

Water Softening Project  
November 19, 2020

Theresa Freiss:

Good evening, and welcome to the South Adams County Water and Sanitation District telephone town hall. This evening, we will be providing information and updates about our Water Softening Project, and answering your questions live. After introductions and a brief overview of the project, you will have the chance to ask questions of the leaders and board members of the District. We also have a few poll questions for you to get your feedback. If you would like to ask a question, please press star three, and you will be placed in our live question queue. Again, that's star three if you would like to ask a question on the call. We won't be able to answer specific questions about your account, so those should be directed to our customer service team after this call. Now I'd like to introduce our District Manager, Jim Jones.

Jim Jones:

Thank you, Theresa. Welcome everyone. We greatly appreciate you participating tonight and taking the time to be with us. We're really excited about this project and happy to have this opportunity to talk about it and answer any questions that you may have of us. As Theresa said, I'm Jim Jones. I'm the District Manager. Along with me tonight on our panel is the Board President, Mizraim Cordero, the Board Vice President Heidi McNeely, and the District's Water Systems Manager Kipp Scott. As I said, we're really excited about this softening project, and we're excited to have the opportunity to give you a brief project overview. Kipp, would you give us a brief description of the Water Softening Project?

Kipp Scott:

Thank you, Jim. Yes. The project is... It started about three years ago. It's based on a pellet softening technique that's primarily used in Europe for removing calcium hardness from the water. This technique has been used in the US, but not to the scale that we are for the size of our facility and the customers that we serve. It will be removing hardness from about a level of 23 grains per gallon down to six to seven grains per gallon.

Jim Jones:

Thanks, Kipp. Can you explain a little bit more what customers can expect as the water is softened, and actions that they should consider taking?

Kipp Scott:

So when the system is up and running, and we are producing softened water to the District, first it will be more consistent throughout the District, because we are treating everything at one central location. The hardness, as I said, will drop from about 23 grains per gallon to six to seven grains per gallon. If residents are using a home water softener, they will want to set the level of that softener of incoming water down to approximately six to seven grains per gallon. They are going to see a lot less use of salt or potassium in their home water softener, and if they're not using a home water softener, they're going to see a lot less scale buildup on their appliances and bathroom fixtures.

Jim Jones:

Thanks, Kipp. I know one thing, when we talk about softening water, that as you soften the water, the water can become more corrosive. Is there any steps that the District's taking to reduce that corrosivity of the water, and should customers think about that as well?

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Kipp Scott:

We have specifically evaluated the corrosivity of the water, and it will not become corrosive at the level that we are softening to. If you should soften it to zero, the water does become corrosive. But again, we're going to be at about six to seven grains per gallon, and specifically not corrosive for our water, so there's nothing that the residents need to be concerned about as far as corrosivity.

Jim Jones:

Thanks, Kipp. Now I want to talk a little bit about the benefits that we, as a District, see by providing this project. I've been with the District now for 32 years, and for 37 years before I even started, the District was already dealing with the hard water. I get the question a lot of, "Why now? Why hasn't the District softened the water before now?" Historically, there's a challenge associated with softening water, and that's that the softening process ends up with a residual either in the form of a brine that's a real salty, watery substance, or a sludge that has to be disposed of. And because of the historic environmental concerns of the community, the District just didn't want to add a potential... Another problem that we had to deal with, so there hasn't been a good softening solution until now.

The District went through a detailed public process in 2017 to investigate alternatives, looking at the historic alternatives of RO treatment, ion exchange treatment, and lime softening, but a new technology is on the market. It's been used in Europe for decades, but not readily used in the United States, called pellet softening. As we went through that public process, it was identified that the pellet process was going to be the best, and our plant's going to actually be one of the first in the US, especially of our size, to utilize pellet softening. This softening process actually results in a material that can be beneficially used in secondary markets like animal feed, concrete, or drywall, so that's a big change, that now we actually have a softening process that can be environmentally friendly, and that's one of the big reasons that we're moving forward at this time. President Cordero, can you speak to what you believe one benefit of the project could be for the community?

