you wouldn't mind waiting then people online can hear you.

01:06:27.000 --> 01:06:43.000

So what stood out for you? What surprised you? What resonated for you? That's the question.

01:06:43.000 --> 01:07:00.000

Here. And exchange sort of communal energy with some thing that really stand out from what James said, but also resonated with.

01:07:00.000 --> 01:07:06.000

When the magic is happening. Yes, that's right. That's when the magic does happen.

01:07:06.000 --> 01:07:17.000

Reciprocity, community, nice. Okay, my name is Angelina. One of the common themes of our stories was approaching things from a non adversarial approach.

01:07:17.000 --> 01:07:27.000

Seeing the gifts and the light that everyone can offer to a project or a challenge.

01:07:27.000 --> 01:07:35.000

Let's stood out here. We've got one up here.

01:07:35.000 --> 01:07:49.000

I think what we talked about were. Kind of mediation contact context. What seemed to work was to have a third party target.

01:07:49.000 --> 01:08:04.000

In the case of Testing, issues. In the case of engineering have a document. That people could beat up on.

01:08:04.000 --> 01:08:21.000

Third object. Thank you. Good pattern though that thanks would be aware of one more.

01:08:21.000 --> 01:08:24.000 Okay.

01:08:24.000 --> 01:08:29.000

Thank you.

01:08:29.000 --> 01:08:31.000

Hi, name is Betsy, and the common thread for both of our, that they were from, we were much younger and more optimistic.

01:08:31.000 --> 01:08:44.000

That they were from, we were much younger and more optimistic. Well, I wish you all well.

01:08:44.000 --> 01:08:54.000

I think you're at the beginning And I'm very impressed by the diversity in this room in terms of age.

01:08:54.000 --> 01:09:01.000

And I'm looking forward to the next time I see you all, there being a lot more diversity in all kinds of other ways.

01:09:01.000 --> 01:09:12.000 Take your care. Thank you.

01:09:12.000 --> 01:09:29.000 Okay.

01:09:29.000 --> 01:09:40.000 Okay. Okay.

01:09:40.000 --> 01:09:46.000 Okay.

01:09:46.000 --> 01:09:55.000

Yeah. Okay. Yes. Good morning everybody.

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I think I'm up next. As the having the honor of the keynote this morning and also the good fortune of the sequencing of the presenters.

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I think will align nicely. So my name is Hannah Risely White. I am the newish director of the New Mexico Interstate Stream Commission.

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Which is a great honor. I'm also here today with an incredible team planning team from interstate stream.

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I was hoping the team could stand up. Andrew. Amanda, Sarah is in the back of the room.

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Here's our planning team.

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Okay. And I also have the great honor of working with an incredible group of colleagues at the Office of the State Engineer.

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It's a great pleasure working with State Engineer Mike Hammond, who unfortunately couldn't be here today.

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But I see a number of folks from our team at office at the state engineering and our team at office of the state, but I see a number of folks from our team at Office of the State Engineer's.

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Well, maybe you guys could raise your hands. John, yes, awesome. So a bunch of us here.

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It's also amazing to see so many familiar faces here. From other state agencies, the maximum environment department, department of bag.

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One of the themes in my presentation this morning is going to be partnerships. One of the things that I bring to this job specifically is the true belief that we cannot tackle the challenges ahead.

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Without partnerships. And so I have the great privilege of working with some really amazing people at state agencies and also federal agencies.

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I see folks from reclamation, forest service. Fish and wildlife service here so incredible group of people.

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It's also very exciting to have this event sold out. What a great sign in terms of the commitment and interest to work towards addressing the challenges ahead.

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Before I jump in, I'm also just a little bit curious. There was some conversation earlier about.

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You know, the age range in the room. Hi, so good to see you too. So good to see you too.

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So good to see you too. So good to see you too. So many great colleagues here.

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How many people here for, is this your first water dialogue meeting Okay. Wow. That's incredible.

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How many people have been to 5 or more water dialogue meetings? How many people here have been to 10 or more modern?

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All right, so it's really awesome to see this bridging. Of folks who've been engaged in this issue for a very long time and lots of new faces.

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That's fantastic. I also want to start by just thinking the water dialogue for dedicating this meeting and large part to water planning and for water dialogues many years of bringing people together to address water-related issues.

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As I think those of you participated in previous years, the past 2 water dialogue annual meetings. We're dedicated to planning the state's planning efforts in the 50 year plan.

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And I'm gonna provide a little bit more info on that later in the presentation. Okay, so What given what we just heard from Nelia and given the comments from Christine Whitney Sanchez what I'm gonna talk to you all about today is the Waterloo Security Planning Act.

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And it's something that I personally am very excited about. And my job here today is to get you guys really excited about it too and motivated and inspired to engage in this effort.

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So the water security planning act was passed in last year's legislative session. It passed unanimously. It is essentially a rewrite of New Mexico's regional water planning statue.

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And what it provides for us, particularly in the next year to 2. Is a unique opportunity for everyone in this room and hopefully a whole heck of a lot more people.

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To engage in what the future of regional water planning will look like in New Mexico. Over the next 2 years, Interstate Streaming Commission are really a year and a half.

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Is going to be developing rules and guidelines under the Act that will determine how we as New Mexicans plan around water.

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And New Mexico potentially for decades to come. Okay. So it feels like an incredibly important window in time for us all to engage.

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In this very critical effort. Before I talk more about the act, I think it's hopeful to just provide a little bit of context.

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And so I wanted to speak. More broadly about Interstate Stream Commission. our planning activities in general.

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So Interstate Stream Commission, I have the great honor of working for a governor appointed commission.

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It's a 9 member. A couple of our commissioners here today. Great to see you all.

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I as director of this awesome job of kind of bridging staff and this this commission. Interstate Stream Commission is distinct from Office of the State Engineering that we are not a regulator, but we work very closely with our partners at office of the state in here that administer water rates in New Mexico and work with our colleagues at environment department who help protect water quality in New Mexico.

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Part of what interstate stream commission does our main really mission is to support new maximum complying with our interstate compacts.

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Which will become increasingly important as we face increasing water scarcity. We also do a lot of work around compliance with federal environmental regulations, And very importantly, we are tasked by statute with leading New Mexico's water planning efforts.

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And those fall into 2 main buckets. So regional water planning. The original statute was passed in 1987.

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That statute was replaced as I just said with the Water Security Planning Act last year. The water security planning act was a recommendation of the water policy and infrastructure task force.

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Which I think you all are familiar with. If you haven't looked at their report, I highly recommend you check it out.

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It's available online. It was a task force convened by state engineer Mike Hammond in 2022.

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I see quite a few passport numbers here as well. The task force was made up of 20 citizen representatives of all different water use sectors.

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9 agency reps from all of the different state agencies that work on water. And then we also had 9 legislative advisors participated in that process.

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And they came up with kind of an amazing slate of 17 recommendations, one of which was to pass this act to entirely re envision, you know, water planning for New Mexico.

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The other bucket of planning work that we do at interstate stream commission. Is state water planning.

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That's dictated by, the 2,003 state water plan act. And so that's looking more broadly across the state as a whole.

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This, past year, 2023 by statute, we are required to produce either an update or a review of the state water plan and we did that.

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You will be seeing that shortly. We opted last year because of so many things going on to really do a review.

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So we looked at the past update to the plan from 2,018. In light of the report that Nelia discussed earlier, so the climate change report.

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And then look towards the future in terms of what's needed. So you'll

be seeing that shortly.

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I also want to just say I think our planning team right now has an amazing vision for our planning program.

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With the idea that our program could really be in the information hub where information is shared from various groups and that we really see planning as an ongoing process.

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Historically often there's been an effort at the state to sort of, up for a big planning effort and then not do a lot for many years or decades.

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We think planning will be most effective if it is an ongoing process and there is continued and concerted effort both from the state level and the local level.

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We also, again, don't see planning as being successful without really robust partnerships. So that clearly I would be hitting on this presentation.

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In terms of the context related to regional water planning. Again, the original Statue passed in 1987.

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The 16 existing currently existing planning regions kind of It's from somewhat haphazardly, as groups sort of self organized.

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Those delineations of those regions are currently a combination of administrative and hydrologic boundaries.

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There are also a lot of regions. The state since that act passed completed 2 full rounds of regional plans for each of those regions.

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The first round was very much sort of self-determined. So the stakeholders within those regions.

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I know self organized, they receive some funding from the state to

develop their plans. All of those plans look really different.

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But there was a lot of local engagement. There was a there was a lot of local commitment in that first round of plans.

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The second round of plans in part was driven by the state much more state driven with the idea of trying to have the plans be more consistent so that they could be integrated into a state plan.

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The first round of plans like the plans were just kind of apples to oranges. Like there wasn't any way to compare them or integrate them.

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And so that made it challenging from the state level to use those plans. To say here's the status of water issues in New Mexico.

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So that second round was very much sort of top down driven. All 16 regions were updated in 2 years in 2016 and 17.

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So it's to roll those plans. To the 2018. Safe water plan update. And talking to people who've been involved in.

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Both of those previous rounds of planning, I think the biggest thing that stands out for me is the challenges that everyone experienced in implementing those plans.

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So as we're looking towards the work ahead underwater security cleaning act. A thing that's front and center in my mind and hopefully some of yours is how do we make sure that we're linking.

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The planning process to implementation. And part of the challenge in the past was just funding. Some of the challenge was whose role is it?

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Implement who takes the lead in implementing those plans. So those are considerations.

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Okay. I'm not gonna cover this really in much detail because Nelia did. But I think a big part of the context of this moment in time is precisely the work that Nelia outlined this morning.

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So, you know, climate change. Feels very real in this moment in time. We see that the temperatures are already increasing.

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And we know they are projected to increase. Throughout the state. I think what's really remarkable to me about this figure is simply that it's going to be hotter everywhere.

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So very significant. And then this figure would take Nelia included in her presentation this morning.

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I'm showing just cause it. Highlights to me in a way. The New Mexico feels like it's kind of in the bull's eye of increasing water stress, right?

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So this is all kind of frightening. Although I do have to say, Nilia, you didn't make this comment earlier, but it's stuck.

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It's stuck. So one of the other things I'm going to do in this presentation is just weave in a bunch of things from my amazing colleagues that I get to work with that sort of stick in my mind.

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And one of those is a comment from Nelia about This looks terrible. It's frightening and concerning.

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And maybe why there's so many people here today. But also newly made the point recently would you rather be in a situation where you have to be super creative about how you use a small amount of water.

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Or deal with excess. And in some ways, flooding, terrible flooding that you can't stop might be worse.

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So I don't know if this helps anyone to feel like. But there's upsides and downsides to either, right?

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And so I think the challenge for us in looking at this map is how do we get really creative about the using less?

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And I think humans are incredibly creative and resourceful when we put

our minds to it. So, let's see if we can figure this out.

01:23:19.000 --> 01:23:22.000 Alright, so.

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Is this asking myself, is this a magic moment? And magic moment, so one of my many mentors in stepping into this work in New Mexico, said to me sort of early on that sometimes like once in a decade.

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Or maybe once in a career. There is a particular moment in time where the convergence of a number of factors.

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Lay the groundwork for a amazing things to happen that affect things for decades to come. And I can't help but feel like the Water Security Planning Act amongst other things feels a little bit like one of those moments.

