

# Austin Water Oversight Committee (AWOC) meeting Transcript – 5/24/2023

Title: ATXN-1 (24hr)

Channel: 1 - ATXN-1

Recorded On: 5/24/2023 6:00:00 AM

Original Air Date: 5/24/2023

Transcript Generated by SnapStream

=====

***Please note that the following transcript is for reference purposes and does not constitute the official record of actions taken during the meeting. For the official record of actions of the meeting, please refer to the Approved Minutes.***

[1:30:10 PM]

And I think I will convene...the Austin Water Oversight Committee here today I am Leslie Pool I am chair of this oversight committee and with me at the dias

for our quorum are Ryan Alter, Council Member Velasquez and council member Alison Alter is also with us we have a full dias. Our first item of business is

Citizens communications and I understand from our staff there is no one signed up is that correct?  
Great.

[1:31:11 PM]

Thank you so much. Approval of minutes approve the minutes of March 29th, 2023. Oh, you know what? I didn't do the calling to order appropriately. 1:30 P.M. 301 west second street. It says some members may be participating by videoconference, but I do not think that's the case today. It looks like all of us are here. We have the minutes of March 29th, 2023 for the special called meeting of the Austin water oversight committee to

[1:32:12 PM]

approve of. And do I have a motion to approve those from vice chair Ryan alter? Is there a second council member? Velasquez seconds are there any changes or corrections to be made to the minutes butts hearing and seeing none Ann we can deem these minutes approved briefings item number two director's report on innovation burns events and awards and upcoming recommendations for council

action. And we have director Shea Roalson with us today. Good afternoon, director. Good afternoon, chair. Council members, thank you for being here today. I'd like to provide you some updates on activities at Austin water. Beyond the specific items we will be discussing on the agenda today. First, we have several important and exciting items coming for council approval in July and August. The June 8th council

[1:33:13 PM]

meeting will include an item to set a public hearing for the August 3rd council meeting to review Austin water's updated capital recovery fees for the army advanced metering program, the final loan installment of \$18 million from the Texas water development board. Swift funding program will be on the July 20th council agenda for and we are in the process of reviewing proposals for the construction manager at risk for the \$700 million expansion and improvements project at the Walnut Creek wastewater treatment plant. The contract award is expected to be on the August 31st council agenda. We appreciate council's support of these items and if you have any questions or concerns or need any additional information, please let us know. I've been director now for just about five months and in that time I've been making my way around the

[1:34:15 PM]

utility meeting with our teams as I've attended about three dozen staff meetings. So far from a single supervisor in their direct reports all the way to program area, all hands meetings and different work groups have different challenges, but there are a few themes such as trust and engagement that our staff are looking for. Leaders who have a vision for a culture of excellence, and they want to work for a team where their contributions are valued. Our work in these areas began long before I became director. Our talent and development division is proactively reaching into the organization to provide training and guidance for our leaders and staff. We also launched our technical trainers in each water treatment plant about a year ago. They have developed an Austin water specific curriculum and the operations and maintenance staff are making their way through the training modules and we have 100% passing rate. So far, I'm fond of saying that Austin water is a learning organization and

[1:35:16 PM]

my conversations with staff are bearing that out. We have national level expertise in every area in which we practice, and the work that we do matters deeply to our community. So today I'd like to highlight Austin water staff involvement in water related professional organizations. This is an important part of our culture as a learning organization and an opportunity for us to share our technical expertise as well as network with other industry experts. The Texas water conference is the largest regional water and

wastewater conference in the country, and it's actually more difficult to get an abstract accepted there than at the national conferences last month. This year's conference was held in Houston and topped its 27 year attendance record, with more than 6000 attendees and 650 exhibitors. More than 80 Austin water staff attended from field personnel to executives, and we made more than a dozen presentations in 11 different technical tracks. Additionally

[1:36:20 PM]

two of our staff were recognized with the most prestigious awards in the water industry. Charlie Maddox was inducted into the water industry hall of fame in recognition of his long career as an innovator regulator, utility manager and mentor to many, including me. Heather Cooke received the George Warren Fuller award for her distinguished service to the water industry and Trinity O'Neill was honored by the competitor TIRZ in the operations challenge as the most dedicated volunteer judge during this multi day challenge, we have a packed agenda for you today. So with that, I'm happy to answer any questions or move on to the external review update. Anybody have any questions at this point? Council member Allison Alter I have one really quick one. First of all, congratulations to everybody. I was just wondering for the Hornsby Bend renewable gas project, do you know when that will be coming to council? I

[1:37:23 PM]

will get you that answer. Great. Thank you. It is in process. So you might not see it might not be fully on your radar. It is definitely on my radar. And we are tracking it. I'm just not sure when it will be coming to council. We're in the we are on the verge of issuing the RFP for that. Okay, great. Thank you. I think you can proceed with your with the rest of your report then. Okay great. I think we have some slides. Luz. Okay. So we're here today to give you the Singh update on the external review implementation progress. At our last meeting, we initiated this review format and we will follow the same format again. Ann today. So this is what we showed you all last meeting. We had about a quarter of the recommendations were implemented and another 43%

[1:38:26 PM]

underway and the remaining were planned and as of and, and just to recap, what we mean by implemented, there's three ways we call something implemented. It's either we've completed the specific actions in the implementation plan. We have operationalized the steps required to implement that recommendation or we've programmed a long term capital project and it is in the CIP or the long range planning process. So today you can see that we've made quite a bit of progress in the last two months and we're now up to 38% implemented and 41% underway and 13% planned. So what I will do

today is highlight the items that have changed, that have moved from underway to implemented or from planned underway. So zo on the items that we have implement Walkes

[1:39:28 PM]

one of the recommendations was to communicate significant air staff to operate decision burns to operations staff and we have communicated all of the compensation changes that we've made to base pay and we have operationalized our processes for reviewing and updating Singh and submitting compensation Ann change requests. On the recruitment and retention. We have been attending career fairs . We've hosted two recruitment open houses. I think last time I was here I told you those were planned and we did both of those. We had a recruitment open house at the Ulrich water treatment plant and one at the Davis water treatment plant. And those did result in applicants and at least a couple of hires. So far there are some of those applicants are still in process . So we feel very good about those events and about branching out into different ways to do those recruiting events. So we'll continue to do that. Our

[1:40:29 PM]

tracking of vacancy rates hard to fill positions and separations is something that we do. Bi weekly and we monitor those numbers and we will continue to do that. So this is recruiting and retention is and prioritizing our vacant positions. That is definitely a part of how we do our business. So we consider that implemented . Eid on emergency management, we have communicated our roles and responsible parties prior to events. So we have revised our standard operating procedure for incident command roles and responsibilities. We have communicated that to Austin water staff and we have implemented as part of that the communications that will happen as we go into an activation and then regularly throughout the activation to keep all Austin water staff up to date out on activities in the utility. For operations and engineering, the

[1:41:32 PM]

filtration standard operating guidelines are available. They have been updated and made available on the o&m website and we've also finalized our our instructions for accessing standard operating procedures and guidelines and communicated that to staff. Continuing on with our implemented items in the area of public information. The communications and public information office as part of the city, one of the as part of the city structure has been working collaboratively with all of the departments to update communication protocols for emergencies, including a crisis communique burns checklist. And we participate Eid in that process and have incurred operated those changes into our processes. And

that that collaboration Ann includes cpio homeland security and emergency management, Austin energy,

[1:42:32 PM]

watershed protection, Austin fire and other departments regarding situational awareness, we have finalized our standard operating guidelines for the communication Luz that happens between pumping and treatment and when we need to increase or decrease treatment capacity in order to meet the needs out in the distribution system and we are using our online Ann tool, the Mok, which you've heard us talk about before, which is our virtual emergency operations center platform to document those pumping changes. And that the first bullet under operations oh, wait. Okay. There were two recommendations related to that last one, and we just

[1:43:33 PM]

covered it in that one bullet. So moving on to our progress for the items that were planned and are now underway for operations and engineering, we are planning to stress test. Rick, we mentioned that two months ago, but we're waiting for the demands to be quite high. That will be the best time to do that stress testing. So that is still planned for late June. And then we'll update our standard operating procedures based on those test results. We are underway on the review of the backwashing and filter evaluation standard operating procedure. And once those updates are complete, then this item, the second bullet there will be complete as well. And then reviewing the staffing needs for system flow changes as we have, we've reviewed and documented our sops and again with the stress testing of Ulrich this summer, any updates needed to the sop related to

[1:44:33 PM]

staffing assignments will be made at that time. Also underway is enhancing the understanding of the cip process throughout the organization. Ann so we are working on in the preparation of materials to help operations staff understand how the work that they do feeds into the decisions that get made about what projects move forward in our capital program. And that communication Ann will happen later this summer. And then on finally on sops and training as I mentioned in my earlier remarks, we have dedicated certification trainers at each water treatment plant and as part of that training we are teaching staff to access the standard operating procedures and training them and working