Mizraim Cordero:

Sure. Happy to. Thank you very much, Jim. I have a hard time just saying one thing that is a benefit. The reality is that the community has been asking for our water to be softer, both the community in the south of Commerce City, and the newer community in the northern parts of Commerce City have noticed that our water is hard. They've noticed it in their dishes, they've noticed it in their showers, and only about three years ago, we had a big commission made up of community residents who ultimately, essentially, told us, "Please, find a way to soften our water." And like you said, Jim, we have the science, and so we're able to build a softening component to our treatment plant so no one has to change what they have in their home. The water will get to their home and it will be already softened, and this is a very unique thing.

I'm excited that we're able to build it for our community, because water in every community is different. I know that we move around, and we compare prices, and we compare water, and we compare different things, but water is extremely different. And in our case, our water comes from wells that are very deep in the earth, and that's why it's so hard. And I know we have experts on the line that can talk more about the actual chemistry, and get really in the weeds about that that I don't understand all about, but I do know that it is hard and that our residents know it, and that we have heard them, and I'm happy that next year, early next year, we will be able to go online with this Softening Project and we will see and feel the difference right away. Thank you very much.

Jim Jones:

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Thank you, President Cordero. Appreciate that. Vice President McNeely, what would you tell someone in our community about this project and how it'll benefit the community?

Heidi McNeely:

Thanks, Jim. Thanks everybody for joining us tonight. I agree with the rest of the team who's spoke about some of the benefits. As a resident in the community and a water consumer, I too am really looking forward to the Water Softening Project coming live. As Mizraim mentioned, we will still have different water than other communities, but we'll have much more comparable levels of hardness and softness in our water, as surrounding areas like Denver, Aurora, Westminster, and Thornton. In addition, like many of you probably have noticed, the scaling that you see on your fixtures, we have it on our sink faucets, our shower faucets, in our dishwasher, and we are looking forward to having that scaling significantly reduced.

And in addition, many of the new homes being built are being built with water softeners put in place or customers are having to install water softeners. I've lived in the District for just over seven years, and we do not have a water softener in our home, so I'm looking forward to the benefits of a District-wide softening program that will soften my water as it comes into my house, but I also think for all the residents who currently have softeners, this will really help reduce and eliminate their need to use those and potentially save them money and the cost that it is every month to continue to soften that water. So I think there's so many great benefits, and we're really looking forward to it, and I hope tonight that everybody can get their questions answered and know where there's resources and more information if you have additional questions after this evening. Thanks.

Jim Jones:

Thank you, Vice President McNeely. Kipp, can you talk a little bit about the schedule? What was anticipated, what we've dealt with to date?

Kipp Scott:

Sure, Jim. So the construction started March of 2019. It was planned to be... Construction would be a 20 month process. The original schedule was that we would have the system online end of December 2020. That got postponed last year, primarily due to issues we were having with material supplies and personnel working for the construction team to finish the facility. So last year, in December, we did add more days to the schedule, and the current schedule is projected to be online near the end of February of 2021.

Jim Jones:

Thanks, Kipp. And I do just want to remind everybody, I know we have a lot of new folks coming on here in the last few minutes, if you want to ask a question, press star three and then let us know what your question is. That way we can make sure that we get you on the list. Thank you. Kipp, I do want to follow up with one addition scheduling question. Is there any current risks that you're dealing with on the project, and any idea how that might be affecting your schedule?

Kipp Scott:

Well, yes. We're dealing with the risk that's known to everybody right now, and that's the COVID-19 pandemic issue. It is a high risk to the project, affecting the construction crew and the team to finish the project. We're doing a lot of things to minimize that risk as any other business is in Colorado right now,

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and we hope to maintain schedule, but it is possible that the schedule could get pushed out a few weeks if we should have issues with COVID.

Jim Jones:

All right. Thanks, Kipp. Theresa, I'm going to turn it over to you for our first poll question.

Theresa Freiss:

All right. Thank you, Jim. So our first poll question of the night is prior to this telephone town hall, were you aware of the Water Softening Project? Press one for yes, or press two for no. And again, prior to this telephone town hall, were you aware of the Water Softening Project? Press one for yes, or press two for no.

Jim Jones:

Thanks, Theresa. Do you want to start the questions?