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The urgency of climate change to me really hit home. In 2022 with the largest and most unprecedented forest fires in New Mexico.

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And the prolonged drought and the impacts of drought across the state. It really felt like we weren't now talking about something in the future, but something very much that we are all experiencing.

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Right now. And I think in part of the conversation that Christine and purchase to have about like what lays the Groundwork for collaboration.

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One of those things sometimes is crisis, right? So we're feeling that. Number 2, we have this incredible deep ahead roadwork for the the climate change in New Mexico, report that nearly reported on.

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Again, if you haven't read this, I highly recommend you do it's available online. If you haven't read this, I highly recommend you do it's available online.

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So that's part of the convergence of factors. I highly recommend you do. It's available online. So that's part of the convergence of factors.

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We have the water policy and infrastructure task and then we have at this moment in time. Right here, right here.

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Am I too close to the cargo? Like someone is getting a view of close view of my PIN here.

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So these these documents highly recommend those check those out. And then we also are really fortunate. This moment in time because we have real commitment and leadership from our decision makers.

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To support sound, and that comes from both the legislature and our governor. So our governor is very committed.

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Governor, so our governor is very committed, Governor, and our governor. So our governor is very committed, Governor, so our governor is very committed, Governor Michelle, to supporting work at Office of the State Engineer Interstate Stream Commission related to water, but also, to supporting work at office of the state engineer and, to supporting work at office of the state engineer and state stream commission related to water, but also at other agencies, New Mexico, environment department.

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energy, and state stream commission related to water, but also other agencies, new, environment department, energy, minerals and natural resources.

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And, the other agencies, New Excel, Environment Department, Energy, Minerals and Natural Resources last year's budget landed for us anyway interstate stream commission was more money for water stuff than we've ever seen before sort of like order of magnitude more money for those efforts.

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This year, and the governors executive recommendation, which came out last week, again, significant funding.

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For both additional staff. Per recommendation includes 27 additional full time employees for interstatestream commission and also the state engineer.

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And also significant funding for Indian water settlements, adjudications, water conservation efforts, so real support from our

leadership.

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And then hopefully, and here's all the will update on 50 year water plan. We're still working with the Gods office on getting this plan out.

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The plan itself, I think, is designed specifically to tackle the challenges of climate change and the situation that Nelia so artfully articulated earlier.

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It will include recommendations to expand water conservation. In all sectors. To develop new water supplies and to protect and improve.

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Our water quality and our watershed health. So stay tuned. Hopefully that's part of this magic moment.

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And then we also have unprecedented federal and state funding available for these efforts. And then now we have the ZAC.

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So to me, that feels like this magic moment that my mentor shared with me that might be possible.

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So how do we seize upon that. It feels like this magic moment that my mentor shared with me that might be possible. So how do we seize upon that?

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What's in the act? Well, first of all, I encourage you all to read it.

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It's in your packet for this meeting today. Again, at task and our safe stream commission with developing rules and guidelines.

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We are counting up right now and we've spent the last year preparing with contractors, to mount up for large public engagement efforts in 2024.

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I'm not going to go into a huge amount of detail on that because Andrew, in the sub, panel, is gonna talk about that a little bit more.

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But we're very excited for you guys to engage in that. This slide includes some of the sort of high level items that are included in the act.

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Including, and making sure that the state has a role in, ensuring scientific integrity of the plan.

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So how do we at the state has a role in ensuring scientific integrity of the plan so how do we at the state level make sure that this the planning process, of the plan.

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So how do we at the state level make sure that this the planning process is supported by the best available, make sure that this the planning process is supported by the best available science data and models.

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That's gonna require a real commitment to truly implementing the Water Data Act. And maybe Stacy will talk about that in her comments how does this planning work build on existing planning so that the act is not intended to replace.

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Other planning efforts but acknowledge that different entities throughout the city are extensive planning already. How do we bring that planning to the table to integrate and to new regional water planning?

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That will, you know, acknowledge existing state water law and protect existing border rates. Link to implementation.

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So how do we really through this act more strongly requires us to link planning to implementation including interstate stream commission will be required under the app to report to the legislature annually progress.

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On the planning process, but also the priorities. It will require regions to prioritize, projects.

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How are we, you know, making those recommendations to the legislature for funding? And certainly we're intending to have robust public engagement sort of every step of the way.

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We do not believe that this will be successful unless there's buy in from communities across the state, which is why we were very much committed to doing these rules and guidelines with a tremendous amount.

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Of public input. And I didn't say this earlier, I probably should have, the act requires us to revisit the delineation of the regions themselves.

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So we are going to be re envisioning the whole thing. And excited to do that with you all.

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I think it's also important to note on this slide that this, you know, we're super focused on the goals and guidelines coming in the year ahead.

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Oh, we also acknowledge that many parallel efforts are going to be important. There are areas of this state in which planning needs to be happening now.

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Or more planning needs to be happening now to address the that we're facing. We also have been doing a lot of thinking in my shop about how to in parallel to the rulemaking and guidelines development.

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Really key up the best available science data and models. Mentioned that Dr. Phil King has come on recently as a senior technical advisor.

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To the state of for groundwater planning. We're excited to have him in that role supporting this effort as another outgrowth of the task force.

01:31:05.000 --> 01:31:09.000 Okay, so.

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What is our vision? It seemed like it might be great for you all to hear from us about what the state's vision is long-term related to this act.

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And I guess, you know, what makes me really excited about what the state's vision is long term related to this act.

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And I guess, you know, what makes me really excited about this is it has this potential, as I mentioned earlier, to provide a framework for ongoing and effective regional water planning.

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And again, with an emphasis of ongoing planning as process, not as product, but something that would be sustained and continued over time.

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And also just say, cause I had this awesome conversation at my table thanks to Christine's prompting.

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That ongoing process also needs to be really thoughtful about how it's folding in new voices and new people.

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And it's not just the same folks who've been thinking about this for decades, but how do we create a process by which we're really engaging new voices and newcomers and young people.

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So let's let's all be thinking about that. Ultimately, you know, our hope is that this act will empower communities to come up with substantive solutions to the crisis that we're facing.

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I think in the absence of planning, given the increasing scarcity that nearly had talked about, we will land in protracted and costly litigation and conflict.

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And I think there is much more benefit for all of us if we can work together. And figure out what.

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How we're gonna share increasingly scarce water supplies. And I think that totally has come from the community level.

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To be effective. There has to be real buy—in and engagement from the people involved for that to be successful.

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There has to be real buy in and engagement from the people involved for that to be successful. Hopefully this new planning effort can also think through how to integrate regional planning with state planning

and have a continual and ongoing process.

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That both are tracking on, and successfully communicating with each other. And then also as they've mentioned several times, how do we make the plan into implementation, including funding in particular?

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How are we ensuring that we're leveraging funding for the recommendations coming from the regions. And so, in light of this meeting water dialog, and a presentation about planning, I'm also gonna ask you guys to engage a little bit on each of your tables.

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There are some little yellow slips of paper. I like thinking about how do you create as many pathways for input as possible.

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So I'm also gonna plug the website and give you our emails, but in addition there's a little slips of paper and I wanted to just pose these questions to you all that are at the bottom of the slide here.

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What do you hope this act will achieve and how do we get there together? You can answer either question or something else.

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But we want to hear from you. So take a minute and write your thoughts down on these little, but we want to hear from you.

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So take a minute and write your thoughts down on these little, but we want to hear from you. So take a minute and write your thoughts down on these little, of yellow paper.

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In the back corner of the room, of the yellow paper. In the back corner of the room, above the coat racket here from you. So take a minute and write your thoughts down on these little, of yellow paper.

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In the back corner of the room, above the code rack, or there's, yeah, there's Sarah.

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You can, Sarah is wearing a yellow sweater. You can give the yellow slips to Sarah. Or above the code rack, there's a box that says inbox.

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That is our inbox for the day. Okay and I guess let me watch my time a

little bit here.

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I'm almost out. I'll be quick here. Okay, so, I think I'm gonna sort of go quickly through the next the immediate next steps because as I said Andrew is gonna cover this in a minute.

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I think one of the critical things that I wanted to flag on this slide in particular is that we actually are working currently with Lori Yaki who during our 50 year planning process she helped us convene a tribal water work group to inform the 50 year plan.

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They produced an amazing document which is also going to be released in parallel to the 50 year plan. We have her on contract with us because the waters security planning act calls for interstate stream commission to coordinate within union affairs department informing a tribal border advisory council.

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We're not sure that it's going to be called long term. But basically a group that would include tribal leadership from across the state.

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To help engage in the regional planning process. And that piece feels particularly critical and was worth, worth flagging here.

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Okay. So I think I'm gonna let Andrew cover some of this sort of like immediate next steps for this year.

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I did wanna fly for everyone that we have been working with the communications firm. Again, I'm so excited.

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There's so many people here and also there's a lot more people who aren't necessarily thinking and caring about water that we need to figure out how to engage with.

01:36:14.000 --> 01:36:22.000

And so we're working with the communications firm. They put together this really beautiful website specifically for our work and implementing this act.

01:36:22.000 --> 01:36:36.000

It is mainstream and m.org. I encourage you to check it out. There's a survey of now it's going to be updated regularly with new content, including about the big public meetings that we're going to be holding

across the state later this year.

01:36:36.000 --> 01:36:48.000

So please take over that. Oh, mainstream and m.org.

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So the campaign, you'll notice all my slides of this nifty logo mainstream New Mexico.

01:36:55.000 --> 01:37:07.000

That's the campaign name for our implementation of our. In the website is mainstream.

01:37:07.000 --> 01:37:13.000

Alright, so. I think in thinking about today's. Event and the previous presentations.

01:37:13.000 --> 01:37:24.000

It felt important to sort of talk about what's the action that's needed. So given all this, what do we do?

01:37:24.000 --> 01:37:32.000

And so I tried to capture some thoughts on this slide. I'm sure this is not comprehensive, but, there's lots to learn, right?

01:37:32.000 --> 01:37:35.000

I think One of the things I recognize in this job is I fully feel the more I learn, the more I realize I have to learn.

01:37:35.000 --> 01:37:47.000

So there's a lot to learn. And in particular, for us all to really learn about our own water supplies that we depend on.

01:37:47.000 --> 01:37:50.000

But really importantly, and maybe this ties to Christine's presentation, there is an urgent need to learn about the other interests in our communities.

01:37:50.000 --> 01:38:12.000

Who are the other water users? What's important to them? The work of Andrew is always reminding us that the work of the rules and guidelines feels daunting, but the real work comes after that where we're actually planning with our community, about how to confront.

01:38:12.000 --> 01:38:20.000

Scarcity and so we will be better suited for that work if we're understanding and working to understand our.

01:38:20.000 --> 01:38:40.000

Now. And then engage. Obviously we're looking to all of you all to

participate in the public engagement efforts we have coming this year and implementing the act and gathering input as to the delineation of the regional boundaries, how the entities will work with the planning process and cycle would be.

01:38:40.000 --> 01:38:49.000

I also again encourage you to check out those 2 documents I mentioned, the task force report and the climate change impacts to New Mexico from.

01:38:49.000 --> 01:38:58.000

New Mexico tech, which actually just more than a national award, and then looking to you all to motivate and lead.