[1:45:35 PM]

incorporating that training into our onboarding of new treatment staff as well. So that work is underway. She said that item was one last time that we had talked about as being completed because we had onboarding, added the trainers and based on feedback from you all, it felt like you wanted to continue to hear from us that that that work was underway until all of the staff had been trained. We are planning to have that work complete by the end of the year, so we'll continue to report on it. Until then. So a quick update on the work that we're doing on hiring events and promotions. So as of the time that we hit print on this presentation, we had hired 214. I think as of today that number is actually 228 positions that we have filled. And we are absolutely on pace to exceed our record recruitment. Last year of

[1:46:36 PM]

300 hires, we have set an even more audacious goal closer to 400 this year. And we intend to meet it as I mentioned, we've done open house recruiting events at Davis and Ulrich. We have placed advertisements in community impact. We have participated in social media promotions. We've partnered with the human resources department on their get hired campaign, participated in the city of Austin career expo. And then that graphic on the lower left was our full page brochure that we put in the Texas water conference program highlighting all of our technical presentation options and attempting to recruit technical staff from that conference. We also I thought I had brought copies of it up here with me. Oh, I dropped them all over the floor. So we also had made the thank you, Randy. We also had made these business cards that say Austin water is hiring and

[1:47:37 PM]

have a qr code for folks to scan. And we handed those out shamelessly at the conference as well. So. I mentioned earlier that I've been making the rounds meeting with different teams here. Here's some photo documentation of that. And in terms of the retention efforts, we have implemented a number of retention strategies in the last several months. One is the retention stipend, which is a 10% stipend for all staff with more than a year of Austin water service that they see in every paycheck. We also have a new hire retention bonus and that pays out a total of \$3,000 over two years at intervals. We also implemented a safety incentive pay. That's a recognition that every employee at Austin water operates in a safety sensitive environment. There are three tiers to that safety incentive pay depending on how much time an employee

[1:48:39 PM]

spends in the field versus in the office. And it's a combination of stipend and leave paid time off. Ann and we have implemented enhanced a license stipend that we had already. So if an employee has a license above and beyond what is required for their job, there is a stipend associated with that license and we've implemented that for tcu required licenses as well as electrician licenses as we have some exempt staff that are on call to respond to emergencies and we have implemented a pilot program with hrd to pay them straight time for time over 40. So if, if we have a regular exempt employee that's working 40 hours a week on their regular job and then gets called to go out to a water main break or a sanitary sewer

[1:49:41 PM]

overflow or some other kind of emergency, then we're able to pay them straight time for that time, which is a very nice benefit for them. And then we've also been doing a number of job title and pay grade reviews, and we've been coordinating with the human resources department to get those approved. And we've done an analysis of all of our staff. So sometimes staff who have been in their positions for a long time, they tend to fall behind in the way the city does. The zoning for pay. And so we're doing a zoning analysis of staff that meets certain criteria. And we've submitted that to the human resources department for review. So one of the discussion items that we had at the last meeting was how we will report out on items from the external review that we have operations ized, but our ongoing work as a part of our everyday operations and so this slide covers hits

[1:50:44 PM]

the highlights of how we intend to report out on those items. So for example, we, we will provide annual updates on water forward and our long range planning and that will cover recommendations from the external review related to the raw water quality and enhancing water supply to the south. Pressure Zones. We also intend to provide a semiannual updates on the implementation of our advanced metering infrastructure. My atx water and that will include the external review comment recommendation related to hiring staff to support that program. We also bring to council contracts for design and construction Ann and we will will also provide an annual update on our cip program . And that will cover the cip related recommendations from the external review. And then we will provide an annual update on our emergency management program

[1:51:44 PM]

and that will address the recommendations from the external review related to emergency management. And then again, same with the recruitment , retention and training recommendations. So with that I am happy to answer any questions . Thanks so much. Shea and I was pretty impressed with

the good work that you all are doing and kind of having a fresh look at recruiting and retention. And I wondered to the extent possible, are you sharing those ideas with other directors at the city for them to kind of for them to check and see if the kinds of things that you're doing like straight time for exempt employees who otherwise would never receive overtime pay? I mean, that's part of the wage. And hour act exempt means you don't you don't get paid more even though the expectation Ann is that you will show up and do more work if needed. That and

[1:52:46 PM]

there was another thing on there that you had, oh, the Zones looking proactively at the zoning and people falling behind Eid in the salary Zones, is that information that can be shared to other other parts of the city ? I'm happy to share that with other parts of the city. Right now we are in the beginning stages of implementing that and seeing how well it works. The straight time pay over 40 is a pilot with Eid. They want to see how that how that plays out. So I think there's a little bit of time left that we need to go through to see how well these programs work. But certainly I am in conversation with the department directors and sharing, you know, we share our strategies about a lot of things, including hiring and retention. Wright my guess is if it's if it works and it's successful in water, then we can assess why it is it works well at water and see if it is can be transferred to some other departments because that that could be a benefit that would be

[1:53:47 PM]

not only fiscally valuable but also for expertise and experience in a job that a person already holds who happens to be exempt. I agree with that. And also the creative strategies that other departments are exploring. We would like to know about those too. So the strategy sharing goes both ways. That sounds great. Any other questions? Yes. Vice chair alter and not a question. Just wanted to thank you for hosting us out at Ulrich. Our team went out there and got the tour. It it was really cool. Knell I recommend anybody and I know I'm sure you all have, but it was really neat to see it all in action and so I just want to thank you for letting us do that. Thank you so much for coming out. I think, first of all, it's that makes my engineers heart happy to get to walk around the treatment plant. So I appreciated the opportunity to do that with you. And also, I think that it's hard to appreciate the scale and magnitude and complexity of what Austin water does day in and day

[1:54:48 PM]

out. Until you see it with your own eyes. So we are happy to host anyone who would like to come out and take a look with us. Council member alter thank you. I appreciate all the work that's gone into moving these recommendations forward and the seriousness with which you're looking at them. I was

wondering , Singh, you talked a lot about the strategies for filling the vacancies and gave us the numbers that you've hired. But at the end of the day, the vacancy level is what matters and where we're at. And just knowing how many you recruit isn't giving the full picture. So can you share what the current vacancy rate is at Ulrich and where it was like going back a bit? Sure so specific to Ulrich, our vacancy rate has not budged very much, even though we have hired Eid into Ulrich, we have had some attrition from there as well over all for the overall utility. We started the fiscal year at just under 15% and as of

[1:55:48 PM]

the most recent. Pay period, ten, we were at 11. So we are making progress if we stay on on target, then we aim to finish the year. Certainly under 10, hopefully closer to 8. But we did see, you know, our attrition numbers have been quite high over the last 18 months or so. The last two months, we've seen a decline in attrition rates. So we're hoping that some of our strategies are starting to have some success. Luz so do you have a I was going to ask you about the retention rate. Obviously the attrition rate is similar to that. Is there anything more you can tell us about how those rates are trending? So the last two months we've seen attrition fall, so that's a good thing. Fewer folks leaving Austin

[1:56:49 PM]

water. We would like to call that a trend, but we're not ready to say that yet. So by our next meeting, we will definitely have be able to tell you if these retention strategies are really be making a difference for us. Thank you. And I wanted to clarify on the straight pay for the exempt. That's if they actually are called to go to an emergency, it's not like they're working an extra couple of hours to get their job done for that week. That's their on call to go to an emergency. And then they're actually called to go out to work. The emergency. Yes, that is correct. This is very specifically related to responding to an emergency in the field. Okay. Thank you. I'll be interesting to see how that pilot pans out. Are there other resource pieces or measures that you're trying to explore with hr to further reduce the vacancy rate? We have I mentioned job

[1:57:50 PM]

Driskill options and pay grade reviews as we're doing that in a in a few different areas to look at specific job functions, we're doing some reclassifications of positions. Luz I don't think we have any sort of overarching additional strategies beyond what we've implemented so far that it would affect all our staff. But we're continuing to track how the ones that we have done are performing in order to hopefully, you know, be able to maintain those programs. Thank you. And I hope that you're getting the support that you need from the city managers office for any of those hr needs, particularly if it pertains to Ulrich. So when you gave the vacancy rates going from 15% at the beginning of the year to 11, but

Ulrich is staying the same. Can you help me understand a little bit what that means for outside of Ulrich Ann like is I mean, are we are