Theresa Freiss:

Yes. And just so everyone knows, we will share the results of the poll later in the discussion. So now we will begin taking questions. Again, if you would like to ask a question, press star three to be placed in our live question queue. Our first question is from Scott. Go ahead, Scott.

Scott:

My question is with the water softener, is it being filtered in any way, and has anything been done to affect our water lately? Because a lot of us, I believe, from what I'm reading, is getting a strong taste of chlorine in our water these days.

Jim Jones:

Kipp, would you like to go ahead and answer Scott's question?

Kipp Scott:

Sure. This new process that we're starting up is conceived with a double barrier approach. It has the softening component, which is highly chemistry dependent, to remove the calcium carbonate from the water. Then it goes through a stabilization process, and then the final step in the process is filtration. It goes through a conventional mixed media filter that's used in most surface water treatment facilities, so there is filtration as part of this process. As far as the strong chlorine taste, Scott, that could be due to several factors, and I would suggest calling our water quality hotline, which we'll try to post later, or you can go to our website and find that water quality hotline and we can discuss that issue with you, how it could be affecting you.

Scott:

Sure. That sounds good. Can I follow up with the filtration? You said just a common used filtration media that water plants are using. Is that a carbon filtration system, or what type of filtration system is a common one for the water treatment plant?

Kipp Scott:

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So to be clear, the current water is filtered through a granular activated carbon process, and that process is [inaudible 00:16:28] and operational. The filtration system that's part of the softening process is... It's an anthracite coal. The purpose of that filtration is to remove particulates down to microbial size particles.

Scott:

Okay. Thank you.

Jim Jones:

Thank you, Scott. Theresa, next question? Theresa, you there?

Theresa Freiss:

Op, sorry. Our next question of the evening will be from David. Are you there, David?

David:

Yeah, I'm here.

Theresa Freiss:

Okay. Go ahead.

David:

I just had a question regarding irrigation. Is this going to affect the irrigation water, as far as watering lawn and plants and anything like that? Will there be any side effects in regards to that irrigation water?

Jim Jones:

Great question, David. And again, I'm going to let Kipp answer that.

Kipp Scott:

Thank you, Jim. The answer is the softening process is only for the potable water. It will not affect the irrigation system if you are on the dual irrigation system. If you are on that system, the quality of the irrigation water will remain the same. If you are irrigating with potable water, it will not affect your lawns or plants in any way. The technical term that we use to measure the effect on turf is the sodium adsorption ratio, and we want to be below a level of 10 for that, and our treated water, once it's gone through the softening facility, will be in the range of four for sodium adsorption ratio.

David:

Awesome. Thank you.

Theresa Freiss:

Thank you. Our next question is going to be from Joanna. Go ahead, Joanna.

Joanna:

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Hello everyone. Number one, thank you for doing this meeting. I really appreciate it, and I'm learning a lot. My question is this. Is this going to be like a just shut-on, shut-off kind of thing, or are you rolling out different areas in stages, or what should we be expecting along those lines?

Jim Jones:

Excellent question, Joanna. Kipp, you're going to be busy tonight, so go ahead and take that one as well.

Kipp Scott:

Thanks, Jim. So when the system comes in, it will be distributed throughout the District, not all at once, but you will see over the course of about three days. That's just for us to move the treated water through the system. We have a lot of storage reservoirs in the system that have to be turned over with the softened water, so there'll be about a period of three days from when we do bring this system online to when everybody in the District will be seeing the same quality of water.

Joanna:

Wow. Thank you. Thank you very much.

Jim Jones:

[crosstalk 00:20:26] Thank you, Joanna.

Kipp Scott:

Thank you for calling in.

Theresa Freiss:

Thank you, Joanna. Our next question is going to be from Charles. Go ahead, Charles.

Charles:

Hi there. I was just curious what the cost to each homeowner would be in their water bill. I spent \$3,000 recently on a home water system myself, and now that system is apparently going to be useless, and I don't remember voting for a whole District-wide system for this.

