Representative Policy Board
South Central Connecticut Regional Water District
Consumer Affairs Committee

June 21, 2021
Meeting Transcription

Stephen:

And the first item, this meeting is being recorded. Thank you, Jennifer. And the first item on our agenda is our safety moment. Jennifer, would you like to put that up? Jennifer, are you there?

Stephen:

[crosstalk 00:00:42], safety moment was about supporting national trails, and obviously the Regional Water Authority is a great resource, in terms of trails [inaudible 00:00:53]. As someone who uses both that and a lot of local state parks, it's a great thing and a great space to inhabit, resource for everybody and I hope everyone will support them. Item two is the approval of our minutes of the May meeting. Can I have a motion?

Frank:

I make a motion, Steve, [inaudible 00:01:18].

Stephen:

Okay Frank, and second?

Naomi:

I second it.

Stephen:

Thank you, Naomi. Are there any corrections, omissions? No additions? Hearing none, I'll call for a vote. All those in favor of passing the minutes?

Group:

Aye.

Stephen:

Minutes pass unanimously. Thank you. And we get back to Mary Ann Dickinson, who is here from the Alliance for Water Efficiency and Conservation to give us a presentation. Thank you, Mary Ann.

Mary Ann:

Thank you very much, I'm really pleased to be here. As I think I mentioned a little earlier, I was an RWA employee for a while, so I have a soft spot in my heart for Regional and all of the good work that you've been doing over the years. And especially the help that Rochelle gave us to bring the rates workshop that we held in Connecticut. We had to do it via Zoom. Rather than a live, in-person, one day workshop, we did a two day, half day Zoom meeting. And Rochelle thought that one of the introductory presentations that I gave at that workshop might be something you would be interested in seeing, so

that's what we're going to be showing you today. It's the presentation that I gave to open up the discussion of what the connection is between rates setting and water efficiency, and what some of the issues are.

Mary Ann:

So it follows a program that we've developed called Financing Sustainable Water. So that's the first slide that you see there. But really what I want to so is-

Stephen:

Mary Ann, if I could interrupt you for a moment.

Mary Ann:

Sure.

Stephen:

You gave this presentation to finance, and I thought it was important enough I invited Land Use members too.

Mary Ann:

Great.

Stephen:

So there may be some members coming to this, so that everybody would have a chance to see it.

Mary Ann:

Great. Thank you. Thank you. And can everyone hear me all right? I think I hear a little bit of a background echo.

Stephen:

Yeah. Does anyone have some noise in the background they could possibly quiet that?

Jennifer:

I don't know if it's feedback that's happening. Seems when you're talking it's coming up.

Speaker 8:

If everybody mutes other than the speaker, that usually works.

Jennifer:

Yeah.

Mary Ann:

Okay, thank you. Okay. So we want to start off by talking about utility financial management, because it's now becoming harder than ever for a utility to conduct its business. It used to be as utilities were growing everywhere, it was always easy to fund your new development and your new capacity, off of all the new customers that you were getting into your system. And that's not happening the same as it used to. What we're seeing is a real decline in residential water sales around the country, and it's not just the private water companies that this graph shows, it's all systems, both publicly owned and privately owned. This is a graph from the National Association of Water Companies.

Mary Ann:

And I like using it, even though they haven't updated it beyond 2010, I like using it because it shows very clearly the pattern of how we were growing in our water sales and in basically our revenue, up until around 1988 or so. And then it slowly started to decrease as individual customer use became more efficient. And part of it was standards that were adopted in 1992 in the Energy Policy Act, for plumbing fixtures that made them more efficient, so you couldn't buy anything that wasn't an efficient fixture. But also just changes in habits of customers, and the declining pattern of per capita water use declining, meant a decline in water sales as well. So it shows a pretty precipitous decline. You see here in 2010, it's just as low as it was in 1972, even though you're serving quite a few more people.

Mary Ann:

So as a water conservation person, I think, "Well, right, that's a success story. Where the US is the highest per capita water using country in the world, isn't it good that we're reducing our per capita?" But it has a lot of side effects. That lower demand means lowered sales revenue. And if you're projecting that you need a certain revenue requirement to balance your books and you're not getting it because your sales are lower, that's a prescription for disaster. And it reflects badly on the water conservation programs that have been implemented, and the customers get angry, they say, "Well, gosh. Why should I conserve if you're just going to raise my rates anyway?"

Mary Ann:

Because what you have to do, of course, is you do have to raise your rate if it turns out you're not covering fully your fixed costs. You've got long run capacity costs for supply transmission, storage treatment, replacement of infrastructure, pipes that need replacing. And then you've got the variable costs that are connected with water consumption, the water itself, pumping that water and the energy it takes to run those pumps, chemicals that are used in the treatment process. Those are all costs that have to be covered. And of course your sales revenue has to cover all of those costs, plus running your operation and your staff and all of that.

Mary Ann:

So revenue stability now has become a really big issue all across the country with water utilities. And frankly, because the demand has been declining, conservation's often blamed for the revenue crisis that's now occurring in a lot of places. So we at the Alliance for Water Efficiency, developed this Financing Sustainable Water program, because we wanted to make sure that we helped utilities do what would be right for their systems, in terms of structuring their rates, but also doing the kinds of conservation that would make sense for them as a system. And we didn't want to leave this untreated. We didn't want to leave long-term revenue collection, leave it unstable so you didn't know what your year would bring you based on rainfall. Because long run, that can affect your bond ratings.