[1:58:52 PM]

other plants all fine or is it is there a particular pattern? So in terms of our treatment plants, is the. And I don't know if Stephanie would like to weigh in on this, but I will say that the number of staff that we have at those plants is such that if we gain a few and lose a few, then our attrition rate, you know, our vacancy rate does not really change that much. Hancock's is, I believe, either fully staffed or only has a couple of vacancies. Davis has improved a little bit. They've hired the same as Roig, but they haven't lost a couple the way Orrick has. So it's really a matter of just the specific numbers for those plants. I don't know that we can say there's a trend where we're more concerned about one plant or another or other than we're just really focused on supporting all the plants and their hiring. So with respect to Ulrich, there

[1:59:52 PM]

was also some managers Swint changes. Can you speak to those a little bit more in detail? I think you're referring to having dedicated our division manager over treatment to Ulrich that's in place and we are continuing to work to support all of our water treatment teams. We had a leadership meeting earlier this week on Monday with all of the leaders from all three water treatment plants to talk about, to do some leadership training and talk about how we can support all our staff. And you know, the division manager was a part of that. So we're really focused on supporting the plants and getting them the resources they need, the training that they need, the leadership training. So it is a work in progress. So as you move forward, if you're if you do need resources or there are obstacles to addressing the vacancies, particularly at. Ulrich, please be in touch with us and obviously with the city

[2:00:53 PM]

manager. But I think that's a high priority if we want to really address the challenges that we experienced in the past, we have to get. Ulrich more staffed up. And so all of these efforts are great and ultimately they will help us do that. But but we do need to try to move that needle as well. It is certainly a priority to Austin water. Thank you. All right. Let's move on to item four. If your report is complete, director item four is updates on water supply and drought response and who do we have for this presentation? Kevin Crittenden assistant director will come up and introduce this team. Hello, Mr. Chris Chen, welcome. Oh yes, that's the radioactive oh, speaking. Sorry about that. There you go. All right, well, good afternoon, chair pool and council members.

[2:01:53 PM]

My name is Kevin Crittenden, assistant director at Austin water. This afternoon we're here to provide you with the water supply and drought condition update. You may recall that a year ago and we're coming up in June, we did enact our stage one drought restrictions as relates to an ongoing regional drought that we've been experiencing. Singh we've been fortunate that over the last several weeks and months we've been seeing a little bit of local rainfall. So that's generally good news, but not good enough to really change our current trajectory. We still the basin remains in drought condition Luz and we still continue to watch for potential additional inflows into the highland Lakes and try to judge that impact on our water supply . Over the past year we've been busy monitoring water supply conditions across our basin that includes working with the lower Colorado river authority just to ensure that there enacting their

[2:02:54 PM]

R amended water management plan . We've also been working to make sure that water conservation stays on the top of mind to all of our customers and all of our community. We continue to promote all of our water conservation offerings and of course our water conservation Ann enforcement activities. And then of course, we continue to make progress on water forward. So a lot of things that we have done and we will continue to do . Again, we are optimistic that as potential weather patterns may shift in the late summer, early fall to reflect an el Nino condition, we're going to remain optimistic that perhaps we get some additional rainfall knell and that does manifest itself as additional inflows into the highland Lakes. But even with that, we do anticipate that we will there's a high likelihood that we will be moving into a stage two drought restrictions. So zo this afternoon, we'll have a presentation to kind of give you a little more detail on that. With me is Teresa Lutz.

[2:03:54 PM]

She's our division manager over our systems planning group. And they do our water supply planning in addition to their system planning work. And then Kevin kluge, who was our division manager over water conservation, thanks so much. I just had a quick question. Ann are we looking at any dam releases from the lcra at all? Right now? There have not been any. Again, lake Travis is very low. I think the combined storage between lake Travis and Buchanan is about 50. So lake Buchanan is also low as low as low, I think I don't know that exactly. There's typically sherry will keep a little more water in Buchanan just to try to keep it as far upstream as they can. But it's reasonably balanced. I'll simply say that there's a lot of room if we actually start getting some some water. So that'll be a good thing. That would be great. I

agree. Thank you. Ms. Luz, are you next? Yes all right. Well, welcome. Good to see you. Thank you. You too. Appreciate that chair pool and committee

[2:04:55 PM]

members, appreciate that. I'm Teresa Lutz, division manager for systems planning. I want to give a quick update about our water supply. We have this map shows our water supply reservoirs that the lower Colorado river manages and operates Lakes. Travis and Buchanan, upstream of Austin, including our intakes at our three water treatment plants. Hancocks Ulrich and Davis city of Austin has access to up to 325,000 acre feet of water supply from this Colorado river system. That supply comes from a combination of our city of Austin and senior run of river rights and then also water supply contracts with lcra, where they provide firm water and back up to our run of river rights. So run of river rights are just access to water in the stream if it's available knell in a priority first in time,

[2:05:57 PM]

first in right system that the tcu, the Texas commission on environmental quality oversees that system. But but the we have contracts with lcra, as I mentioned for releases of firm water from Lakes Travis and Buchanan to firm up those water rights. So that if there is not enough water in the in the river to meet our needs under our run of river rights, then lcra can release that stored water and provide that water to us as a point of reference, last year we used about 175,000 acre feet. So that's where we are kind of on a relative scale to our to our access to up to 325,000 acre feet. This is a graph that shows the inflows to the highland Lakes. It shows several things. I'll point out a few things on the on the graph we're experiencing very low inflows to the highland Lakes. This year. So far this year, from January to April, we've had the lowest

[2:06:58 PM]

amount of inflows since the Lakes were completed in 1942. This is our lowest year thus far and last year, 2022 was the lowest year for the whole year. In that same period of record. So we're experiencing very low inflows. Another those. 2022 inflow lows are shown there in green and the 2023 thus far this year in purple also shown on the graph are average inflows for the 2008 to 2015 period. That period is significant because that's the new drought of record for our basin here in the lower Colorado river basin Ann and that that is an average over that new drought of record period that was just fairly recently here. We referred to it as the 20 teens drought. It's our new drought of record for this basin. Eid also for reference shown in the so those are in the dark blue bars, the

[2:08:00 PM]

drought of record average and then also shown for reference are the averages for the period of record all the way back to 1942 when the Lakes were completed. So just want to highlight that this is something we monitor on a regular basis. We continually look at the inflows and the amount of inflows and keep track of this particular graph on a monthly basis. So we'll continue to track those, but just recognize that we're in a very low inflow period and this is another key way to look at our water supply picture. This is the combined storage in Lakes. Travis and Buchanan, those are our two water supply reservoirs. As mentioned earlier, the Icra operates those under a water management plan that is approved by the Texas commission on environmental quality. And as part of their permit for operating these reservoirs and water supply, the reservoirs are just at the combined storage. In

[2:09:02 PM]

those is 2 million acre feet, a little over 2 million acre feet and the amount that's in those combined reservoirs right now is a little over 1 million. So the level is at about 51. That is the amount of stored water that we have in the reservoirs. Now we have our drought contingency plan triggers that are are pegged off of the combined storage levels as mentioned, we're currently in stage one. We entered that in about June last year. In 2022, when the combined storage dropped below 1.4 million acre feet at that point. And the next stage will be the stage two trigger. If the combined storage continues to drop, it will be that would be at 900,000 acre feet of storage . But again, we're just at about 51, just a little over 1 million acre feet right now. Wanted to point out a couple of things

[2:10:02 PM]

here. We made a note, Ann at the bottom, I think you were asking about the releases from the highland Lakes from stored water down through the Lakes. Travis and Buchanan, Icra releases water for interruptible purposes for agricultural irrigation in the lower three counties toward down towards matagorda bay. And those releases have stopped since mid last year, 2022. The Icra are operating under their water management plan provides this interruptible type water Shaw. And when we're in drought conditions and conditions are met to allow for those releases to be stopped, then that's triggered by the water management plan. So releases have for downstream rice irrigation stopped mid last year

[2:11:03 PM]

and then they were also stopped from 2012 through 2015. In the 20 teens drought. Before you move off of that. Yes if I can ask, there was there were some conversations Luz a year or two ago and maybe

before that about the interruptible stored water and the quality of the water and the amount flowing Singh down to matagorda bay and the impacts on those communities and the fisheries and shrimpers and so forth. So during that that discussion, there was some conversation about a new storage facility somewhere on the Colorado south of Austin around Columbus maybe, or in bastrop county somewhere. Is do you have any do you have any updates on that? Has that conversation continued or any status? Yeah, there there is continuing to be

[2:12:04 PM]

. I think the lower Colorado river authority, lcra, is looking at potential additional what they refer to as off channel reservoir locations, potentially somewhere between matagorda bay and Austin, along in the area where you were mentioned. Singh. I think they're still looking at that as part of their as part of our regional water planning process, region K and then also lcra is working on a water supply resource report out that they're developing where they're looking at water supplies and water supply needs in the basin. So that may come out of that. That may be. Potentially released sometime later this year or possibly early next year. This water supply report that they're working on. So we'll look at that and see. But they also have been are very far into construction on on another off