Jim Jones:

Thank you, Charles. This is actually one that I can answer, I won't rely on Kipp for this one. In 2017, the District went through a detailed public process that included a committee that was formed of residents and businesses, both from the north area as well as the south area. That committee looked at treatment alternatives, looked at do nothing alternative, looked at costs, kind of considered everything. And in addition to that public process, we also did a public phone survey that was conducted by a professional survey company to ask residents if they were interested in one, having a system-wide softening process, and two, how much they might be willing to pay.

In that survey, a high majority of the participants said that they would be willing to pay in the neighborhood of \$10 to \$12 per month in additional amount in their water bills to soften the water system-wide, because they recognized that they'll probably be able to either eliminate or reduce their softening system things like salt costs and different things like that, and also they might be able to reduce how much bottled water that they may be buying if the taste were to improve. Again, that was

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\$10 to \$12, and that's kind of what, in conjunction with the Hardness Advisory Committee, we kind of thought back in 2017 that it might cost.

The board, in conjunction with staff, have been working hard to try to figure out ways that we can minimize those cost impacts as much as possible. In 2017, it was anticipated that we'd have two new components that would add up to that \$10 to \$12, and that was a fee. It's going to be called the water softening fee, and at the time, in 2017, we thought that would be at about \$5 per single family residence per month, and then there would be rate increases above normal inflation area increases, and the combination of that fee and those rate increases would be in that \$10 to \$12 range.

We have accelerated some irrigation system projects that will now allow us to more fully take advantage of those lower-costing irrigation supplies. That allows us to maximize our water resource system, including the softened water, and treated water that we get from Denver Water. By doing that, the fee, with the growth that we've seen over the last few years, is going to be more in the range of \$4.50 per month, and the rate increases are only going to impact probably an additional about \$2.50 a month, so it looks like the monthly cost to an average single family home is going to be in about the range of \$7 a month.

Theresa Freiss:

Before we continue on to the next question, I am going to share the results of poll question number one. Let me actually repeat what poll question number one was. Prior to the telephone town hall, were you aware of the Water Softening Project? And 70% of the respondents said yes, so that is great to hear. We will be asking the second poll question. So the second poll question for the evening is what do you think is the most important benefit of the Water Softening Project? Press one for softer water for personal or family use, press two for less maintenance or less salt for your in-home treatment system, press three for less scaling, and press four for water that is more comparable to other communities in our area.

Again, I will repeat the question. What do you think is the most important benefit of the Water Softening Project? Press one for softer water for personal or family use, press two for less maintenance or less salt for your home's softener, press three for less scaling, and press four for water that is more comparable to other communities in our area. And thank you, we will share the results of this poll later in the discussion. And again, just a reminder, press star three for questions. If you'd like to ask a question, again, press star three. Our next question is going to be from James. Go ahead, James.

James:

So yeah. This is James. Hello?

Jim Jones:

Hello, James.

James:

Yeah. Got a question about the water softening process. The only one I'm familiar with is like the one you have in your house where you put salt in it, and I don't even know how that works for sure, but this one that the department's going to put in now, is it going to mean an increase in the salinity of the water? Do I still have to watch that, or no? [crosstalk 00:26:28] Go ahead.

Jim Jones:

Go ahead, James.

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James:

And the other question I have is how much water do we buy from Denver, and do we buy water from any other water departments? [crosstalk 00:26:42] Go ahead, Jim.

Jim Jones:

Thank you. I'll quickly answer the Denver. We have a contract with Denver Water to... We can buy up to 4,000 acre-feet of water per year, and that's a perpetual lease, so it never goes away. And 4,000 acre-feet of water will generally serve about 8,000 homes, so that gives you an idea. Right now, we take about 2,000 acre-feet of the Denver Water. We're not fully utilizing that, but we will grow into that full utilization of the 4,000 acre-feet over time. Kipp, can you respond to James' question about is there going to be any additional salt in the water after the treatment process?

Kipp Scott:

Yes I can, Jim. The salt content, this is sodium chloride, is around 80 parts per million. It will go up with the softening process, because a chemical that we use in the softening process to get the calcium carbonate to come out of the water is sodium hydroxide. Therefore, there will be more sodium added to the water, but that level, because we're doing this on a large scale, will be less than the sodium you would see from your home water softener. Home water softeners contribute about 200... Or raise the sodium level up to about 200 milligrams per liter, and we project this softened water to be right around 180 milligrams per liter, so less than a home water softener would raise the level.