01:38:58.000 --> 01:39:05.000

Like how do we engage a broader audience? So another question if you want to write something on another, How do we engage a broader audience?

01:39:05.000 --> 01:39:16.000

How do we connect the science with everyday people and have it meaningful to them in a way they wanna show up.

01:39:16.000 --> 01:39:22.000

And, yeah, we're looking to to help promote these outreach events.

01:39:22.000 --> 01:39:30.000

I think I just in closing I wanted to there's a couple of comments from colleagues that are here today that have stuck with me that I just wanna share.

01:39:30.000 --> 01:39:36.000

I can just take. One, hope few minutes more. Okay, see.

01:39:36.000 --> 01:39:44.000

One of them is from Adrienne, in the back corner. It was a couple of years ago we were at something Adrian.

01:39:44.000 --> 01:39:52.000

And you said, let's take a minute to just acknowledge. Sort of the emotional psychological tool. Of what we're facing.

01:39:52.000 --> 01:40:03.000

And you know, when Christine had us go inside a minute earlier. Like I realize that, Makes me scared.

01:40:03.000 --> 01:40:10.000

I also, you know, this work is a huge part of who I am. I'm also a mom.

01:40:10.000 --> 01:40:17.000

I go home to a beautiful little 4 year old. And this work feels daunting, right?

01:40:17.000 --> 01:40:29.000

So I just wanna thank you, Adrian, for that, cause I come back to it regularly like, oh yeah, let's keep in mind this is hard stuff to confront.

01:40:29.000 --> 01:40:36.000

The other thing that I wanted to say is, we learned something coming out of COVID. Or at least I did .

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I feel like COVID really made me realize what a social species we are. Humans don't do well in isolation.

01:40:46.000 --> 01:40:57.000

And I think, we had a conversation yesterday with Christina, and the state engineer, the state engineers said something about people being hungry to connect.

01:40:57.000 --> 01:41:07.000

Hungry for community. And I think the way that we confront the scary stuff in nearly as presentation. Is by getting to figuring out and understanding the bigger we.

01:41:07.000 --> 01:41:17.000

So who is the bigger we? I think that's the other question for all of us. And part of the homework here about understanding your community's needs.

01:41:17.000 --> 01:41:24.000

How do we honor and support our rich? Agricultural traditions in New Mexico as we confront what's ahead.

01:41:24.000 --> 01:41:35.000

How do we learn? From some of the shortage sharing that the Isaacas can teach us.

01:41:35.000 --> 01:41:49.000

How do we fully, fully acknowledge and respect travel, sovereignty in New Mexico? How do we build on the existing sovereign relationships that make them stronger? How do we build on the existing sovereign relationships that make those stronger?

01:41:49.000 --> 01:41:53.000

And how do we bring the traditional ecological knowledge, how do we build on the existing sovereign relationships that make those stronger?

01:41:53.000 --> 01:41:57.000

And how do we bring the traditional ecological knowledge that make those stronger. And how do we bring the traditional ecological knowledge to the gentleman in the back raised?

01:41:57.000 --> 01:42:01.000

How do we bring the traditional, and how do we bring the traditional ecological knowledge that the gentleman in the in the back raised.

01:42:01.000 --> 01:42:12.000

How do we bring that to bear and respect that in how we're confronting these challenges We have incredible and precious ecosystems in New Mexico that are also going to be weathering these changes in New Mexico that are also going to be weathering these changes.

01:42:12.000 --> 01:42:14.000

And so what's our, what's the, systems in New Mexico that are also going to be weathering these changes.

01:42:14.000 --> 01:42:17.000

And so what's our, what's the, and all And so I think I'm out of time.

01:42:17.000 --> 01:42:27.000

Just gonna say I'm very excited to work with all of you. All of our planning jobs names and emails are on this slide.

01:42:27.000 --> 01:42:33.000

And we're very much excited to engage with you all, and implementing this act.

01:42:33.000 --> 01:42:55.000

Which will have an impact on how planning happens in New Mexico for decades to come. And thanks so much.

01:42:55.000 --> 01:43:10.000

Rick, I think we're a little over. Maybe we'll split the difference a little bit back from break at, 1035 and also for the afternoon session.

01:43:10.000 --> 01:43:18.000

We're gonna need some volunteers for host at each table, so we want. One host for 4 people, so we'll just kinda say 2 per table.

01:43:18.000 --> 01:43:22.000

So if you want to volunteer to be a host. Come see me. I've got cards for you.

01:43:22.000 --> 01:43:32.000

You know, volunteer eventually becomes long told, but anyway. And,

yeah, we'll see when we come back.

01:43:32.000 --> 01:44:02.000 Thank you.

02:02:14.000 --> 02:02:44.000

Right. Hurting Yeah. Oh, so you can make it to my understanding. Yes.

02:02:59.000 --> 02:03:16.000

I know, but I'm just gonna go wrong.

02:03:16.000 --> 02:03:27.000

Thank you. Alright. There we go, that's good. Alright.

02:03:27.000 --> 02:03:41.000

We are going into our panel here. Should be pretty good. Each panelists will talk for about 7 min and there will be time for Awesome questions after if you want to introduce yourself at the start.

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Have added and Norm G will be the first panelist speaking. Thanks.

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It's so great to see everybody here. Today and to see all the energy in the room and to see people talking and so engaged that they won't sit down.

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But this is for both. And both of those are absolutely essential going forward. The panel is selected to give you a short burst of information from various perspectives of people who are engaged in the water issues in New Mexico.

02:04:24.000 --> 02:04:38.000

About why planning this time. Will be different. And I have 6 reasons. To to tell you about in my short remarks.

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Number one, previously. Regional water plans were prepared. They were submitted to the ISC. The statue said nothing about what the plans were.

02:04:52.000 --> 02:04:59.000

What they're, well, the purpose was to show them to Mexico had used for all the water that it has.

02:04:59.000 --> 02:05:08.000

In order to. Have backstop to keep Texas from coming in inappropriate. I mean that was that was the purpose.

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But many regional planners took it much further than that. But then what happened? Did didn't have much guidance, introduced a bunch of plans, but what really was one of the market, what is a market change?

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Is previously planned were submitted to the ISC. Or acceptance. And filing. And I know they were not really.

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Reviewed as a step along the way. They were accepted as they were. For piloting. You know the presentations of the water planners to the ISC was cursory.

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The discussion was cursory. And they were accepted for pilot. This time. The in the state stream commission is going to be engaged continuously.

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There should be no surprises as to what is expected. The rules are all there both in statute and forthcoming rules and guidelines.

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Is the plans will be approved. All, following a rigorous review. And, an approved plan is an endorsement.

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For implementation of the priorities laid out in that plan. Second. Act calls for collab, transparent collaboration leading to implementation.

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The word collaboration. Here's in the act twice. To be approved for implementation, each entity has to reach a consensus through collaboration.

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There can be no minority reports. The plants must be substantive. And they must be agreed. And the only path forward to get that.

02:07:01.000 --> 02:07:20.000

Get there. Is the engagement and collaboration. And process. The Christine Whitney Sanchez presented earlier.

02:07:20.000 --> 02:07:24.000 Shared values.

02:07:24.000 --> 02:07:28.000 Effective collaboration.

02:07:28.000 --> 02:07:31.000 Leading to consensus.

02:07:31.000 --> 02:07:43.000

First requires us. To think about. Talk about. Understand, connect.

02:07:43.000 --> 02:07:56.000

To determine our shared values. The act requires each in the language of the app. To define the public welfare of the region.

02:07:56.000 --> 02:08:07.000

Now in English, that means shared values. We have such diverse interests. Well, we also have tremendous shirt values.

02:08:07.000 --> 02:08:17.000

We need to find those and articulate them. And the act requires that we do that. Water across to Mexico.

02:08:17.000 --> 02:08:20.000 There's a community problem.

02:08:20.000 --> 02:08:27.000

Community problems require. Community-driven solutions.

02:08:27.000 --> 02:08:42.000

There is no other way. The act requires. Consensus and prioritization across the region. Of community driven solutions.

02:08:42.000 --> 02:08:52.000

This one, next one. It's something that I have stood for my entire career. As a water professional in New Mexico.

02:08:52.000 --> 02:09:07.000

It is scientific integrity. Those words appear in the act. Along with an excellent definition. And I wanna read you now the language in the act.

02:09:07.000 --> 02:09:11.000

The Commission Shelf.

02:09:11.000 --> 02:09:20.000

Insure. By using the integrated water data and information platform to build Pursuant to Water Data Act.

02:09:20.000 --> 02:09:29.000

Collaborating with Bureau of Geology and Mental Resources of the New Mexico Institute of Mining at Technology, Technology and the Water Resources Research Institute.

02:09:29.000 --> 02:09:41.000

That the best. Data and models related to water resource planning are available to the regional water planning entities and are used with.

02:09:41.000 --> 02:09:50.000

Scientific integrity. And adherence. To the principles of honesty. Objectivity.

02:09:50.000 --> 02:10:05.000

Transparency. And professionalism. In developing, betting, and prioritizing proposals. That is statutory language in New Mexico.

02:10:05.000 --> 02:10:15.000

Finally, we have to prioritize. The X before we drafted the bill before the bill was drafted.

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Numerous legislators, to the people who are engaged in this separate what they have to have.

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And one of them is they have no clue at the top when they get all these random requests for capital outlay.

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How to prioritize them. It's usually the squeaky wheel gets the dollars.

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Instead, we need to collaborate.

02:10:42.000 --> 02:11:03.000

And we need to prioritize across the regions. The programs. Paul that the legislature will then The ISC must, according to the act, prioritize those for advocacy for implementation.

02:11:03.000 --> 02:11:16.000

The legislature will make the decisions and they will know what your Pro and it's not just your It's the other 2 million New Mexicans.

02:11:16.000 --> 02:11:19.000

Thank you.

02:11:19.000 --> 02:11:35.000

0kay.

02:11:35.000 --> 02:11:40.000

No, I've got a question.

02:11:40.000 --> 02:11:47.000

I think we. We don't have time on the panel, James. I'm sorry, but we have 7 min each and we want to, but we have 7 min each and we want to, we want you to hear from everybody today, please.

02:11:47.000 --> 02:11:59.000

There should be time at the end after all the panel goes through. About 30 min for questions.

02:11:59.000 --> 02:12:03.000

Good morning. I'm Stacey Timmons and I'm here from the New Mexico of your geology.

02:12:03.000 --> 02:12:27.000

And mental resources, which is a research and service division of New Mexico tech. I'm the associate director of Hydergeology programs there and one of our programs at the beer of geology is the water data initiative which is a collaborative effort, a spin off from the Water Data Act, which is what I'm going to talk to you about here today.

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Just as a reminder, there is. Little vignettes from each of us. In the packet that was provided.

02:12:34.000 --> 02:12:59.000

And so there's a lot more background in content and the packet that was provided. And so there's a lot more background in content and perhaps website links that you can find in the text, So, the Water Data Act was legislation passed about 5 years ago now in 2019 that basically directs our state to do better with our water data, working on sharing our state to do better with our water data, working on sharing our water data.

02:12:59.000 --> 02:13:13.000

integrating, sharing our water data, integrating it, working on sharing our water data, integrating it putting together, sharing our water data, integrating it, putting together and managing it better, working collaboratively, hence the water data, integrating it, putting together and managing it better, working collaboratively, hence the Water Data Initiative, with regional efforts and national efforts, as well as 5 state agencies that are specifically named in this effort.