[2:13:05 PM]

channel reservoir called the Arbuckle reservoir, which is further down in the basin. It's closer to the to the coast. But that would be a reservoir that could pick up and store flows in the river closer to the to the bay that could be used for firm water customers in that area. And also interruptible customers if the water is available for that. That is still hasn't been completed. They've had some problems with construction and leakage Paige due to the some of the soil and other conditions that they've encountered in that construction process. So I don't have a very late, very up to date estimate on when that might be completed, but they're still working on that and trying to get that completed. I think that would be interesting to pursue at a at our next meeting, depending on what other agenda items we have on in front of us. Director and for my newer

[2:14:05 PM]

colleagues on on the Dyess, I just wanted to make a couple of draw a couple of connections to the dots because we've got this natural so the freshwater flows going down to the gulf are really important for the economy below lugo Austin Wright and above us, the ranchers and so forth need the water as well. So there's this natural tension Ann to make sure Austin gets enough water. Shaw and there was an agreement and I think maybe it was in late 1990s, early 2000, it was maybe under then mayor Watson where we crafted that agreement with the lcra to have the additional water supply made available to

the city. Am I getting my how am I doing on my dates? Yeah, that's right. 1999, 1999. And but now what? And you can tell from those inflows that even then when we were worried about it, it's nowhere near as bad as it is now. So the natural tension with Austin and the downriver folks and then here

[2:15:06 PM]

comes Tesla and they are taking a significant they're draining a significant amount of water. And we talked about the water budget that Tesla was going to take from the Colorado river. And I'd like to also get an update on on what that looks like and how that has been accommodated. I think it has is but it would be good to get updated on that. So all of these things are kind of at play and we are in a situation where we are directly affected, but we may not have all that much influence other than just responding and reacting to the conditions as they as they occur. And the as I mentioned, the lower Colorado river authority operates the stored water operates the Lakes. Travis and Buchanan, in accordance with the water management plan approved by tcu. We were very involved as as stakeholders, as in the update process that was completed, I believe it was completed in 2016. And then another update

[2:16:09 PM]

process that was completed in 2020 to update it. The water management plan to reflect these is the lower end flows that were seen during the drought, the new drought of record and there is another update to that because that's a that's a four and a process where all of the stakeholders and all of the basin interests and needs are looked at kind of holistically in relation to operation of the reservoir reservoirs. There's another one of those update processes scheduled for 2025 which will hopefully be able to take into account these additional lower inflows so that if needed, adjustments to the lcra water management plan can be made. And so that's a I just thought I should mention that because it's kind of a scheduled forum where we'll be able to continue to have input to that process that is key in Lucas decision making about how the

[2:17:12 PM]

storage, how the stored water is managed is that under the auspices of regent Kay or is that tcu or L.S.U? Okay. Tcu what I would like to know is how much water is Tesla taking out of the Colorado river. It doesn't affect us directly because it's south of us, but it does have an impact on on folks needing the fresh water inflows below, below traverse county. Okay I think I was the only one who wanted to stop you at that point so you can proceed and thank you. Thank you. Next, I want to show the water weekly graph that we had at the time when we needed to provide the presentation. It very much shows the drought conditions for the state Wright and then also upstream of Austin, where the lower Colorado river basin is, we're in drought conditions

[2:18:12 PM]

there. This week's picture looks a little bit better. We've had a little bit of rain, but it's still we're still experiencing severe drought conditions in the counties upstream. And we you know, some of those are more intense areas. I think are shrinking a little bit with this rain that we're having and we're are even getting some beneficial rain to the basin today. Also during the day, we got some overnight and today, but it's we're still in drought conditions. The amount that we're getting is not enough at this point to move the dial very much on on how much stored water there is in the reservoir. We'll look for hopefully more wetter conditions into the fall. And, you know, continuing on as long as they can. Now we're getting ready to go into the summer to just, you know, point this out, that we're getting ready to go into a period where we may have

[2:19:14 PM]

above average average temperatures and then kind of normal equal chances of precipitation Ann. But typically during the summer, our precip is fairly low. So hopefully in the in the fall, we'll get some increased chances for rain. So we'll continue to track this as as time goes on. This is a key graph that is prepared by the lower Colorado river authority. It's a six month projection for the combined storage in lake Travis and Buchanan. And this is one that we've been tracking. They prepare this on a monthly basis and releases at the beginning of each month in it projects out in this particular one that we may be crossing that 900,000 acre foot trigger for our drought stage two in in the July time frame likely in July, late, late June or in July. But with this

[2:20:16 PM]

rain, this was done on may 1st. So with the little bit of rain we've gotten that may possibly push out into July, those lower those lower lines that we have been tracking along the in the dry and extreme dry condition lines. So we'll continue to monitor the drought. We're implementing our water forward plan. We have a presentation also today on on our water forward plan implementation and update process. We that's our integrated water resources plan . We're also promoting water conservation Ann and adherence to our drought contingency plan stages. And so those are some of the drought related activities we're continuing to do and monitor. So at this point, I'm going to hand it off to Kevin kluge. Good afternoon. Chair

[2:21:17 PM]

pool committee members, as was mentioned, Kevin kluge, water conservation manager as Teresa mentioned, we are following our drought contingency plan Ann and our in stage one at this point. And on the screen you see the primary drought restrictions that we are adhering to now. But I wanted to mention and remind us all that Austin is a very forward leaning city in terms of water conservation measures. And in our conservation stage Paige our stage without drought, we have nearly all of these same restrictions. So we are conserving day in and day out. 365 years a day, even without drought as you see on the screen there on the left hand side, we have landscape watering. That's our primary restriction of water to save water in a drought or

[2:22:17 PM]

even within outside of a drought for residential customers, they're able to irrigate one day a week on Wednesday and Thursday, and they are able to have hose irrigation Tuesday, two days a week, either on Wednesday, Thursday or Saturday, Sunday, depending on odd or even addresses. Our commercial customers are similarly faced similar regulations on irrigation either on Tuesday or Fridays on the right hand side, you see a number of other patio misters ornamental fountain is that that must adhere to water conservation measures. If we do go into stage drought, many of the restrictions are very similar on in terms of landscape watering, the primary change, we still have one day a week watering and we reduce the

[2:23:19 PM]

number of days for hose irrigation down to one day a week on the weekends. And in terms of automatic irrigation, the change is just how late they can irrigate rather than 8 A.M. They can only irrigate till 5 A.M, reducing water loss through evaporation and spraying. We will also be increasing enforcement, Burt and enforcement patrols and investigations. If we do go into stage two. And on the right hand side you see a number of the other restrict options that will come into play. If we do go into stage two ornamental fountains, some restrictions on golf course fairways and that that last bullet is a nod to landscape establishment and is no longer being exempted from watering schedule. So if a new home had new landscape that needed to be established prior to stage two,

[2:24:19 PM]

they're able to water more than one day a week, not during the day, but more than one day a week. If we do go into stage two, this those new landscapes will have to adhere to the one day a week watering for automatic irrigation and then a second day for hose irrigation Ann. And then finally, next steps for Austin water. We will continue to monitor the situation in terms of lake levels and daily water use. We will be promoting our water conservation measure and adhering to our own drought contingent plan.

We will be also implementing our water conservation, our water forward plan Ann in order to provide water in short term and long term for our customers. Our message really will be that we are all in this together because despite all that we can do as an enforcement team or water

[2:25:19 PM]

conservation team, it really depends on Ann Austin customers and residents adhering to the watering schedule and to the other regulations. So we're asking we will be asking them this summer to take time to look at their own water use, particularly early through the water portal as more and more customers receive those smart meters and able to do that. And we're going to ask them to ensure that they are watering on the watering schedule and also take a look at additional steps to save water. Perhaps watering less or letting their lawn go blond for the summer, letting it go dormant instead of watering it throughout the summer. And with that, we are available for any questions. Any questions? Burns. I just had one and one is, is are we looking at drought and water supply in context of

[2:26:20 PM]

climate migration? Yeah yeah. Yes. In in relation to climate change, yes, very definitely in our water forward planning process and we're hoping that we'll continue to try to push the push. That idea forward through the state water planning process, through region K, the most we can and in any other kind of planning forum. But definitely with our water forward process, we are looking at that and I think the next presentation will will touch on that some. That's great. Thank you. Yes councilmember Allison alter. Thank you. I was just wondering if we wanted to be monitoring the drought conditions or the lake levels. What are the best resources for that? Right. Yeah the some of the best resources are the lower Colorado river authority. They post and on a daily basis on a