Theresa Freiss:

[crosstalk 00:28:26] Thank you, Kipp.

Jim Jones:

Thanks, Kipp. And he also did ask do we get treated water from any other water providers, and we do not. Denver's the only other provider that we get water from.

Theresa Freiss:

Thank you. Our next question is going to be Avis. Go ahead, Avis.

Avis:

Hi. I had a question. I have a water softener now in my home because everything was turning... All the utensils and everything was turning white. But I'm having a house built in Reunion, and it should be done in seven months. So you had said something about if we already have a water softener to go ahead and continue using it with whatever it is that you guys are doing. So is that more beneficial for me to also buy another water softener for the other house, or is whatever it is that you're doing going to be sufficient?

Jim Jones:

I'll start off, Avis, and answer your question, and then I'll ask Kipp if he has anything to add to it. One thing to consider, as we have mentioned tonight, the hardness level is going to go from about 23 grains per gallon down to six to seven, and that is fairly consistent with water that you see throughout the rest of the metro area and in areas like Denver, Aurora, Westminster, with hardness levels that you don't

typically... Most people don't have a softener, so there's probably going to be an opportunity here for a lot of folks to stop using their softeners.

But some folks might want the water to be a little bit softer than that six to seven grains, and if you do, you can continue to use your softener, just make sure that you get it adjusted appropriately so that it's only removing... It knows that it's calibrated at the six to seven grains and not over-softening. And we do also want everybody to know that you don't want to make your water too soft, because if it gets too soft, it starts to get corrosive and it can start eroding the plumbing materials on your pipe, on your fixtures, and you really don't want that to happen. So you probably don't want to make it too much softer than what the treatment system will do. Kipp, do you want to add anything?

Kipp Scott:

I think you summed it up good, Jim. I would just add, because I see a couple other questions, that yes, we do not recommend taking water softeners down to... So that you have zero grains per gallon. You do want a little bit of mineral content left in the water so that it is not corrosive, and corrosive basically just means that it will attack your pipes or eat your pipes. So it's best to have a little bit of mineral content left in the water.

Theresa Freiss:

Thank you, Kipp. Our next question is going to come from John. Go ahead, John.

John:

Yes. I was curious as to what the system throughput is with respect to daily use. Essentially, I'm looking at the future, and wondering whether you'll have to provide another system. I know that Commerce City is interested in growing rather substantially.

Jim Jones:

Thank you, John. That's a good question. Right now, we produce... And we use a term that's not familiar to everybody, but we the term acre-feet, and right now our system produces about 10,000 acre-feet of water a year. We anticipate with the growth projections that Commerce City's looking at that we will probably get as high as 35 to 40,000 acre-feet total demands in our system. We're one of the very few communities in the metro area that we have enough [inaudible 00:32:43] water right now to triple in size.

While we're serving 10,000, we can get up to 30,000 acre-feet, and that's going to include ground water supplies in our potable system, that's going to include the ground water supplies in the irrigation system, the Denver Water, and then we have some surface water rights and some additional ground water rights that add up to that 30,000 acre-feet. So right now, we have enough water to triple in size. We do have a water resource program where we're actively looking at water resources that may become available, and as we need them over time to stay up with the projected growth, we'll continue to buy those water resources. Did that answer your question?

Theresa Freiss:

I think actually we are on to the next question, Jim. I'm sorry. He's not live anymore. Our next question is actually from Abraham. And just a reminder, if you would like to ask a question, press star three and you will be put into our live answer question queue. Go ahead, Abraham.

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Abraham:

Hi. My question is since this is a new method that will be used in the District, how confident is District on the success of it? Like are we going to have interruptions, we get issues later on, since there isn't a lot of work with that kind of projects around here?

Jim Jones:

Great question, Abraham. I'm going to throw this one to Kipp again.

Kipp Scott:

Thank you, Jim. So Abraham, this technology is new to the US, but it's been used in Europe, and really throughout the world for 50, 60 years. So while it's new to us, it's not a new technology. It's well proven, well thought out. So I would say we're 100% confident in this process doing what it's intended to do, which is to reduce the hardness in the District's water supply.