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So our agency, the Bureau of Geology, is simply the convener. We are asked to get everybody together.

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Let's work on water data. Let's put some standards together. Let's move in the same direction.

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The program manager for this is Rachel Hobbs who's over there on a yellow top and sprung she that send her your comments on my talk and any data that you need to Rachel.

02:13:35.000 --> 02:13:45.000

We're working with the state engineers office interstate stream commission in the environment department and energy minerals and natural resources as directing agencies in the Water Data Act.

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The Water Data Act specifies a long list of specific water data that shall be made more available. It is very encompassing and kind of a huge effort to just go and grab a bunch of data.

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You can look through the text that I provided or the legislation. To look at the list of data that are included.

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Or you can start by exploring what we have in a data catalog. So we have, kind of 2 main efforts that I'll talk really quickly about.

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One is this data catalog where we are basically illuminating data sets that are currently available in New Mexico.

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Some of them are pointing you to websites where data exist. Some of them are actual data that are uploaded to this webpage and some of them are going to be links to data visualization map tools of that.

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Wide range of data sources. If you are a data collector or data provider, this is a place where you can also put your data for others to come and find and use.

 $02:14:47.000 \longrightarrow 02:14:53.000$

So this is a really important tool that addresses some of the needs of the Water Data Act.

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And I want to kind of shift to thinking about how water data and the strategic water planning act kind of fit together.

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When we think about I don't know the big opportunity that we have here. We have Lots of really smart scientists.

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We have data, which I would classify as the raw data, the

measurements, and then we have information.

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Information has been somewhat synthesized data. It's been interpreted put together into a report or to a map.

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And then we have this other category of water policy and water management. There's also really important for the Water Data Act and for the strategic water planning effort.

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And that place and overlap I think is that connection point that Hannah talked about that we're really trying to kind of refine for the strategic water planning.

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And in terms of the water data, what I'm trying to get to and what I hope you'll help us gather here today is what are the key questions for some of these regions?

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What are the issues that you're facing and where do you need data to help get that together? And then from that, Once we have the questions, we can then look to the data sources that we have available.

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And the information that's available and then try to integrate that for the regions for whoever is working on these issues and work towards improved water policy and management for those regions.

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But it does go back to what are the communities needs. So it just as an example of how this can develop.

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I wanted to just bring you one quick use case. So identifying those questions is basically developing a use case.

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How are we going to use the data to answer a specific question? And so we had a question which was, where is New Mexico monitoring brownwater?

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How much do we have information? On our groundwater levels and how can we work to improve this. And so with a project that we had funded last year from Thornburg Foundation, we collected a whole bunch of groundwater level data that are electronically available online.

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You can find out more about the details of this effort from our website, which is Mexico Water data.org.

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There's a projects tab. And there's a report that describes a lot of the effort that we went into that.

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One of the outputs is a data visualization, a map tool that looks something like this. If you find your way to our data this page, you can see a bunch of colorful symbols on this map.

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Orange being places where we can see groundwater levels going down. Blue being places where we can see ground water levels going up and an orange bar that's where is needing it to steady groundwater level.

02:17:28.000 --> 02:17:37.000

And then you can. Click on those points and have a sense of get a little graph of what the trend in the groundwater level is over a period of time.

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So this is a really important tool to, just kind of first off explore what the data, are available electronically in New Mexico on groundwater levels.

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And then. Also kind of think about the places where we need more data. So in our project, we identified 10 key regions that we wanted to dig deeper on and look for places where we need more monitoring.

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And so part of the output also on this map and in the report that's associated with it are some areas where we've identified a need for more groundwater monitoring.

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So hopefully in coming years we can utilize this information and go and potentially drill wells that will be used for monitoring and tracking groundwater level changes, water quality changes as we face this future of less water available.

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One quick thing I wanted to mention. 7 min. I think I'm at 6 50. Is that we have an water data meeting coming up.

02:18:33.000 --> 02:18:38.000

So save the date of May tenth. It's a Friday coming up. We'll have it here in Albuquerque.

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Yeah, if you go to our website, you can sign up for the newsletter and you'll get information straight to your inbox about that. All I have next up.

02:18:46.000 --> 02:19:02.000 Thank you.

02:19:02.000 --> 02:19:06.000 Okay.

02:19:06.000 --> 02:19:22.000 Okay, Assistant. Let me. So. Okay.

02:19:22.000 --> 02:19:23.000

Okay, thanks. Sorry, was trying to keep it simple without slides. Apparently it makes it a little bit harder.

02:19:23.000 --> 02:19:41.000

Yeah. Sorry, was trying to keep it simple without slides. Apparently it makes it a little bit harder. Yeah.

02:19:41.000 --> 02:19:48.000

So, my it's pretty amazing. I had this job for 2 years. So this is certainly not my program that I've created.

02:19:48.000 --> 02:19:56.000

And it just seems like I've been coming to this. I was one of the people with my hands up for having been to more than 10 of these.

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We've asked that question. I've seen it at their previous events and it seems like there's a lot more people here for the first time this year than has been the case in the past and it's just really exciting.

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So thanks so much to everyone who's here and to the organizers of the event. It's great to see everybody.

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I'm gonna give just a little bit of information about myself because I often feel like it's just unbelievable that I have this job.

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And how could anybody possibly understand enough about water to have this job and how could anybody possibly understand enough about water to have this job?

 $02:20:22.000 \longrightarrow 02:20:30.000$

I'm not positive that I am that person. We are a very small team. I have a background in water resources, but there's certainly lots of things I don't know.

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So I went to the University of New Mexico's Water Resource and Planning Program worked for the Forest Service out of the regional 3 office down on Broadway here in Albuquerque for a number of years.

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I worked at the state engineer in the adjudication and in water rights for a number of years worked at the city of Santa Fe for about 8 years their water department and I've been here at the Interstate Stream Commission for a couple of years.

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It's a lot of water work. It's got a big blind spot relative to agriculture.

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I just want to be real clear about what I know about and what I don't. So that's who I am.

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I'm I guess in charge of I feel like really just a member of our water planning team.

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There are 3 of us. I would ask them to stand up, but like many of the things I was going to present about.

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That's already been done. So, there are 3 of us who are on our planning team.

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I'm really thankful for him. Everybody is here. That is our entire state wide water planning group.

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The fact that group is so small, I think everybody on our team is great. Also, we really need help to get this addressed, right?

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As Norm pointed out, there's a couple 1 million New Mexicans who didn't make it to the meeting.

02:21:36.000 --> 02:21:43.000

And we're all gonna do, right to represent the interests and the needs and the values that belong to everybody and to really try and get more people involved to everybody and to really try and get more people involved in doing all this water to everybody and to really try and get more people involved in doing all this water planning work.

02:21:43.000 --> 02:21:52.000

So the most important piece of this, I think, and the reason that there's this is the first meeting I've been to where the word magic was used and it's been used twice.

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So I think the reason that we have some magic relative to this particular moment is as has been noted because of the urgency of it is as has been noted because of the urgency of it, right?

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So all the work that Nelia presented or Dr. Dunbar presented or Dr. Dunbar presented or Dr.

02:22:06.000 --> 02:22:11.000

Dunbar presented earlier today is. As anxiety inducing for me as I'm sure it is for many of you.

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And at the same time, it really is seemed to be the reason that everybody is here. For the sake of reiterating this because I really think it's important that we keep hammering home the issue.

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We're looking at a reduction in surface water of something like 5% a decade that's 25% in the coming 50 years.

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That's a lot it comes with a bunch of attendant additional kind of impacts including changes in when we're expecting runoff increases in a ratification and a.

02:22:43.000 --> 02:22:44.000

We're worried about flood and flood issues. There's all sorts of things that are.

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Concerns for the future that we're looking at for water. We're looking at for water management and certainly I'd encourage everybody to go.

02:22:49.000 --> 02:22:59.000

We have it on our website mainstream and certainly I'd encourage everybody to go. We have it on our website mainstream in New Mexico or mainstream and ${\tt m.}$

 $02:22:59.000 \longrightarrow 02:23:04.000$

Dot org. That also is a place where you can go and look at the work that Dr. Dunbar and her team did to look at some of those and I'd encourage you all to go there and look at that.

02:23:04.000 --> 02:23:19.000

Maybe, in small bites. So, so there's that urgency. We have this, this magical piece that, it seems like we have a tremendous amount of interest not just at this level but also at like the higher level of folks who are actually allocating funding towards a lot of our projects.

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I should also mention I've merely been doing this for 15 years. The 15 years that I've been active doing this, the mantra has mostly been, can we do more with less?

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And that seems to be something that we're also moving away from too and into this. Can we do more with more kind of mode?

02:23:39.000 --> 02:23:46.000

So that also perhaps is a contributor to the the magic of the moment we're at right now that there's a contributor to the magic of the moment we're at right now that there's really an opportunity and I think that's really an opportunity.

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And I think that's going to be one of the things. That provides the potential to really make state water planning different this time and in previous iterations.

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All right, so quickly, the thing I'm really supposed to be talking about is what the next steps are and what we're going to be doing next.

02:24:02.000 --> 02:24:08.000

So quickly, the thing I'm really supposed to be talking about is what the next steps are and what we're going to be doing next.

02:24:08.000 --> 02:24:17.000

So our team is responsible for implementation of the act. The first piece of that is going to be creating these rules and guidelines and we're really hoping, intending going to use input and engagement with the public and people throughout New Mexico.

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As the basis that we're going to use to build this, we really want to

have a lot of buy in for the process.

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As Hannah mentioned earlier, I guess paraphrasing me. It's gonna be hard to do rules and guidelines and that should be the easiest part of this process.

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So that's what we're going to be doing over the next year. Actually years about right a little bit less than that.

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So we've been working with the, firm to do a really nice website. We're gonna use that to collect information to support the rules and guidelines.

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We're also going to be doing a series of public meetings. Those are gonna be held in the 16 existing regions.

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Those are on the map that was up here earlier today. I realized that doesn't reflect the way the regions are likely to land, but it's what we've got.

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We certainly promised those when we left those regions back in 2,017 at the close of the last round of regional planning.

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The public meetings are going to address. Well, we're gonna collect information that is going to be used to create the rules and guidelines.

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Our real goal is to expand participation, really get a lot more buy in, really have ongoing and effective regional planning as Anna mentioned and I'd add to that really active and expanding ongoing and expanding.

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So that we continue to bring more people into this, right? And that's what we're really hoping to kind of set the groundwork for doing with our rules and guidelines process.

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I should have looked to see if I was at 7 min, but I'm just gonna say here as I wrap up my comments here the next piece that we have that I think this room can be particularly helpful with is going to be about using this website to really connect with people around New Mexico and

make sure that the sense of magic is kind of conveyed, right?

02:25:54.000 --> 02:25:59.000

We're in a difficult moment. There's a lot of urgency. There's opportunities that haven't existed in the past.

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And we hear a lot from people who are trying to figure out what to do next. And one of the things we'd really like to highlight our stories from around New Mexico that can kind of humanize some of these statistics that we should that have been shown on the screen today.