[2:27:23 PM]

continual basis, you can try Mok the lake levels, the combined storage levels and how much water is coming into the reservoir Lucas website. We can provide a link to those specific ones if that would be helpful so that you wouldn't have to, you know, look for those particular spots in their website, Wright. But I think Lucas website is the best place. Then they also have they have they have that information Ann kind of in a summary format. But then there's also another tool if you really would want to get into it, into the details. They have a powerful system called hydro met where they have information Ann it's shown graphically with gage location. Burns so you can look at streamflow and rainfall and all kinds of you can look at the radar in that portal as well. So

[2:28:26 PM]

that's another place it also has a good historical overview. You can go back to the droughts of record even, I think back to the 50s, it may go back that far. It's pretty interesting stuff. Used to be on the main Paige kcra.com or something like that. I don't know where it is these days. It's also in the statesman. They put out the lake levels daily and the statesman on the back on the weather page and we also have a drought Paige that we've started had hosted. It's been up for some number of months. It's been up for a good while. We have a link there to Lucas website, but we can provide more specific links if that would be helpful. I would be interested. I don't know that I need to go into the Uber detail, but but for the lake levels. And then in terms of I really am interested in this, the map that you had for the water weekly to understand Eid where the area is at in the level of drought. So if there's a link to where we find that

[2:29:26 PM]

even if it's with the lag of the week, that would be that would be interesting. Yes, that's a separate one. That's through the Texas water development board. And they post that weekly so we can send you that link as well. That'd be great. Thank you so much. Appreciate it. All right. Thank you so much. I think there are no more questions for that panel item number five is our water forward update. Thank you. Thank you so much, miss Luz. Mr. Kluge. Thank you. Wright Mr. Crittendon, you're back. I'm back. Good afternoon, Ann again, I'm Kevin Crittendon, assistant director of Austin water. For those of you who. How's that? Is that better? You're doing great. Perfect. All right. Just as a matter of history, we in 2018, the Austin

[2:30:29 PM]

city council adopted our 100 year integrated water resource plan, which was intended to identify a sustainable water future for our community. That effort's been dubbed water forward and lives on today. That really is our strategic plan or blueprint for providing our water supply for our growing community in the face of a changing climate. This afternoon, we're going to talk to you, give you a bit of a presentation on a little bit of a historic perspective on our water forward 2018 activities. Also update some of the implementation strategies related to that and then give you an update on where we are looking for water forward 24, which will be our planned five year update. So we're approaching that shortly. So with me this afternoon is Marisa flores Gonzalez. She is the supervisor of our water planning team. That is in our water systems planning division. And so she's going to take us through the presentation. Great.

[2:31:30 PM]

Well, thank you very much for having us here to provide you with a little bit of background information on on water forward and an update like Kevin said, my name is Marissa flores Gonzalez. I've been with Austin water for nine years. I've been with the water Ford plan and project since its beginning or inception. So like Kevin mentioned as well, we're going to talk a little bit about water forward 2018, the development of that plan, as well as our progress on implementation. And we'll be talking about the first update to the water forward plan, which we're calling water for 2024. And we'll be talking about how we are addressing uncertainty in this plan update process. So Waterford 2018, this plan was initially developed in response to the severe drought that we experienced from 2008 to 2016. And you saw some of the combined storage levels from that drought on the screen as part of Theresa and Kevin's

[2:32:30 PM]

present action. We knew that in response to that drought we needed to think in new and innovative ways about managing Swint of our water supplies moving forward. Eid and so city council created the first water forward task force. It has a much longer name. There was a 2014 task force, the Austin water resource planning task force, that met for a three months, came out with a list of recommendations. One of those recommendations was to create an integrated water resource plan. So then council created a second task force, the Austin integrated water resource planning community task force, and for short, because it's a terrible acronym we call it the water forward task force. Working with the water forward task force, we wanted to address a key drivers in management of our water supplies, droughts worse than the drought of record droughts, worse than the droughts we've historically seen here in the Colorado river and highland Lakes basin. A strong continued population growth as

[2:33:31 PM]

well as impacts that we may experience on our surface water supplies due to climate change. Paige so working closely with our council appointed water poured task force, Austin water led development of this plan by incorporate Singh also community input that we gained at attending Ann hosting over 100 different community events. The technical work for the plan was supported by a variety of consultants, including engineering hydrology as well as climate science consultants. And ultimately the plan was approved unanimously by council in November of 2018. On the right hand side of this slide, you'll see the four main categories of water forward strategies. They include reducing demand by conservation, moving reuse forward at multiple scales, Ralls. That means everything from reusing water that's gathered on site like rainwater harvesting, stormwater

[2:34:32 PM]

harvesting or greywater harvesting to connecting to our centralized reclaimed purple pipe system. Our third category of strategies include includes working with our regional partners to protect our core Colorado river supplies. And our fourth category is building resiliency to drought through key supply strategies like aquifer storage and recovery and all of this is built on a foundation of continued stakeholder and community engagement. I'm going to walk you through some of the key implementing Ann milestones that we've achieved over the past several years. So starting in 2019, the plan was approved in November of 2018 and starting in 2019, we took that first year to do the detailed work of tactical implementation planning within the utility with all of the different groups who would be involved in or leading strategy implementation, as well as across various city departments

[2:35:33 PM]

. Butts that included identifying staffing and resource needs to be able to implement key plan strategies. We also began Ann consultant procurement process to help support the implementation of these strategies, one of which is called out on the screen beginning the consultant procurement process for our aquifer storage and recovery pilot and program management project. I'm going to take just a second to explain what aquifer storage and recovery is. Aquifer storage and recovery is a strategy where we would take water from our existing Colorado river and highland Lakes water supplies. We would treat that water to potable drinking water standards convey that via a transmission pipe to a well field, and then that water would be injected underground into a naturally occurring aquifer where it would be safe for evaporation and available for us to pull back out, to integrate into our drinking water distribution system in the event of a drought or potentially

[2:36:34 PM]

another emergency situation that would help to augment our water supplies. But it is in a slightly ingenious strategy in that it simply stretching our currently available water supplies and utilizing water during average or wet periods to make use of that later, during dry periods. To go back to our implementation timeline in 2023, the utility began implementation of the my atx water advanced metering infrastructure project , replacing all of the analog meters throughout the city with digital meters that would allow us to provide more real time information about water use to customers and would also provide us with a ton of information that we could use to better do our water management planning. Ann and allow us to develop targeted programs for customers . Also in 2020, our onsite water reuse team brought before council and received council approval of a regulatory framework to streamline the

[2:37:36 PM]

development and permitting of onsite water reuse systems. Again, that's things like rainwater for gray water, stormwater harvesting, as well as an incentive that we've established to try to encourage developer tirz to install these types of onsite water reuse systems in what we're calling the voluntary period before mandatory requirement rates go into effect. Also in 2020, we executed Eid, a contract with a consulting hdr to help us with the pilot and program management project that eight consultant contract was approved by council and hdr began the work to help us do a desktop analysis to identify potential pilot locations for an asr project act the next year in 2021, Austin water brought before council and received council approval of a suite of code changes. Those included water benchmark Singh requirements requiring that all new developments submitting a site plan also submit a water

[2:38:38 PM]

benchmarking calculator that calculator provides us with estimates of water usage on the site, including indoor and outdoor usage and potable and non potable usage. That allows us to identify opportunity for conservation or reuse on the site and developments that are greater than 250,000ft !S. And gross floor area. Also have to meet with utility staff to have a discussion about those opportunities that may be present for their benchmarking calculator. We also, as part of that suite of code changes council also approved code changes requiring on site water reuse systems be installed Eid again in large development projects, it's those that are greater than 250,000ft !S in gross floor area. Those code requirements are also are not effective until December of 2023 and there'll be an affordable impact statement that will be coming to council in September

[2:39:39 PM]

of 2023. Looking at that code change as well as an additional code change that was approved extending our existing reclaimed water connection requirements for again, large developments. If now those large developments that are within 500ft of our reclaimed water system must connect to that system and use that water for significant non potable purposes, endure as well as outdoor that that affordability impact statement that I mentioned will cover the potential affordability impacts of both the on site water reuse requirements as well as the extension of the reclaimed water connection requirements in 2020. One. Our conservation division also developed and implemented a new voluntary reclaim water connection incentive so that existing developments would have a further incentive to connect to the reclaimed system for example, cutting over their irrigation system to connect to the reclaimed system and use non potable water for outdoor uses

[2:40:41 PM]

and our water resources planning team had been working on, works very closely with the regional water planning team, had been working on the development of the region water plan and in 2021 the region water plan was adopted by Texas water development board. We only have a short period of time between planning cycles for the regional water planning process and so we're now back in that planning process on several committees and continuing to engage with other stakeholders throughout the basin. In 2022, our consult Swint and Austin water staff reached a key milestone in that we completed a preliminary storage zone screening for our aquifer storage and recovery project. We were able we had started with a much broader scope looking at many different counties around Travis county. We were able to narrow down our scope, looking at favorable aquifers in Travis, bastrop and Lee counties and now we're doing