Jim Jones:

And Abraham, the engineers that are designing and working with us to bring our system online designed a similar plant in California that's been running for several years, or at least a few years now, so they're very familiar with the process and have experience on that plant.

Theresa Freiss:

Thank you, Jim. Our next question will be from Carol. Go ahead, Carol.

Carol:

Hi. Yes. Hi. We've been living in Commerce City for the last 18 years, and this is the first time we've ever lived anywhere with hard water like this. So my concern or my question is I know that it's built up in our appliances, our washer, the ice maker, things like that, and I know there's a calcium buildup probably in all of our plumbing and our pipes and everything. Once this water softener system starts working, will our pipes and appliances and stuff keep that calcified residue in there, that buildup, or over time, will using that softened water on a regular basis, will that break that up to diminish the majority of that?

Jim Jones:

Good question, Carol. I'm going to let Kipp answer this one as well.

Kipp Scott:

Thank you, Jim. Carol, the scaling that is already built up on your appliances will not be removed by the softer water. Specifically, as I talked about corrosivity, the water is not corrosive so it will not dissolve any mineral scaling or metal out of your pipes. But what you will see is over a period of time that scaling will not happen as quickly or be as bad as it has in the past. Now again, we're not taking all of the hardness out of the water. There will be some calcium and magnesium still left in the water, and over time, you still will continue to see scaling, but not to the level that we have in our current water supply. I guess another way to look at it, we are taking out about 60% of the hardness in the water and leaving about 30% in.

Carol:

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Okay. Fantastic. Thank you very much. Oh, one other question. Oh, it just slipped my mind. That's okay. My husband wanted me to ask something and I forgot. Sorry.

Jim Jones:

No. Thank you very much.

Theresa Freiss:

Thank you, Carol. Our next question will actually be from Dave. And just a reminder, if you'd like to ask a question, press star three to be placed in our live question queue. Go ahead and ask your question, Dave.

Dave:

Hi there. I did have a question about some of us that live in the south side of Commerce City. We still have galvanized pipes, and it kind of goes off of what the last caller was talking about, but it we have the tubercles that is built up inside of our pipes and you have softened water that's running through like 100 feet of tubercles coated piping, is that water going to change between being conditioned and not conditioned by the time it hits our tap?

Jim Jones:

Dave, that's a good question, and as Kipp kind of alluded to in the last question, is we're going to carefully monitor this softening process, so after it actually goes through the pellet softening process, we're going to go through a pH adjustment process to, again, regulate that corrosivity of the water. And it's my understanding, and we'll get Kipp to weigh in on it as well, that we're going to balance that pH so that it's not aggressive and shouldn't affect the scaling that's already in your piping. Kipp, do you agree with that?

Kipp Scott:

I agree 100%, Jim.

Jim Jones:

All right. Thank you, Dave. Good question.

Theresa Freiss:

Thank you. Our next question will be from Chad. Go ahead, Chad.

Chad:

Hey. How's it going? I've got a couple questions. A lot of us currently use reverse osmosis systems with our water softeners, because the water tastes terrible and many say that it's probably not the best water to drink, which is the reason why people buy bottled water. Now, will this system help with that at all? And the other question is when is the go-live date for this? When should we expect the water to be softened? And the last question is I know with a system this big, there's going to be some trial and error. We're probably not going to get the best water that we should expect right off the bat. After the system is up and going, when should we expect optimal performance from this system?

Jim Jones:

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All right. Thanks Chad. I'll start off, and then I'll let Kipp supplement my answer. The start date was originally supposed to be in December. That got moved to the end of February 2021 because of some labor shortages that the contractor had early on in the project, and he's been able to rectify that. Right now, with the COVID... So right now the go-live date is February 21st, 2021. We think that's going to be affected, and the main reason is because of COVID right now. If the contractor or any of their subcontractors have an employee that get the COVID virus and they can come into contact with coworkers, potentially the contractor or their subcontractors will have to have a number of employees quarantined during the 14 day period. So that could likely have an effect on the schedule.