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And this is a group that I'm sure has some stories of resilience or of catastrophe or of ways around problems or problems that perhaps they didn't find a way around.

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And actually, if anybody is interested in reaching out to us, we would love to be able to highlight some of those stories to provide some of those stories to provide opportunities for other folks in the state to.

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Connect with each other through shared struggles and through shared successes. So, yeah, please, please find me around here during the rest of the day if you have any interest and of course our information is up on our website mainstream. And.

02:26:38.000 --> 02:26:51.000 Work so thanks very much.

02:26:51.000 --> 02:27:04.000 Yeah.

02:27:04.000 --> 02:27:12.000

Alright, hi everyone. My name is Max Ankels and I'm a program manager for the next Department of Agriculture.

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And also was the agency designee on the policy infrastructure task force last year. So, you know, NMDA, I'm not really going to speak for farmers.

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That's not really our role, cause they're more than capable of speaking to themselves and their perspectives on this.

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It's also obviously a very diverse group, culturally, economically,

geographically.

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In terms of their operations and practices. But I'm gonna give a couple kind of general ideas about how regional planning can be.

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Both beneficial. Both in involving and in supporting agricultural communities. So just kind of some importance of this round and then I'll get into some specific provisions from the Act.

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So this, this new round of regional planning is going to really be crucial. For ensuring that agricultural communities are viable and resilient in the face of increasing water scarcity and climate change.

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As is often noted, irrigated our culture is the largest water user in the state and also holds the majority of the water rights in many bases.

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Yet farmers are also the most immediately and intimately affected by shortages and water and certainty. Agriculture water use not only supports food production in farmer livelihoods, but also shapes the landscapes, ecosystem services, and cultural identities of the communities in our state.

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So I think it's really important that we understand the interaction both between water management and also land management to this holistic perspective.

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2 regional water planning. So I think a central challenge really will be how can we preserve this agricultural heritage of our state while also conserving water and addressing the new water realities.

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So I'm gonna really focus on 3 specific provisions that I thought are going to be really important in terms of.

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And Norm already touched on most of them, but the first one really is the requirement to base planning on best science, data, and models.

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I think in fulfilling this it's really important that ISC and original entities consider a long-term planning horizon to help farmers really understand what their water situation is.

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In each case in. There's many types and sizes of farms I mentioned, but they all really have one thing in common.

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They need a reliable source of water. And the business decisions they make you know infrastructure farm equipment cropping patterns etc. these are long term investments and the financing them can be very complicated.

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So I think by advancing the science or understanding it can really inform them so that they can make these decisions for their long-term water solution, you know, including, knowing the supply, demand and balance in their basin and courting action during shortages to reduce their uncertainty.

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A second real key requirement, that norm touched on is that each plan included projects, programs and policies prioritized for state funding.

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And I think the real purpose of this used to incentivize regional planning, create buy—in from stakeholders, and effectively allocate state resources to local needs.

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So for these projects to really support agricultural resilience, there's a couple considerations. First, I think farmers should play a leading role in crafting agricultural water conservation strategies.

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And there's really kind of 3 kind of reasons for that, but really, only farmers, you know, I mean, planners can really understand it from the water perspective and you know, and from the technical perspective.

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But they often don't understand the business realities and non water considerations faced by farmers. You know, there's a whole suite of potential water conservation strategies, some of which are already being implemented in the state, you know, we have infrastructure improvements, irrigation practices, incentives for cropping changes, for water capture, soil improvements or volunteer rotational fouling just seem a few.

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But I think it's important to design these with, from the start. That

way there will be more adoption.

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Will make sense with the economic decision making, sense with the economic decision making processes of local producers.

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They'll make, sense with the economic decision making processes of local producers. And they'll also consider the interrelated land management processes of local producers.

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And they'll also consider the inter related land management factors, to give a recent example with the water conservation program in the lower real brand.

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You know, ISC held listening sessions and found out the concern with the following program, about erosion, loss of soil fertility, and we didn't festations, and they were able to craft some flexibility in their program to allow a slight bit of surface water irrigation to cover crops.

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So I think there's some creative solutions there, but it needs to come from dialogue. And then finally, I think it's also important because farmers, it's important that they can see their conservation efforts in the context of the holistic vision for the basin.

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So they understand that it's part of a greater vision rather than just shifting their use to other sectors.

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Second, I think it's important that these programs, the policies think beyond just water, but it's, as the recent experience with fires and the sake of us have shown us.

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Often agricultural water security is just reliant on on watershed management and on upstream risk mitigation and disaster recovery programs.

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As on on farm conservation. And if you've ever been to irrigation district meeting, you'll know there's a million different topics that come up besides just the water balance.

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So there's a lot of, there's a whole range of issues that I think can

be addressed.

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So finally, the last provision real briefly. The act also, explicitly requires engagement with rural communities and state gate communities in Is implementation of the act.

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And I think it's really important to all these communities early and meaningfully, to provide more opportunity for alignment of interest and solutions.

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You know, the communities are very diverse and, but it'll be important kind of to consider things such as agricultural calendars and schedules, which are often different than those of us that work normal business hours, farmer focus events.

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If you only go to water conferences, you'll notice you don't see a lot of producers there so you're gonna have to go to the events they're attending existing community networks so that's gonna take a lot of direct outreach in relationship building and then I think listening sessions, community dialogue that sort of thing.

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I think these are all important actions that I see kind of bark on in the next year. So anyways, thank you for your time and happy to answer.

02:33:57.000 --> 02:34:20.000

So anyways, thank you for your time and happy to answer questions later.

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Thank you, everybody. Let's see, Hope. My name, Just gonna, introduce myself.

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So that's the hat I'll be wearing today, but always I can't leave. How I was brought into this world, in my name, in my, so that's what I shared this morning with you all in my introduction.

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And just acknowledging everybody and as Andrew said earlier it's amazing to see so many people here.

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Today and engage from various fields and stakeholders and communities and different parts of New Mexico. One thing I wanted to just share in

my learning and my my grandpa taught me he lived in his mid nineties to be a lifelong learner.

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And in that, in this role as I can see commissioner one of the ISC commissioners I've learned so much in this role and I just appreciate everybody here because I tried my best to use 2 ears and listen and absorb that.

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That information from various viewpoints. And I think that's what we need to continue to do to what Christine talked about earlier.

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Is that listening? That connection and engagement is so important. So I just wanted to start from that point.

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I know we're trying to talk about ways that when you do a time check. Okay, tell me, pull me off right now.

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Time's up. But I just wanted to say, you know, pull me off now. Time's up.

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But I just wanted to say, you know, the topic here about the water security planning act and it being different this time.

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And I think the way it will be different is from all of us. This is our opportunity as Christine mentioned, how problems, how challenges can also be framed as an opportunity.

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This is our opportunity for everybody. Living today, for me living today, we only have our lifetime to make those positive impacts and the work that we all do.

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Sitting at these tables, collaborating, listening, and cooperating. And that's like the brought up is.

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To benefit everybody. In the in the thought, well being of, which means everybody in our language. Everybody, everything, including the land.

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Including all of the elements of that hydrological cycle that many

nerds talk about and we live and think about every day.

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It's every single element of that hydrological cycle. From the, from the mist to the hand nutty to the clouds.

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To the snow and the rain to then it becoming part of the ground. Now I have to go under.

02:37:32.000 --> 02:37:43.000

To be the streams and rivers. That we all depend upon. 2. Be that water in his life, So we're part of that and I like to say we're all walking bodies of water.

02:37:43.000 --> 02:37:56.000

Science has confirmed that. Right. Science that we've been talking about has confirmed we're all walking parts of water.

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So we're part of that ecosystem. We're part of that. Hydrological cycle.

02:38:01.000 --> 02:38:02.000

And so it is about HOPA. It's about all of us and I love water.

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I love water. To my, to my bones in my, in my blood. And so in asking a question if it is different this time it really is amongst all of us.

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To make sure it will be different. That it won't be a document sitting on the shelf that we can actually do things.

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Through this plan and part of it is actually going through that process, but just the collaboration and engagement respectfully.

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And one thing I wanted to say, in black and white, why it might be different and why I hope it is different is because in this plan and this legislation we have a section that actually identifies the engagement.

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Tribal nations and Propos here in New Mexico. A 100 plus years ago I know, and talking about, you know, signing up the Rail Grant Commission, I mean, Real Grand Compact and other water agreements, there was no tribal engagement.

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There was no tribal person sitting there.

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And so as we talk about water in New Mexico, I sure hope that we use this opportunity to have that engagement.

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And that collaboration. And inclusion and incorporation of that perspective. Because as we talk about water data.

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I was looking at all of those pictures and slides which I know. A lot of the data, mine for that, those reports, as identified by Dr.

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Dunbar is based upon the existing data that is a available. In black and white or from gauges.

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But I also want to share that there are. Other resources of existing data. And that's living data.

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That's living data. In the minds and the language and the way of life of our indigenous communities, tribes and publisher.

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And so, that is hard. That is a little bit harder to capture and extract than put on paper, but that is why the engagement of trifle nations and public is so important.

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Because there's a lot of wisdom and expertise related to that data source. That is a must as we continue as the gentleman in the back shared earlier are indigenous peoples have been living in this landscape.

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Since time and memorial. We've had to carry the experience of that balance and I always want to say with balance you achieve it in a split second.

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The next second, you're out of balance potentially. It's an iterative process. You always have to work at it.

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So it's not a one and done thing. We have to all be engaged in it and

it is work.

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And that's okay. That's all right. And I'm so, again, happy to see everybody here willing to have being involved in that iterative process and be involved in the work and we just need to be transparent that it is going to be work.

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And we're gonna hit the speed bumps. But let's work on it together. And so with that, I'll turn it over.

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I'm sure I'm over my 7 min, but I appreciate everybody listening and I look forward to this process as we go forward.

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And continuing to learn and to listen to you all as well as trying to advocate for the incorporation of.

02:41:49.000 --> 02:42:03.000

The indigenous perspectives and the data sources that are within those perspectives. Thank you.

02:42:03.000 --> 02:42:10.000 Yeah.

02:42:10.000 --> 02:42:15.000

Good morning everyone. Appreciate you all being here and it's an honor to be here to privilege.

02:42:15.000 --> 02:42:16.000

My name is Eric Olivas. I am the vice chair of the Bernoulli County Commission.

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I was just elected last year. November of 2022 and I'm also the chairman of the Albuquerque Berlin County Water Utility Board.

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I was born and raised here in Albuquerque. New Mexico, but, my roots here in New Mexico go back much, much further.

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My great grandfather was a sheep herder in the mountains up above Cuba. And if you don't know what that word means, in Spanish is a, is a word for miraculous birth.

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It's often taken in a religious context, but if you don't know that

it's also known as the same paper wilderness, it's a place of, springs, right?

02:42:57.000 --> 02:43:08.000

Water, miraculously birthed to the surface of the earth. Nourishing the environment, they're nourishing life.

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That has prospered in that region for many many years right you think back to the indigenous peoples that were the original culture in that area.

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All the way up to, you know, my grandfather who was a Spanish immigrant of many generations. So it's, it's incredibly, it's, it's a huge honor for me to be here today and be talking about water, which is something that I've been passionate about my entire life.

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Watching as our climate has changed, my generation is the generation that I believe has a real opportunity in partnership with with everyone to solve some of these complex challenges that have been put on our table.