[2:41:42 PM]

more detailed study and looking at different project alternatives within that smaller area. We also began the water forward 2024 plan update process in 2022, beginning key technical tasks and our conservation division began the process to develop irrigation and landscape code changes for new single family and residential developments. Now here in the first few months of 2023, our my atx water project has continued meter installs. They've past the halfway point. They had a great celebration. They had pancakes and all sorts of games for the kiddos. And they've reached the point of about 140,000 zo installs across the city. The utility has also brought on a consultant to review Austin waters water loss program. That consultant black and Veatch is expected to deliver a report by the end of this calendar year, beginning of next the items that

[2:42:42 PM]

are on the screen in blue are showing kind of future items that we expect, kind of key highlights, Bartz things to look forward to in 2023. We anticipate that ordinance, amendments to codify the new on site water reuse and reclaim water connection requirements will be brought before council. And we also anticipate identifying Singh a pilot location at one or several pilot locations for the aquifer, storage and recovery project by the end of this calendar year. In 2024, we plan to begin field testing for the asr pilot project, and we also hope to complete the water for 2024 plan update by the end of the calendar year. So just to dive into a little bit more information about the water for 2024 plan update process, our key theme within this update is planning for uncertainty. We know that the future is going to

[2:43:43 PM]

be different from the past. We know that we are facing conditions of greater uncertainty, including that that we face through climate change, and we want to be able to adapt and learn from our

implementation efforts so far and figure out what additional activities we need to do to make sure that we've got a resilient, robust water supply system for the next 100 years. We have been working with our water forward task force who continue to meet every other month with subcommittees meeting on the off months. We have worked with them to update our guiding principles from the Waterford 18 plan. They include creating a plan that is resilient to growth, drought and climate change. Paige using a holistic approach to water resource planning that incorporates the Austin community's values using an equity and affordability lens to develop and implement the plan, including diverse water management strategies that make use of all water sources, including reuse, conservation and efficiency. Continuing to

[2:44:45 PM]

protect Austin's natural environment and minimizing implementation and operational risk in alignment with one of our key guiding principles that is new for this Waterford update, we are doing this planning using an equity lens. We convened for the course of 12 months a community ambassador Lucas group. That community ambassadors group had the specific task of helping us to develop an equity and affordability roadmap that equity and affordability roadmap includes two key parts well, several key parts. I'll say three. The first includes a history of equity and water within the city of Austin. The second includes a framework that we will be using to evaluate our water management strategy inches that framework includes a series of questions centered on several different themes that were

[2:45:46 PM]

identified working with our community ambassadors group. Those questions or questions that will ask about our water management strategies to understand the distribution of benefits and burdens from implementation of plan strategies. Especially burdened that are inequitable on marginalized communities. We're using that term marginalized communities to primarily mean communities of color, as well as low income communities. And the intent of that analogy, this is to identify which plan strategies may have inequitable burdens on marginalized communities and how we may need to adjust plan strategies or adjust our implementation of those strategies to mitigate those burdens. We are pairing that that framework of questions with what we're calling an equity and affordability. Well, that that framework questions as well as a spatially disaggregated data are paired together to create our overall equity and affordability tool.

[2:46:47 PM]

That will be one lens that we'll use to evaluate our water management strategies in addition to the multi criteria decision framework. Similar to what we used in the last planning process that looks at things like water supply, reliability, using our water availability models, cost and cost cost, environmental impacts,

other social impacts as well as implementation considerations. Another component of our equity and affordability roadmap are recommendations to improve the procedural equity of our process. That means making our community engagement more equitable as well as making our overall decision making process more equitable that those recommend actions are feeding into our education, Ann and engagement plan and all of that feeds into our overall water forward. 2024 plan update we are also working with climate scientists at UT to update the

[2:47:48 PM]

climate and hydrology analysis that we performed as part of the last water forward plan. We have reached substantial, substantial completion of that climate and hydrology analysis. This we've taken output butts from global climate models looking at several different scenarios, several different emission scenarios, and have created outputs of temperature and precipitation that we have included in an analysis to create projections of streamflow. Those projections of streamflow then go into our hydrology logic models that allow us to model how much water could be available to the city in several different climate future years in a to meet our customer water demands embedded in all of that analysis, we are able to pull out several high level climate trends that are listed here on the screen. Those include trends that we expect annual mean temperatures to

[2:48:49 PM]

increase over time. We expect that the number of hot days with temperatures above 100, 100°F will increase. Our results are showing that the distribution of rainfall is projected to change and that we will experience less frequent and more intense rainfall events in the future. We are also seeing that the number of dry days with precipitation below 0.01in are also projected to increase. A key takeaway here is just that we will see extreme events begin to get more extreme, more intense rainfall events separated by potentially longer or more severe droughts. We have also been working with our city demographer as well as other Austin water staff to develop a projections of population. These population projections are accompanied by employment projections that we use within

[2:49:51 PM]

our water demand modeling on the right hand side of the screen Ann are graphs of overall projected population out to 2120. The kind of brown line towards the left of the graph shows historical Austin water served population Ann. So how many how many people were providing retail and wholesale water service to the purple line on the top shows the water for 2018 population Ann projection. Ann and then the three dotted lines green, blue and Orange show the population projections that we are using for this water for 2020 for plan process. You'll notice that as we get further out to 2120, there is a

larger fan and those population projections are a bit lower than the purple water for 2018 projections that is because we are trying to use a range of possible future population burns

[2:50:52 PM]

to inform our analyzes. We are trying to capture some of the uncertainty that is inherent in doing 100 year water plan by planning for a potential number of futures rather than trying to guess at what we or predict what we think the future will be. Also, the reason that those projections are a bit lower than the 2018 projections upon the kind of recommendation of our Sade demographer. We're using declining growth rates as we get out into the later period of our 100 year planning horizon, rather than using flat growth rates in that later period of the 100 year planning horizon, we take these control total population projections and then we disaggregate those projections into a smaller geography. So we take those larger projections and we allocate them into what we call

[2:51:55 PM]

polygons, shapes on the map that are somewhat analogous in size and shape to census tracts within each one of our polygons . We then will have projections of how many people and employees could be present along each of those three different population scenarios for our four key timesteps 20, 20, 2040, 2080 and 21, 20 and the maps on the left hand side of the screen show zo densities in terms of people per acre. As we move through each of those time steps, the yellow and Orange shades show higher densities. The blue, the purple and blue shades show lower densities. And you'll notice that over time, as we get out to the full 100 year planning horizon in some of those yellow and Orange shades move out from just downtown into areas further out in between our primarily in between I-30 five and mopac. Our

[2:52:58 PM]

population distribution is informed by historical trends where we're seeing service extension requests coming in, citing plans, subdivision plans as well as our imagining Austin growth concept map with the centers and corridors as well as future project connect alignment as. So like I mentioned, those populate Ann and employment projections then feed into what we call the disaggregated demand model. Our disaggregated demand model takes those spatially allocated projections as well as historical building data from multiple customer sectors. And we create factors for each customer sector and sub sector apply that to our projections of growth to come up with projections of future water demand. This is a snapshot of baseline Ann year water use from the water forward 2018 plan. We're still in the process of

[2:54:00 PM]

developing our updated demand projections, but this snapshot provides you with a kind of example of the type of results we will get from our demand modeling. We will see results broken down, not just at the sector level. So sectors are things like single family, residential multifamily, residential, commercial, large volume, etcetera. We will also break that down into subsectors. So in the commercial sector, those shades of gray, you'll have various subsectors like hospitals, hospitals, offices, schools, restaurant, Bartz, hospitality, industrial, etcetera. And then beyond the subsector level, we will also break down our estimates into estimates of indoor and outdoor water use. So in the shades of blue, single family residential, the darker blue is indoor single family residential usage. The lighter blue is outdoor Shaw single family residential. Same thing for multifamily. Darker is indoor multifamily and the

[2:55:02 PM]

lighter is outdoor multifamily. The real power of doing all of this work is that we can then use this very granular demand information Ann to identify what are our options. Cities for conservation, Ann and reuse and not just at the citywide total, but within specific geographies that helps us to target or create a tailored programs and recommendations Luz within our water forward planning process to be able to achieve kind of the best outcome in terms of conservation and in reuse efficiency. I'll also mention that our overall goal is to shift to a fit for purpose approach when it comes to reuse. So right now, now you'll see folks using potable water for outdoor water use in time. Our goal is to shift that paradigm, so that we're matching the appropriate water quality with the appropriate end use. We want