Right now, we don't know exactly what that is. We are having a few of those issues that we're dealing with, but we will continue to monitor that, and if a significant change happens, we will update the community by our website and also get information out. But that's as much as we know right now. We hope it doesn't get impacted a lot by this virus, but this crazy thing is impacting everything, it seems like everything that we deal with, and it probably will have some impact of the project's completion schedule.

As far as making the water drinkable, one of the processes that we went through when we did the public process in 2017 is we did a taste test, and we kind of did a before and after. We looked at Denver Water, we had four different types of water, and in the first test with our normal water, it came in in fourth place, and once we did the pellet softening process, we had a pilot plant that we were operating at the time, when we did that, the pellet softened water came in a close second to Denver Water.

So we're hopeful, and we think the taste of the water... I personally like the taste of the water, I've been drinking it for 32 years and I'm used to the mineral taste, but I know a lot of folks don't like that mineral taste. And this process, by removing a significant amount of the calcium hardness, should take away some of that mineral taste that folks don't appreciate. Kipp, do you want to talk about bringing the system on, and when folks might be able to confidently get rid of their existing treatment systems?

Kipp Scott:

So I apologize. I got knocked off the call, so I didn't hear everything. But as far as system optimization, what the residents will probably notice is over a period of a few weeks a change in taste of the water. Again, taste is highly subjective. Some residents may notice a different flavor, other residents may not notice anything at all. But that will happen over a period of a few weeks, just as the water in the system equilibrates and stabilizes to the mineral content that's already in the pipes. As far as chemistry, the chemistry is going to... Within the three days that I mentioned earlier, is going to stabilize and that is going to be the water quality that residents can expect from here on out, and that will be with that hardness level of around six to seven grains per gallon.

Theresa Freiss:

Thank you, Kipp. Our next question is going to be coming from Bob. Go ahead, Bob.

Bob:

Hello everybody. Hey, thank you for doing this tonight, by the way. This is a great thing. Couple of questions. I heard earlier all the talk about the benefits, which is great. Are there any drawbacks to this? That's the first question. Second question is, and I'm going back to my... I've been out here 17 years in northern Commerce City and have had the water softener from a local company for the entire time. Are

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you suggesting that, I mean it would be great, that we could rid of that water softening system and then maybe even go with a minor filtration system versus the full on having to put a bag of salt in it every few weeks? And also, if I do keep the water softener, this is what kind of confuses me right now, like you said right now it's like 22 grains per gallon, and my softener currently is probably softening it down to some amount per gallon. Are you saying if I maintain this system of the water softener, I should have them come out to calibrate it so their system doesn't soften so much?

Jim Jones:

Yeah, Bob. Good questions. First one, talking about the benefits, as a community, I think it's going to be a great benefit to get the water softened, reduce the scaling, improve the taste. So those are all good things. One drawback that I see is there is an additional cost. We've had to go out and get bonds in the amount of \$60 million. We will have additional costs, so we did have to do that, and we're very happy that we've been able to minimize that monthly cost increase, but that is there. But again, while it could be viewed as a drawback, we think that a lot of folks are going to see some benefit by not having to use their softeners as much or not at all, and hopefully not have to buy as much bottled water. So there's going to be some cost savings that we hope outweigh the additional cost that we're looking at to implement the system.

As far as the softener, it's hard for us to say exactly what you should do because a lot of times it comes down to personal preferences. If it was up to me, and once the water gets softened to that six to seven grains per gallon level, I would not soften it anymore, just at the risk of becoming corrosive in my own house and possibly corroding my pipes and my fixtures. So I wouldn't soften it more, but I know some folks might want it just a little bit softer, and if that's the case, then yes, you should probably contact your softener provider and have them come out and adjust it to appropriate level so that you don't over-soften.

Theresa Freiss:

Thank you, Jim. And our next question will be from Jack. Go ahead, Jack.

Jack:

Hi. I appreciate you all doing this call as well. There's been a lot of speculation and some misinformation going around, and listening to other people's questions, most of my questions have already been answered. One question that I have not heard, though, is will there be any form of additional notification when the system does go live?

Jim Jones:

Thank you, Jack. Appreciate that question. I'm actually going to turn this one over to Theresa. Theresa's our Public Information Officer, so I'm going to let her answer this question for you.