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From decisions that have been made over many generations, decisions to dismiss indigenous culture to dismiss the knowledge and the tools that we know in favor of you know other systems and other creations that we've made.

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That in many cases I believe have put us in the position we're in. But we have a unique opportunity now.

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To change that course. We are confronted with this reality of climate change. But we also have to look at the past and how do we remedy the past?

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How do we use this opportunity, this planning process and the opportunity to invest in the future. To remedy some of those mistakes.

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And I can't help but think it's a little ironic. I was talking to one of my colleagues here.

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That I'm the political representative here before you today of the largest Come on, I don't know if that's a word of water in our state,

right?

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The Albuquerque water utility authority. We sell water to residents of. The metropolitan area here.

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But it's incredibly important, I think, that in this planning process we tried to move away from that practice of seeing water as a commodity.

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And rather seeing water as the life force, the connective tissue that it is within us, within our society, within our culture.

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And, those decisions that were made in the early 19 hundreds. Twentieth century. We now have the opportunity to to make some changes and I'm really hopeful about this process and the opportunity that we see before us here today, right?

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The place that we were in the very place we're in, the Pueblo Cultural Center.

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And bringing together the diverse users from our, SETIs, we have the Mill Real Rank Conservancy District, the Water Authority, our counties or cities or municipalities, our farmers.

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Our scientists right we have the best minds and the best practices in the room right now and this is an opportunity to build on that and grow on that through this, this planning process.

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And so I'm really hopeful about the future and I'm really hopeful about what that engagement of this large and diverse group can mean for the future.

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And I wanna say something sort of more specifically to the middle real ground region now. In my brief tenure here working with county and water authority.

02:46:26.000 --> 02:46:37.000

We do an amazing job at the authority through our local. A jurisdictions here of working together, but largely in times of crisis.

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Right. And the unfortunately reality we face is that every year is going to be another crisis as we look at the realities that we started this conference with today.

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We know that the impacts of climate change are only going to increase, the heat is literally getting turned up.

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So we can no longer afford to just collaborate. When there's a shortage in the in the river, insist because there will always be a shortage from here on out until we start looking at water differently.

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That's how we start looking at this again as that connective tissue of our society that binds us all together that is interconnected.

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The farmers, the agricultural users are interconnected with the urban users are interconnected with our tribes and Pueblos and Indigenous communities.

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And I think that this planning process presents that unique opportunity. To really reframe our concept of water and reframe our concept.

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Of quote unquote beneficial use right we have ecosystems as well that are beneficial to our society, but it's impossible for us to quantitatively value those systems.

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And so this planning process, I'm very hopeful. That with the group we have here before us today and the engagement of our entire state, we have a real unique opportunity again to shift that mindset and move to a place where we can really leave the nation and make our community proud of doing something really good.

02:48:09.000 --> 02:48:16.000

So I appreciate the opportunity to stand before you today to speak. And I'm really just honored to be part of this panel and these distinguished speakers.

02:48:16.000 --> 02:48:46.000 Thank you.

02:48:49.000 --> 02:48:56.000 Yeah.

02:48:56.000 --> 02:49:04.000

Good morning to everyone this morning. You're hanging in there. I know it's been a long morning and let me just tell you from my perspective, it's hard to be last, okay?

02:49:04.000 --> 02:49:15.000

So I'm gonna do my very best though to keep you engaged and I'm so honored to even have the opportunity to present to you today.

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My name is Ladonna Clayton. And I am the executive director of the Oglala Land and Water Conservancy, but also a former Clovis City Commissioner and that's important for me to mention because some of what I'm going to share really came out of that experience.

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So the title as you can see is water can't wait. And this is about the Eastern of Mexico groundwater crisis.

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Only have 7 short minutes to talk about that. I do want to put up like in for Jake McCook who is really leading a charge for water can't wait because there it is, right?

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It cannot wait. And if nothing has resonated with you yet. I hope that what I'm going to say will.

 $02:50:00.000 \longrightarrow 02:50:11.000$

If you haven't looked beyond hope and decided you have the personal will to engage at this point. I hope you do not walk away from here today.

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Without determining that you have the personal will to become involved and engaged as a water ambassador and I'm not the only one, Don, there are other water ambassadors in this room.

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One of our key roles is to get the communities that we live and breathe in, the regions that are important to us to engage immediately.

02:50:31.000 --> 02:50:36.000 So I cannot express that enough.

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Let me see if I can. Thank you. Couldn't get it to go. I will try this.

02:50:44.000 --> 02:50:47.000 I still don't think it changed.

02:50:47.000 --> 02:50:53.000 We'll try this. I'll see if that works.

02:50:53.000 --> 02:51:00.000 It's under your paper.

02:51:00.000 --> 02:51:07.000 Oh, what to see it is under my papers. No, I don't think it's literally moving.

02:51:07.000 --> 02:51:15.000 Okay. Okay.

02:51:15.000 --> 02:51:22.000 There it is. Maybe it'll hang in there now. Okay. Okay, sorry about that.

02:51:22.000 --> 02:51:35.000 I'm gonna set that right there. I wanna read this quick quote and I took it from the water now because Norm, which I am, I've learned so much from and I'm so pleased to be associated with and some degrees.

02:51:35.000 --> 02:51:53.000 So it says water planning is the process through which we potentially can equitably determine how best to minimize, mitigate, and potentially adapt to the pending water shortages projected for our state.

02:51:53.000 --> 02:52:03.000 Water issues affect every legislative district in every New Mexican and there is broad acknowledgement that the state faces a groundwater challenge.

02:52:03.000 --> 02:52:12.000

That requires urgent action. In eastern New Mexico, groundwater from the Oval Office is the sole source of potable water.

02:52:12.000 --> 02:52:18.000 And it is finite and depleting rapidly. And it is for this reason that. Water can't wait for us in eastern Mexico.

02:52:18.000 --> 02:52:31.000 So we're a really great example of what happens. When planning doesn't happen. And when planning does happen.

02:52:31.000 --> 02:52:37.000

And then what do we do with the knowledge that we gave in the execution process? We can't wait.

02:52:37.000 --> 02:52:46.000

We have a very urgent call to go ahead and execute everything we can to say what little groundwater we have left.

02:52:46.000 --> 02:52:53.000

And that's just the way it is, New Mexico. So I'm Clovis and 19 miles away from me is Dallas.

02:52:53.000 --> 02:53:03.000

I was born and raised there. My family, many of them, several of them live there now and friends I was born and you know, was born in the same community and raised with.

02:53:03.000 --> 02:53:10.000

Are going through a very serious struggle right now. So we can't wait for the rulemaking to take place, but the rules are very important.

02:53:10.000 --> 02:53:19.000

It's just that we have to move while they're being created.

02:53:19.000 --> 02:53:25.000

As I said, our aquifer in close is the sole source of potable water and it is finite.

02:53:25.000 --> 02:53:35.000

You don't last so long. And. We know that.

02:53:35.000 --> 02:53:45.000

We looked at Aqua for mapping that's been brought up by Stacey. That's been highlighted is a very important piece of what we got to do to move forward in this.

02:53:45.000 --> 02:53:55.000

Challenge and for us it was the difference maker we began to move because we received the results based in scientific data.

02:53:55.000 --> 02:54:08.000

David, that had integrity. That informed us where we were and the picture was super bleak okay so 2016 we had a water summit And there was the first wave of the initial results that Dr.

02:54:08.000 --> 02:54:18.000

Jeff Rawling. And Alex Reinhardt had began to put together as well as Stacey Timmons work and it ignited us.

02:54:18.000 --> 02:54:28.000

It ignited us into action. So. We use that data and we are in motion

in multiple ways.

02:54:28.000 --> 02:54:36.000

The, fluent reuse system. One began to change the nature of what can we do.

02:54:36.000 --> 02:54:39.000

What is our water supply? What different sources do we have to supplement the only sole water supply of groundwater that is depleting at a very rapid rate.

02:54:39.000 --> 02:54:54.000

A fluent reuse was one of the answers. In Clovis, we're fully functional, saving 4 million gallons per day.

02:54:54.000 --> 02:55:10.000

But the, system has stalled. So you can almost take our 2 cities for Talis and Clovis and always speak with respect about, because that again is my hometown, but also my heart is heavy for them.

02:55:10.000 --> 02:55:22.000

What if? Why if they have planned? What if someone had said, have you done water planning? Have you considered taking a serious look at your hydrologic reality?

02:55:22.000 --> 02:55:29.000

Do you know where you stand? Are you going to run out? Because they got the same data we did.

 $02:55:29.000 \longrightarrow 02:55:33.000$

We looked the opera for mapping results. It was Curry County and Roosevelt County.

02:55:33.000 --> 02:55:45.000

They saw what we saw, but when I look at the, when I looked at that data, I went, oh no, It's going to be in much dire circumstances than we are sooner.

02:55:45.000 --> 02:55:57.000

And so for those of you who may not know that about, they are in stage 3, emergency water restrictions and have been since June of 2023.

02:55:57.000 --> 02:56:12.000

And it has been a difficult journey and it's becoming more so but what I know is there's a grassroots movement there and I'm working with that little grassroots group who said we have to collaborate collectively.

02:56:12.000 --> 02:56:19.000

Our voices must rise. We have to be heard because they didn't look to

the city and leadership.

02:56:19.000 --> 02:56:27.000

They didn't really look to the state leadership yet, but they're looking now. They look to themselves for first, what do we do?

02:56:27.000 --> 02:56:37.000

And how do we get the attention of those who can help us most? How do we immediately take action to reverse or at least hold on to where we are?

02:56:37.000 --> 02:56:46.000

We're talking about Not being able to take showers. I mean, I watched a New Mexico Christian Children's Home.

02:56:46.000 --> 02:56:53.000

Children. Couldn't have enough water to take a shower.

02:56:53.000 --> 02:57:05.000

And then there's the water to drink. How long before the water to drink is affected? Currently, yes, yards are not being watered, plants are only being, we're only being watered maybe 2 times a week.

02:57:05.000 --> 02:57:14.000

You can wash your car. All those things are happening there, but what's next if we can't reverse the situation if we can't step in.

02:57:14.000 --> 02:57:19.000

And do something to make the difference.

02:57:19.000 --> 02:57:25.000

Yes, we're waiting for delivery of the surface water from the reservoir by 2030. Guess what?

02:57:25.000 --> 02:57:35.000

We're running out before then. Clovis for Talus. And texico. Those are 3 I can name right away.

02:57:35.000 --> 02:57:40.000

We are all working very closely together because we can see we're not going to make it to that finish line.

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If that finish line arrives even by 2030, we don't even know that it will still.

02:57:47.000 --> 02:57:54.000

But I can tell you this, what about your infrastructure? Do you have to look at that when you're planning within your city?

02:57:54.000 --> 02:58:13.000

For Talis water infrastructure is really bad. They have massive leaks continually that they're dealing with and trying to get stopped and we're we having those conversations too will you have the infrastructure to transmit the water from the youth reservoir all the way in?

02:58:13.000 --> 02:58:24.000

Currently the answer to that is no, not for portalis, but yes for clothes. So again, it's going back to the importance of the planning and preparation because we did do the infrastructure.

02:58:24.000 --> 02:58:35.000

And for TALUS didn't know about doing the infrastructure. Preparation.