[2:56:02 PM]

to see a greater shift to using non potable water for non potable purposes like outdoor water usage or even for indoor purposes like toilet flushing, urinal flushing or other compatible knell non potable indoor end uses, like I mentioned, the a key thing that we're trying to do within this planning process is to plan for uncertainty and to do that, we're testing our groupings of water management strategies, not just against one or several different planning scenarios in this updated planning process, we are going to be testing Singh against hundreds of different future scenarios. We'll be looking at 71 different scenarios of future hydrology or streamflow. We'll be looking at three different scenarios of future water demand as well as three different scenarios of potential future regional supplies by regional supplies, we mean supplies that are developed outside of the city of

[2:57:02 PM]

Austin that could have a benefit for the Colorado river basin as a whole. When you combine all of those different scenarios, you come up with 639 different planning scenarios, different planning stories, and we'll be using an optimization model and a program to test our different combinations of water management strategies against those and to find strategies that meet our needs amongst in the near term. Amongst all of those different scenarios as well. Here you go. I say right here we're developing a range of futures and we're trying to find common near-term strategies that work for the broadest range of those futures in the near term. In the first 50 years, we're coming up with a list of recommended strategy changes similar to how we did in the last water forward planning process. That also aligns with the work that we do in the regional water planning process. For the latter 50 years of the planning horizon will be

[2:58:06 PM]

developing an adaptive management plan with key decision points that will help us to understand how we may need to adapt our implementation of strategies in alignment with changing conditions that will allow us to reevaluate our implementation at key decision points. In addition to the five year planned updates to the water forward plan. Our next steps in this update Wright are to review the water management strategies from the waterfall 2018 plan. We are going to be gathering water for task force as well as community input on those water management strategies to understand are there any new strategies that we need to consider and are there other configurations of strategies, including existing strategies in the plan that we should consider? We'll be working with a consultant to update the characterization of supply, reuse and conservation strategies and for us that means creating updated cost estimates

[2:59:06 PM]

for each of the strategies. Update Eid yield estimates, as well as other data that will be using for multi-criteria decision making analyzes some of our near-term next steps in implementation of the water for 2018 plan, which will continue even as we are updating the water for 2024. Plan include Eid the delivery of an affordable impact statement in September. 2023 related to the on site water reuse and reclaim code requirements, as well as ordinance amendments that will be brought before council to codify those new code requirements for on site water reuse and reclaim water for our conservation division is also planning to host their final public meetings related to the irrigation and landscape code. Changes for new single family residential developments. And those code changes are planned to be included in local

[3:00:07 PM]

amendments as part of the adoption of the 2024 uniform plumbing code. Eid work on that, I my understanding is that that also will be continuing within the next 6 to 9 months. So thank you for the opportunity to provide you with a little update here if you would like more information about the water for 2024 process, you can visit us online at our speak up Austin page or speak up austin.org backlash water dash four dash 2024. We have a link on that page to request a presenter Ann at a community event or a meeting. And we also have links to sign up for our water for newsletter where folks can find more information about our water forward task force meetings, as well as other information about the plan and key implementation . Ann milestones. So happy to answer any questions you all might have. Great. That's that was a great presentation.

[3:01:08 PM]

Marissa. Thank you so much. Are you going to connect with, with council offices? Those who are not members of the committee to give them an opportunity to have a one on one or a small group with you to go through all of this information? Ann I think Anna, Brian Borja was just mentioning that. Yes. So yes, we will be. A question for you on the water forward stakeholders and the task force that that you're looking as some of the next steps is that are you looking for a appointees from the Dyess or are these appointments that you'll be making, is this a task force that you'll be gathering at a staff level? We'll be continuing to work with the standing water Ford task force on that task force, I believe we do have two vacancies. You know, and but we are continuing to meet with the existing water forward. And were

[3:02:08 PM]

those appointees of the council or were they gathered together at the staff level? Who who appointed them to the they were council appointed. Wright okay. I think it would be helpful for everyone to get a list of who the appointees are, where the vacancies are, and also if you could provide a list of folks who helped in the past. I feel like it's good to get fresh eyes on things, but it's also useful to have some historical and institution knowledge. So if there are folks who served in the past, maybe might be interested in serving again, yes . Miss Borja Bryant good afternoon, chair pool I'm Anna Brian Borja, assistant director of business services at Austin water. Since you brought up vacancies on our task force, I'd like to take the opportunity to tell you that we will gladly share with you a list of vacancies on the water forward task force as well as our water wastewater commission. We do have a few vacancies and we understand that these folks are very important advisors to us.

[3:03:09 PM]

We really value their input at our commission. So thank you for giving us that opportunity and we will definitely follow up with a list of where those vacancies exist that would be really helpful. Thank you.

Yeah, thank you. I was curious about. To things. One was the locations and the phasing in of the new water meters is I think we saw a map at one point. If we could see that again at either today or. This afternoon. Austin water oversight committee members, thank you. Randy Jenkins, assistant director for customer experience at Austin water. And I do have those numbers available if you'd like to see them, but we can certainly share them with your offices directly. That'd be great. Go ahead and send them to us to all the offices. So we have that information. We'll do. Because I think everybody's interested in seeing when they're going to get

[3:04:10 PM]

that new meter because it really is, is a great improvement. It's very exciting. Absolutely it really is. The leak detection alone just makes us all really happy. And on water forward. I know we had some implementation kind of fits and starts. We worked to get things going and then we put things on pause and then we started back again. But we agreed to do things in phases and there were some items that hadn't yet been implemented because they needed a little bit additional foundational assistance. Are you in a position? Ann maybe? Director or maybe Mr. Crittendon or Ms. Flores Gonzalez to tell us about the implementation of the items from water forward? The first grouping, phase two two and where we are with with those recommendations. Burns so I would say generally we're very

[3:05:11 PM]

much on schedule. I know there was some concerns specifically about the initial approach to include some of the ordinance requirements as part of the prior codenext or land development code updates. I think it was a year ago or ish. We'll have to give me the dates. But actually we did bring sort of separate from a comprehensive code rewrite. We pulled out some of the items from the land development code that relate to on-site reuse that also related to the extension of our mandatory reclaim connection. So those are moving forward. I would say the challenge. And then Marissa did mention that we are scheduled to bring to council in the September timeframe a specific Mok affordability impact statement associated with those and so that that's kind of the only, I would say major item that's kind of out of sequence otherwise. Marissa also indicated we're we will be bringing some

[3:06:12 PM]

recommendations that will do through the plumbing code related to landscape transformation. So I think those are really the kind of the two key points that required specific change changes to code. But we're we're getting there and we feel like we're we're pretty much on time and I remember when we were talking about affordability a year ago and getting the assessment on the impacts on affordability. One of the questions that was asked was, can we afford not to make these changes? And that

affordability has a different definition. Ann one is purely financial, the other is more existential. And I would argue, frankly, more more all encompassing and more critical. Knell so my question to you all is, is that also part of the assessment that you are bringing to this matter? So we'll again, we'll we'll certainly bring that data forward and make sure that we have a full hearing on kind of all the impacts of what affordability means in that context. I mean, I do think we

[3:07:14 PM]

need to look at what what the long range effects are. And we're looking at some pretty dire charts in the updates today. And if we are not going to continue with water forward implementation recommendations, at least the first grouping of them before we even go into getting new recommendations for additional updates in the phase two, what would those lines look like if we don't implement water forward at all? I mean, I think that's important to talk about Wright, because affordability comes in different colors and definitions and impacts. And I think it is important for the city of Austin to be really clear and honest, Burt and straight forward in offering that information. Yes. Council member Allison alter, thank you both for a great set of

[3:08:14 PM]

presentations. And Marissa, I'm always in awe of how you cover that whole territory of water forward. So eloquently. This is a really important plan and this update is really important and I want to recognize all the work that has gone into this piece coming out, though, from the external review and the boil waters. I'm interested in water quality and I'm not understanding at this point. So maybe you can explain how water quality is now being introduced more directly into this plan, which is more more been about supply than water quality. And I think the recommendations for some of the scenario planning and the other pieces, as you were, to also look at water quality, if we can have all the supply we want, if it's not a good quality, it's not going to help us. So can you speak to how that's being incorporated? And I may have missed it because there's a lot of material, but I'd like to know more of how that's being incorporated. Eid you didn't miss it. It's just

[3:09:15 PM]

that there's like you said there is a lot of material to cover. And so we've covered some of the highlights. One piece that I didn't mention that's new for the water for 2024 update is what we're calling the Colorado river land analysis. And we are in the market for a new name. So if you have any recommendations after you hear about it, feel free to offer those. We have been working with. So our water resources planning team has been working with our wildlands conservation division within Austin water to do an analysis looking at areas upstream of our intakes with still within the lower Colorado

river basin. But in the counties further up into the hill country to identify priority areas for conservation. The intent of that work is to figure out kind of what what strategies, what conservation strategies can we implement to better protect drinking water, source water source water protection, or to provide source

[3:10:16 PM]

water protection for our drinking water? Thank you for bearing with me as I work my way through that. We've been doing a spatial analysis looking at many different factors in including environmental factors as related to soils or aquifers. Vegetation cover or slopes as well as water supply factors, including the relative stream flow volumes contributed by various stream flow segments into the highland Lakes. As well as spring flow and other hydrologic factors to come up with a set of priority areas. If I could show you on the map what has been kind of coming up in our results based on proximity to our intakes as well as this other variety of factors as the pedernales river basin has been highlighted as a key area, some of the areas in between lake Travis and Buchanan have come up as as key areas.