Theresa Freiss:

Thank you, Jim, and that's a great question, Jack. We will be sending out more notifications when the system does go live. We will be sending out bill stuffers. There will also be information on our website and our social media pages, and also if you ever have any questions, you're more than welcome to call our customer service team and we can answer any questions live over the phone. I hope that helps to answer that question for you.

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Jack:

Yes. Thank you very much.

Theresa Freiss:

You're welcome. And I believe our final question of the evening will be going to Alex. Go ahead, Alex.

Alex:

Hey everyone. So a lot of the que... Can everyone hear me?

Theresa Freiss:

Yes.

Jim Jones:

Yes.

Alex:

Okay. A lot of the questions that I had were kind of, or partially, answered already. My first one was about over-softening for corrosivity. At the six to seven grain per gallon rate, it was recommended during this phone call that we set our water softeners to six or seven grains per gallon, so I wanted to clarify that for people out there. And you guys already recommended that someone come and calibrate it for them so that they don't over-soften. Would you recommend staying in the two to four grain per gallon rate for soft water that's not corrosive?

Jim Jones:

Yeah, Alex. Again, it's hard for us to make that final recommendation. Again, that six to seven is pretty typical in the metro area, and a high percentage of folks will not soften it beyond that. I personally wouldn't soften it beyond that, just because you can possibly change the chemistry a little bit and get that pH a little too low where it becomes aggressive. So I wouldn't personally want to soften it anymore, but I know there are folks who like a little bit softer water than that. If you talk to the AWWAs and others, they would say that six to seven grains per gallon is not theoretically soft. It's still a little bit hard. So again, it's kind of a personal preference. If you want to get it a little bit softer, that's where I would kind of talk to your softening provider to make sure that you appropriately adjust it to a level maybe that they don't believe will be corrosive and will work well for you for what you want to get out of your system.

Alex:

So there is no like official guideline for, let's say, anything under two grains per gallon would be considered corrosive, or zero? [crosstalk 00:51:34]

Jim Jones:

Any thoughts on that?

Kipp Scott:

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Definitely if you're at zero grains per gallon, you're most likely going to be corrosive. But a lot of it has to do with the other minerals that are in the water and chemistry of the water. Again, recommendations are not to go below three or four grains per gallon, and that way you do stay out of creating a corrosive water. You leave enough mineral content in the water so that it will not be corrosive.

Theresa Freiss:

Thank you, Kipp. I just wanted to thank everyone for their great questions tonight, and I did want to give you all the results for our second poll question of the night, the question being what do you think is the most important benefit of the Water Softening Project? The number one answer was softer water for personal or family use at 38%, the second answer was less scaling at 28%, and at third, was water more comparable to other communities in our area at 22%. At fourth place, less maintenance or less salt for your water softener is at 12%.

We do have one more poll question for the evening, and the question is there another water topic you would like to learn more about? Press one for if you'd like to learn more about billing rates, press two if you would like to learn more about the irrigation season, press three if you'd like to learn more about water conservation, and press four if you're not interested in learning more at this time. Again, is there another water topic you would like to learn more about? Press one for billing rates, press two for irrigation season, press three for water conservation, and press four if you're not interested in learning more at this time.

Jim Jones:

Theresa, I just want to thank everybody for participating tonight. We really appreciate their interest in the project, we appreciate the questions that they've asked. I would strongly encourage all the folks, and let your neighbors know too, that we have lots of information on our website. It talks about the Softening Project, we try to keep it up to date with schedules and new things going on. If you're looking at the website and you have any questions, please don't hesitate to give us a call. We're always glad to try to answer questions for you folks, our good customers. Theresa, any final remarks on your part?

Theresa Freiss:

Just thank you all for giving us your time this evening. We hope that this call has been helpful in providing more information about the Water Softening Project. And as Jim said, if you would like to learn more, you can visit our website at [sacwsd.org](http://sacwsd.org), and at the end of this call you will have the option to leave a question or comment. If we were unable to answer your question on live, we will be taking voicemails and contacting everyone back that we missed. Again, if you have any questions, feel free to leave a comment or a question over the voicemail, and we really appreciate everyone's participation this evening. Thank you, and goodnight, everyone.

Jim Jones:

Thank you.