02:58:35.000 --> 02:58:40.000

So really planning for success is we've got to begin with the end in mind. Why do we know?

02:58:40.000 --> 02:58:49.000

What does it say? Where are we headed? We must engage the community to create ownership. And we honored the voices in close of cross-section of the entire community.

02:58:49.000 --> 02:58:57.000

We brought people to the table through a strategic planning effort. To create what was called the Masterwater Assurance Plan.

02:58:57.000 --> 02:59:03.000

We gathered all the data. We said, what are our water sources? What is my hydraulic reality?

02:59:03.000 --> 02:59:12.000

We were fortunate that we have a paleo channel. Out by Canon Air Force Base and it has approximately 26 landowners out there.

 $02:59:12.000 \longrightarrow 02:59:20.000$

Actually that's the action number, okay? So we have 26 out there. Here's the amazing thing.

02:59:20.000 --> 02:59:34.000

Those agricultural producers solve the issue themselves. They solve the data. They engage in the data and the conversations and they said voluntarily we have to cease irrigation farming.

02:59:34.000 --> 02:59:40.000

We have to see, So how are we going to do that? How are we going to accomplish that?

02:59:40.000 --> 02:59:46.000

And I don't have the time to go in how we did a and got them to do that.

02:59:46.000 --> 02:59:56.000

But I love these people. I mean, I work very closely with these people and my heart just like, sores with pride when I talk about them.

02:59:56.000 --> 03:00:10.000

Because they gave up a generational way of life to say for the many. For the greater good. And so we have about 7.2 billion gallons of water already saved.

03:00:10.000 --> 03:00:17.000

From that area after we shut off all those irrigation wells and cease that pumping.

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We want to talk, I wanna just say. Plan, implement, evaluate, revise. These 4 things working together are truly critical.

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And you have to get the plan implemented. That's what happened to Clovis. We didn't get it implemented right away.

03:00:34.000 --> 03:00:41.000

We met with resistance. But here's the thing I know about people if you meet with resistance by city leadership.

03:00:41.000 --> 03:00:59.000

You will rise. We did it! I watched it happen. I watched the people say, okay, you won't implement these particular plans like banking, groundwater, ceasing, And that's what happened.

03:00:59.000 --> 03:01:22.000

So I know I'm probably over my time, so let me just say. Reiterating the importance of firm scientific basis and integrity when we're planning this comes out of the Water Security Planning Act have broad and effective participation rounded in collaboration and cooperation, community level involvement and local innovation don't ever forget about local innovation.

03:01:22.000 --> 03:01:37.000

Things come together. People think of things that never happened before. We are living proof of that. Our model has never occurred before to put groundwater in conservation easements in perpetuity which is what we're getting ready to do that's not happened before.

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But we're moving in that direction. So I just wanna encourage you. You can do this work.

03:01:46.000 --> 03:01:55.000

It's in you. You can inspire others to join hands with you to do this work. The important thing for you to walk away with is you must do it.

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This is an urgent call to action. So thank you for the time I had to even share that with you.

03:01:58.000 --> 03:02:11.000 I appreciate it.

03:02:11.000 --> 03:02:22.000

We, until noon we're going to take, questions and I would ask that you try to keep your question short so we can hear from people as possible.

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But before we do that, I want to tell you something and I wanna ask you, you don't need to tell me.

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But I wanna ask you how you feel about it. And I wanna ask you what you will do. About it.

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The legislature. Sorry, the governor's budget. I don't know what's in the legislature's budget.

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Is under funding the implementation of the Water Data Act.

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The governor's budget is not adequately supporting the aquifer mapping program.

 $03:03:09.000 \longrightarrow 03:03:21.000$

No budgets. Contain any money. For regional self organization. How do you feel about that?

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The legislature starts next week. What will you do? About it. We'd like to take questions now.

03:03:39.000 --> 03:03:46.000

I didn't watch, some of norms, water advocates, programs.

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It's done on me as I was thinking about. But I just like to. To get the legislature to do what needs to do.

03:03:56.000 --> 03:04:04.000

They need to be educated. Probably better than they are. And so the question I'm asking is how Do we put in the plan?

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Educating the people who do our legislation every year. When they're very busy with all kinds of other.

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It's not. Yeah, hi. That was a good question. I have a partial answer to that.

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Which is that we. At the Bureau of Geology in addition to running the aquifer mapping and characterization monitoring program and the water data initiative.

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We've also started a water leaders education program that's specifically geared toward educating our. We've also started a water leaders education program that's specifically geared toward educating our decision makers, both legislators, state and federal, as well as many agency leadership, both legislators, state and federal, as well as many agency leadership, both legislators, state and federal, as well as many agency leadership, that any different organization or.

03:04:53.000 --> 03:04:55.000

federal, as well as many agency leadership, that any different organization or, any different organization or, travel entity, anyone who wants to learn more about.

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Meeting and making decisions about water and getting more informed. So, I have a short little bit that you'll hear about here in a bit.

 $03:05:02.000 \longrightarrow 03:05:04.000$

Started the lunch hour that talks about that is another piece that we're seeking funding for from the state to continue to support that.

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So that is one piece of that and I think it's a slow moving process. And I think that also acknowledges that we have an unpaid legislature.

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So these people who are contributing to decisions for our state may or may not have the background in water.

03:05:27.000 --> 03:05:29.000

So these people who are contributing to decisions for a state may or may not have the background in water.

03:05:29.000 --> 03:05:30.000

So these people who are contributing to decisions for a state may or may not have the background in water.

03:05:30.000 --> 03:05:32.000

They may or may not have the background in water. They may or may not have the background in water.

03:05:32.000 --> 03:05:39.000

They may or may not have a day job that they also have hard thing to do and I think we have to acknowledge their time and their space to engage on that.

03:05:39.000 --> 03:05:46.000

So it's that's a good point and it's an important issue to address.

03:05:46.000 --> 03:06:02.000

Yeah. If I could add just a little bit of that then too. I would just say from our from our planning standpoint, I mean in addition to being update we have our citizen legislation I mean in addition to being okay we have our citizen legislature and we're really trying to emphasize the education and we're really trying to emphasize the education.

03:06:02.000 --> 03:06:10.000

I mean, in addition to being update, we have our citizen legislature and, we're really trying to emphasize the education component for Yeah, it's really important not only that the legislators understand this, but that the people from they're trying to act are asking.

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The right types of action. So I think we're really trying to have a Oh, reach educational campaign that we're trying to build on our mainstream website.

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I just wanted to add one thing briefly. And I think this kind of back goes with Madonna was saying the importance of not waiting and that means that we can also act locally.

03:06:26.000 --> 03:06:44.000

So for example, Burnleyo County, we just appropriated some money to jumpstart our planning effort, as some have said, we have to work in parallel with the rule formulation process.

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We don't have to wait for those roles to come out to get this started

and we don't have to wait for state money to flow to do this locally.

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And so I think it's it's really in all the above approach. It doesn't just involve pointing finger at the legislature.

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There's a lot of institutional issues there as stated, you know, with an unpaid legislature, but there's things we can do locally that can affect this as well.

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We have a question online from after the first. I apologize if I see that naming correctly and it's from the donor.

03:07:19.000 --> 03:07:29.000

I'm curious about the term of the water conservation, who's holding the easements and do the land of benefit from those. Okay, thank you. That's a great question.

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It's a multi tiered question. I will answer all parts.

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The conservation, is the groundwater conservation easement. So it's new concept. It's not looking at a standard conservation easement process, but originally because we are a brand new conservatives.

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So keep in mind we're 2 years in. As of October. So, working with us is Texas Agricultural Land Trust.

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Their exceptional group and they're mentoring me as well as helping us hold those conservation easements.

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For now until we are accredited when the overlaw will underwater concern see has full accreditation then we will transfer the conservation easements from Texas agricultural interest to us.

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But keeping in mind that the landowners at any time should they choose, they have the right to move those easements to another land trust.

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If they lost confidence in us, if we didn't do things the way that they hoped we would, they still have that right protected.

03:08:34.000 --> 03:08:51.000

Do they benefit from the conservation use? Absolutely. And these particular nail owners are going to benefit exceptionally well because in our CS we'll pay 50% of that conservation Eastman value to that land under but the Department of Defense wanted to batch it.

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So getting 100%. That doesn't happen with conservation usements, a full 100% of that value.

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So our land owners will benefit not only from that, but the Department of Defense is paying all of their costs for the easement.

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We could not leave that when they chose to do that. Is this important to the Department of Defense because there's a military installation sitting in our community and they highly value our agricultural producers and their water.

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And so they have compensated them really well currently in water right lease agreements for 3 years as a short-term answer.

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Why did we do that first? Because the water was depleting so rapidly so we had to save it ASAP.

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But yes, the landowners do benefit and I have 7 applications in play as we speak for conservation.

03:09:41.000 --> 03:09:47.000

Peacement applications. There's a question over here.

03:09:47.000 --> 03:10:09.000

Please meet your name before your question. Hi, my name is Sarah. Thanks. The presentation and thanks, for bringing up the upcoming session because the governor's budget does include quite a bit of money for buying produce water for industry and, you know, to the 250 million dollars.

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So. My question is, is there any of maybe the people here who are more connected to the governor's office.

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But they make an argument that some of that money should be used for water data. And water planning.

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As opposed maybe or in addition to you know buying produced water for industry and also connected to that is could somebody educate us here about It's sometimes hard to tell, as a non insider the complex interplay between you know the office and state engineers and the state stream commission and this planning process that we're talking about today.

03:10:53.000 --> 03:11:01.000

Okay. And what's happening at the, governor's office with regard to. Produce water.

03:11:01.000 --> 03:11:04.000 I suppose.

03:11:04.000 --> 03:11:10.000

Talk about that, I have no idea. Of what is happening in the governor's office.

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But I do have an opinion. And my opinion is that it is ludicrous to be thinking about half a million, you know, 500 million dollars.

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For something that at its best. Good only. Give a huge contract to one of the huge international firms that does, across the world, you know, to come in and build a package plant somewhere with no planning, you know, in advance to figure out where it's going.

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And then the other side of it that I think is ludicrous. Is we're under funding water basics.

03:12:00.000 --> 03:12:04.000 Period.

03:12:04.000 --> 03:12:11.000 You're here.

03:12:11.000 --> 03:12:16.000 Okay.

03:12:16.000 --> 03:12:20.000

Hi, my name is Mary Kathryn Block. I'm with the Coronado Slowwater Conservation District.

03:12:20.000 --> 03:12:28.000

My question is for Max. What do you see is the biggest, to getting landowners and water rights owners.

03:12:28.000 --> 03:12:36.000 Involved in the

03:12:36.000 --> 03:12:43.000

I don't, it's a little hard. I, I guess we'll see once they get started.

03:12:43.000 --> 03:12:59.000

I think that Some of the challenges, I guess I think one of the things that I see and the planning department can do is really start with direct outreach to add organizations to, you know, irrigation conservancy district swell water conservation districts, etc.

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That already kind of have these built up networks. I think there's a lot of existing stuff but maybe not the right connections exist at the moment.

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And I think You know personal contact showing up there, you know, that sort of thing is really gonna be key rather than, you know, send you on emails or invitations to water centric events.