[3:11:19 PM]

And we're working with our experts on land conservation strategies to figure out what are different approaches that we could take, whether that's through education programs, partnerships with organizations who are working Singh already within these areas as to encourage better land management practices, is working with landowners or things like the purchase of conservation easements or other fee simple acquisition strategies to try to better preserve some of these areas that we know are are critical for maintaining high quality in our source water. So kind of going back to root causes in terms of water quality protection, that's one of our key strategies moving forward. It is a really broad scope. It's something to think of almost as a legacy project too. We know

[3:12:20 PM]

that there's a lot of growth and development happening within the hill country, and so we're looking at ways to work with partners to be able to better protect those water supplies that will continue to be core parts of our supply portfolio moving forward. Another piece of that that we're working on and will be working on in the next couple of months is working with lcra, the lower Colorado river authority, using a water quality model that they've developed. They call it the krems model to run various scenarios of a water quality simulations, looking at the impacts of future growth and development, looking at kind of baseline scenarios that could turn on or off various existing Singh protections for the highland Lakes, the highland lake, current highland Lakes ordinance, the discharge Paige ban on the highland Lakes, certain protections that are key

[3:13:20 PM]

to continue supporting and to continue implement Singh to further preserve the high quality of water that that we have been able to get from the highland Lakes. That's a starting place for us. I'll acknowledge that. You know, our work has typically been on the quantity side. You know, that's what you have seen us focus on because we experienced these periods of drought that has been a high priority for us moving forward. We know that we're experiencing ecological shifts within the past several years. The yano river flood, you know, all of these events are prompting us and this growth and development, all of these things are further prompting us to take actions and look at different ways that we can further protect water quality. Thank you. Thank all of those are really important. I'm trying to put this in the context Burt with the external review and the pieces that they wanted us to focus on and everything you said is important, but I'm not I feel

[3:14:21 PM]

I'm not I'm not a technical scientist, but I feel like there's still a disconnect between what they were asking us to be modeling and to be thinking about and what we're talking about here. And none of that's to say that what you just said were not important aspects of water quality, but there's seems to be a difference that I think as we move forward, we should explore and. Alternate if I may, thank you, Ana. Brian Borjas, assistant director of business services at Austin water. You're Wright. In addition to what Marissa has been discussing, the external review identified Eid other scenarios that they tasked Austin water with looking at climate change impacts. Cold and hot were part of that recommendation. It also included oil oil spill into the Lakes, flood water management and occurrence and finished water. Wildfire has also been frequent

[3:15:22 PM]

, mentioned as a scenario that we need to be prepared for so so we are preparing and evaluating all of the risks that are related and cited in that recommendation. In terms and there are at varying stages of preparation. So the climate work that Marissa is describing is obviously on a longer time horizon. Ann in terms of wildfire Garza, we have a scenario, Pio that we are actually preparing to exercise Luz both in the field at one of our plants and at our department operations center, working closely with the Austin fire department to prepare for that. Our staff are monitoring Pio as a risk that we need to respond to as an organization organization, we've recently completed the next phase of work related to flood risk management for our facilities, and we also so are updating our oil spill response plan. One other element that's often been mentioned in

[3:16:24 PM]

context of water quality is how harmful algae blooms and cyanotoxins that is also a scenario that we're preparing for an emergency simulation as well as we have ongoing technologies that we've implemented to detect that. So just to give a broader picture, some of these risks are being addressed on more short to medium timescales. Does that help to give a picture of what we're doing? It does. I just want to I mean, in the response to that item in the external review, it was it was going to be dealt with in water forward. And I'm not sure that I'm totally seeing that. And we can continue that conversation. Ann yes, outside of here. But, you know, for instance, if the focus is on drought for water supply and water quality, then when we have cold spells that create short term supply issues, we're not necessarily accounting for

[3:17:27 PM]

it and it may not belong in water forward. I just want to I want to make sure that we are planning for it in the right ways and since the response was we're doing it in water forward, that's where I was looking for it to be. So maybe we can continue. I don't have the scientific basis to have that conversation on the dice right now, so maybe we can we can continue that conversation as the process evolves. But I did want to communicate what what I am trying to see where that is. And if water is not the place for it, then water for is not the place for it. I just want to make sure that we're planning for it appropriately. It looks like the director may have some things to offer. I just wanted to add one tidbit that at the end of my presentation earlier, I mentioned that the we have a number of report outs to this committee that cover different topics and water forward, of course, is one of them that covers some of those external review recommendations that are

[3:18:27 PM]

ongoing. We also will be reporting on our emergency management. That was another item that was on there. And so a lot of the scenario planning that Ana is talking about will be reported out as part of in that framework. So it's not only in water forward that we'll be talking about water quality. Thank you. And that's what I'm trying to understand because I know, you know, having worked with that advocates on the external review and different pieces, they're very concerned about the water quality. And so I just I just want to make sure that we have some clarity on that. A, we're dealing with it, and B, where where would you follow kind of what we're what we're doing. And so we can we can think that through more as we go with these things and the presentation. Burns I did want to ask if we could get and I don't know if this is for future meetings or, or here, but we've been trying to get some atx meter information specific for the district to try to understand where it's being rolled out and when. And I think it would also be helpful for

[3:19:28 PM]

people who don't have the new meter to understand what they can get out of the new software or if it's something you wait to do until you get that new meter. I think that would be helpful. The last question I had was about the purple pipe system and the extension, maybe the purple pipe. It's the reclaimed, the reclaimed water pipe that allows you to do. I think it allows you to do some of the purple pipe. But I may be mixing two different reclaimed water systems there. But but the, you know, the system that allows the buildings downtown to use the reclaimed water, certainly our centralized reclaimed water system. Did you have a question about that? I was just wondering how that fits into the water forward and the plans for expansion of that. And that may be a future meeting. So we do

[3:20:29 PM]

have a number of projects underway that we call completing the core that that extend that centralized reclaim system loop into downtown that allows those developments to connect to it that are within Ann a certain distance as required by ordinance and the. Certainly if we have more specific questions. Kevin and Marisa can cover those. Okay. I think maybe we could consider that as one of our future meetings to learn more about that centralized reclaim water system and I know there's some conversations going on with the county which I hope are continuing to move forward on that. But I think it might be good for this committee to discuss that at some future meeting when we have space in the schedule. Thank you. Okay thank you. Very good. Thank you so much, Mr. Crittendon and Miss Flores Gonzalez. Thank you. Thank you. And I think we are up

[3:21:31 PM]

. To addendum item seven. Let's go ahead and take that up. And this is an accommodation. This is an accommodation Ann for the change in the council meeting that was agreed to at our last council meeting. And so I asked the water utility staff to look at the schedule and see if it would be possible to push our plan. And August 30th meeting up to up a week early to August 23rd. And it would be at 1:00 instead of 1:30. So it's up to us. To approve this if we can do this day in time or if not, I guess you have a different conversation. But is there any discussion about that? Are you all okay with the date change? Paige was there a reason

[3:22:33 PM]

we switched to one from 130 and that's to accommodate, I think, the room or something? Wright we can't. We have to be out at a certain time because the room is also encumbered. Would you like to make a motion? Yes, ma'am. All right. So we have a motion to approve moving our August 30th, 2023, Austin water oversight committee meeting from 130 on August 30th to 1:00 on August 23rd, third. And it looks like like I got two seconds. We'll give that one to jv2 council member Velasquez. Is there any additional comment? And looking like that is approved across the board, we will officially move that August meeting. A week early. Thanks y'all. Miss Roalson, do we have anything else that we need to talk about? Excuse me? Other than maybe future items which I think we've kind of talked about

[3:23:34 PM]

throughout the meeting that is everything we have on our agenda for you today. Happy to discuss any future items and we'll be prepared to bring those back next time. And do please feel free to connect up with staff and have additional deep dives for you and your staff because I bet they have some questions as well that don't necessarily get heard from us on the dais. All right. That being it, at 3:23 P.M, I adjourn this meeting of the Austin water oversight committee. Thanks so much, everybody. Thank you