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So I guess that would be my strategy for, for that. I'd be curious in your district if you have any, Any thoughts about what you think might be the biggest impediment though?

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The producers that we've talked to are concerned with, to make improvements on their land. So the landowners need money to improve the soil or through the water system.

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So I would agree with you that sole water conservation districts are a great source for that. Our issues outreach, how do we reach these people?

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And I think that's a great suggestion. To their events. I was wondering if any other meeting, Andrew, if you have any

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Yeah, thank you so much. Certainly going to the events is one of these pieces. For anyone who's not aware, agriculture uses more water than any other sector within the state.

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By that significant margin, it's hard to quantify exactly because they're return flows and it's all very complicated but speaking,

that's the case.

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So for our side, actually, I think that's really like the biggest issue that we're facing with how to make this successful.

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And frankly working with agricultural producers is successful. And frankly, working with agricultural producers is a big part of the whole purpose of doing this is a big part of the whole purpose of doing rural communities and agricultural producers are in a lot of ways the most vulnerable.

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Likely to benefit isn't quite the word I'm looking for but like the people who are most directly involved in water, you have the greatest opportunity to have something up there.

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And it's the group that we seem to have a trust deficit with working with. Which I think is related, right?

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I mean, if your water right is part of your livelihood, this is pretty close to where you live.

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I mean, I described this as existential, which I think is true for everyone, but it's even more so for the agricultural community.

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So we're going to hope to participate in that and really go in with both your openness as commissioner.

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I mentioned earlier and we can learn from that community and Good question back here. It's the same question.

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I'm really, you might say we don't have, water running.

03:15:46.000 --> 03:15:52.000

In our backyard, everything that we do on a farm, 95%. WANG.

03:15:52.000 --> 03:16:03.000

That we get. So the challenges are there, shower once a week or sometimes twice. Forget me.

03:16:03.000 --> 03:16:13.000

But, the one thing that I'm hearing throughout the the room is there

has to be some kind of cultural competency.

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Attached to all these policies and the policies It's not top there. It's bottom up. I've seen that over and over.

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To get it together. So the competency has a role. We have to get over, And that's native people have to get over our innerness or stealing water, squatting on lands, stealing our land.

03:16:39.000 --> 03:16:47.000

You gotta get over that. So in that, in saying that I think we need. A lot of the scientists get out.

03:16:47.000 --> 03:16:58.000

To our area and began to communicate some of this information. So that you can realize that there is a relationship that partnership and has to be built.

03:16:58.000 --> 03:17:09.000

So that involves competency. What I'm not hearing is, when I was working with the healthcare system We change that word, competency.

03:17:09.000 --> 03:17:18.000

To cultural humility. And I think that's the challenge that we have, how do we contextualize that.

03:17:18.000 --> 03:17:31.000

So that people realize that they had a stake in it. They have a partnership in it and we're not gonna We're not gonna continue to speak over their heads.

03:17:31.000 --> 03:17:41.000

We're not going to continue to make decisions. Apart from them being involved. And with indigenous people, I think it's really important to get that relationship going.

03:17:41.000 --> 03:17:55.000

With the tribes and and making that effort. I haven't seen any, folks out. Better water policies out except for a few of the ones that have come out to be in meetings.

03:17:55.000 --> 03:18:03.000

I think those need to happen more and more. We got, we gotta get it over ourselves. The word American.

03:18:03.000 --> 03:18:12.000

Doesn't come from the word that the Brits used to say. Those the colonizers there in the new world.

03:18:12.000 --> 03:18:34.000

It was the word of American they used to use was to save those Indians. So you.

03:18:34.000 --> 03:18:48.000

Ellen, private citizen. Okay, well, I heard in a recent, your faith power and light presentation.

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Then the oil and gas wells. Used a great deal in freshwater to produce.

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And I know we haven't been in that area today in any way. We're planning with human beings and communities and IS there something we can do at the legislature?

03:19:15.000 --> 03:19:40.000

To reform the oil and gas. Yeah, Joe, is there a Yes. There is. You know, it's not out there.

03:19:40.000 --> 03:19:53.000

Beautiful cultural issues and everything else. Thank you.

03:19:53.000 --> 03:19:56.000

Hello, I'm Jack and for Diana. We're for the drinking. So it's fantastic to see that we're bringing the tribes into it.

 $03:19:56.000 \longrightarrow 03:19:58.000$

I think that is something that is very important working with us to engineers in the past, and I think that is something that is very important working with us to engineers in the past, working up in tennis, things like that.

03:19:58.000 --> 03:20:17.000

However, I'm also the Spanish born and raised in Mexican. And I don't see that, and maybe it's that I haven't delved into it, but the there's also our other cultures.

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So we do have a very big Hispanic, of course. People here, especially with our agriculture and stuff like that.

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So I'm wondering if. When he makes the tribal communities, as part of this, if there's gonna be.

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People who are on ag and who are going to be representatives for their

communities. So at drinking water bureau, you know, we're doing like, to help people with their drinking water and give them that information.

03:20:41.000 --> 03:20:54.000

I think that involving those people, not just the, but involving these other people and going to these areas is important because.

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I'm from up north and people are very clannish as I like to say. And so unfortunately they're not gonna take it from as James said from the Indian or American people right they're gonna wanna hear from somebody in their own community and so we need to get those people on board.

03:21:05.000 --> 03:21:26.000

In order to and not just talking but have them involved in part of the committee because when they say hey Joe Sanchez, is now on the committee for this and he's going to be speaking for us.

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I think that that's really important. Because then they're gonna understand that that community is now being spoken for instead of somebody coming in and saying, this is what you need to do, this is what you're doing wrong.

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So that's just something to throw out there's not necessarily a question but just maybe making sure that we involve them and some sort of commission in our community aspect.

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Any comments to that from the board? No, I just wanted to say on that subject, it brought to mind the community of, it brought to mind the community of, Carnwell, New Mexico.

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If you're not familiar with it, it's just a few minutes outside of Albuquerque.

03:22:06.000 --> 03:22:11.000

If you're not familiar with it, it's just a few minutes outside of Albuquerque.

03:22:11.000 --> 03:22:20.000

But this isn't in a land rank community. But this isn't in a land rank community, Hispanic, Indigenous, and, but this is in in a land rank community, Hispanic, Indigenous, LANG, but this is in a land rank community, Hispanic, Indigenous, LAND, GREEN, community of a mixed background as all of us are really.

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But, it's again, to that point, it's really important to have those local ambassadors because our water authority utility staff is excellent.

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We have great engineers and outreach specialists, but when it comes from the community itself. So working with the land-grant leadership, the families that actually live there and work there and know the community.

03:22:32.000 --> 03:22:48.000

That's where we can really drive, whether it's getting easement signed or getting hookups to the system, our, staff can go in there and do their best but really the most effective messenger.

03:22:48.000 --> 03:23:09.000

Is engaging that community and that's something that we're working really hard with to, to really reach out to the Land Rat and make sure that they are the face of this project, not the I would also add that the water security planning act contains explicit requirements for the state to support.

03:23:09.000 --> 03:23:13.000 And engage rural communities.

03:23:13.000 --> 03:23:20.000

And if I could add this a little bit too, I think in addition, I believe agricultural communities are probably in the act.

03:23:20.000 --> 03:23:28.000

So we got the sake of communities. Thank you. I should also mentioned there's an empty seat up here which is going to be called like our CSC so that would have been something.

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It's being more directly to the, component of this. And I forgot to mention because basically 7 min sounds like a lot before you have 300 eyes on you.

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But you know, I actually moved over some of this stuff. I tended to talk about too quickly.

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One of those since actually, Commissioner Sweeney mentioned, which is the work within the affairs department. And we're working full speed ahead with already Rocky, the same woman who Dr.

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Dunbar mentioned earlier, this is the work that we did during the 50 year water plan to address that aspect.

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And come up with some implementation strategies. In parallel to that, we're trying to figure out how to best work with the sake, it's, it's our fantastic incredible part of the state.

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They're also difficult to work within a coordinated way because part of the beauty of the sake is kind of replicable, very democratic model of how to do things. It's this kind of replicable, very democratic model of how to do things.

03:24:15.000 --> 03:24:16.000

There are hundreds of a very democratic model of how to do things. There are hundreds in the sake is at least and trying to work with all of them individually is probably beyond our team of 3.

03:24:16.000 --> 03:24:27.000

At least and trying to work with all of them individually is probably beyond our team of 3. We are currently trying to work with the Asiki Association, Dr.

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Connie Maxwell, trying to get the doctors in there properly. And, we're working with them as a partner on a project that they actually proposed.

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I've got a grant for to do some work for the ESICIOUS. If you are working together to look at some of the benefits of the Sikh, you are working together to look at some of the benefits of the Sikh irrigation, how the hydrology works in those communities.

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I shouldn't speak to their project. It's a wonderful project. Ask them about it.

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Make it tell you in more detail. But we're definitely looking in that direction and trying to figure out how best to address that.

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And continue to be open to suggestions. Thanks, I think we've just got time for one more question here.

03:25:03.000 --> 03:25:31.000

And, I used to work here. Groundwater people? Wasn't he stayed and that was a year, but they forbid, up, the, And the voice, they're

also, you say, kids have the same exact situations they were talking to each other.

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I don't know what happens. This is a really delicate question. Tourism is huge in the state and one of things that was sent in here at the table.

03:25:45.000 --> 03:25:58.000

Was that the hotels there? Well, the old town's gonna train the fire system. And one of the reasons they didn't have enough water that was close to close is that wasn't in.

03:25:58.000 --> 03:26:12.000

It wasn't surface water and there wasn't ground water both. Yeah, one of the things I see, We public water rights and I think this is an enormous amount of progress too.

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And also even in this group having specifically acknowledged. Participation that has changed a lot with this business about groundwater which is not regulated but still more has got to be addressed.

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I think a lot of people don't understand that when it's gone, it's gone.

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And the Oklahoma, I don't know, someone who's a farmer, lost his farm in the AIDS.

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Because as they couldn't get the groundwater, they don't receive it that much. It's also happening both eastern in Mexico and I don't know.

03:26:55.000 --> 03:27:15.000

Because of the black water and i don't know Not everybody acknowledges that. Because 4 years ago these things did not exist.

03:27:15.000 --> 03:27:23.000

Since the pandemic started, but it is something to be thinking that.

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Okay. But I mean, the whole, still is.

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Regional. And maybe it's true maybe you're not to have. Regional responses to this kind of thing.

03:27:46.000 --> 03:27:58.000

You're upward, it's anybody. This is more of a comment than question for to raise again the legal issues around.

03:27:58.000 --> 03:28:13.000

And how would, Right. It is time for lunch. Really great boy. Who's gonna be waiting?

03:28:13.000 --> 03:28:23.000

For one thing. I also wanted to say this is the water security climbing act. There's sticking notes.

03:28:23.000 --> 03:28:30.000

So if you have any comments or you want to have any comments or if you have any comments or if you have any comments or if you have any comments that you want to capture, feel free and please do put them there or go for it.

03:28:30.000 --> 03:28:44.000

Thank you all. So, just very brief. Announcement and request. We are going to reset the room.

03:28:44.000 --> 03:29:14.000

And part of that involves setting up the tables a little differently. So I'm asking if you all would either leave your staff or your chairs or take it with you so they don't have to disturb whatever stuff.