Mary Ann:

So here's an example of a Texas water utility, the City of Fort Worth, that got downgraded by their bond agency, Fitch, because they had chronic mismatch of their projected sales and their incoming revenue. Where they were always projecting that they were selling more water than they actually did. So what Fitch said, "Well, it's because you're doing water conservation. So we're going to downgrade you because you're always in a shortfall." So the Texas Tribune press characterized it as, they've lost that much money every year because of water conservation, when they actually didn't have a water conservation program, per se. I mean, City of Fort Worth at this point in time, did not have a water conservation program that you could point to as the culprit. It really was because there was this natural decline in demand that was happening, and they weren't matching up their revenue projections and their rates to that phenomenon.

Mary Ann:

So what does affect revenue stability? Reduce demand comes from a number of factors. It comes from, as I mentioned, the federal law that requires that plumbing fixtures be replaced when a customer's remodeling their house or even building a new one, that they use federally approved standards for plumbing, fixtures, toilet, shower heads, urinals, faucets, and appliances like clothes, washers, and dishwashers. They all have water efficiency standards. And then of course there's the WaterSense program, which is a water labeling program like ENERGY STAR. And that is a 20% even lower value for those plumbing fixtures. So when you go to the big-box stores, the Home Depots of the world, you will see all of these products on the shelves, this is all they're selling.

Mary Ann:

So that's happening, it doesn't cost the utility any money, it happens in the background. And sometimes they can be as much as 1% per year reduction, just from this. If you got a service area with old housing stock and people are doing remodeling of their bathrooms, because they can't afford to buy a new house because housing prices are shooting up, those remodels are reducing water use. Then there are utilities, of course, who do active conservation programs, particularly if they're in a drought or if they have a shortfall in how much supply they have to meet, what might be increasing demand from growth. And then there's recessionary effects. During the great recession, we had a lot of industrial shift layoffs, we had housing foreclosures, we had all kinds of things happening during that period of time that dramatically reduced water use.

Mary Ann:

So the economy has an effect on that reduced demand as well. Plus if you've got a year that rains a lot, and you have a utility system where the customers have put in automatic irrigation systems and they're irrigating, or even hand irrigating with their sprinklers. In wet years they don't do that, because they have plenty of water just falling from the sky. So if you've counted on a big peak demand that will give you peak water sales, that can impact your revenue requirement. And then you've got increased costs on the other side, that come from building new infrastructure, replacing the hired leaking infrastructure. Pipes and mains that get replaced, that's a cost, that's expensive. And there's a rise in other fixed costs as well.

Mary Ann:

Labor is a fixed cost, insurance is becoming a big fixed cost, energy is a big fixed cost, and that cost just keeps going up. And then there's, of course, inflation, which right now is not very high, but in the past it has been a factor in a utility system management. So all of these things go into that calculation. And what's the net effect of it is, that water and sewer rates now are beginning to shoot up much more sharply than other utilities, that similarly were all bundled together, electricity, natural gas, telephone, garbage. All of those refuse services that typically have always been higher than water and sewer, now we're seeing water and sewer begin to spike up, and spike up higher than the consumer price index. Which is what you see in the gray lines, is consumer price index. And the blue line is the water and sewer line.

Mary Ann:

So the Institute of Public Utilities at Michigan State University, Dr. Janice Beecher, who runs it, she puts together this chart, and she had it in our workshop, and did a presentation on our worship, which I urge you to listen to. But this is something that she's tracking very closely, because the phenomenon of the rising water and sewer rates is making the whole subject of water rates, a very unpopular consumer topic. And we've been fond of saying in water, "Well, we're not as expensive as your energy bill." But we're starting to see communities now, cities across the country, where the monthly energy bill and the water bill are neck and neck, and now are starting to get to be higher. Santa Fe, for example, already is at the point where their water bill is higher than their energy bill.

Mary Ann:

And we're going to see other major cities joining them in the next several years. So this is a fact of life that we're all having to deal with. So what is the role of water efficiency in all this, and what is the impact that it has on the rate designs? So this is just a little stylized diagram that explains what you do in the rate setting process. You use first figure out your costs. Regional has done in the past, always a cost of service study, so you know exactly what your costs are to deliver water. Then those costs flow into how you design your water rates. So your water rates then take care of making sure you meet those costs, both fixed and variable. But then how you set your water rate and what that rate is, affects the demand [inaudible 00:13:49] customer exerts.

Mary Ann:

If the rates are getting high, they may want to save money and they may lower their water use in response to that water rate, which then impacts what you have to build in your system, which then goes back into a new calculation of what your costs are. So I show this because this is really an everlasting cycle, you're never done. Many utilities do an analysis every several years and they adjust their rate collection mechanism accordingly, because their costs change, the demand patterns change. And these are all factors that go into it. We'd like to think that conservation is part of a solution, that wasteful water use is not something that we want to encourage.

Mary Ann:

We do think, especially for utilities that are growing, it's a long-term cost reducer to the utility. Because if you can supply your new customers with water that's conserved from your older customers, then you're keeping your demand relatively level, and you're not needing to look at new sources of supply to meet that new demand. And while that might not be a big factor in New England and water supply, it's sometimes is a factor in wastewater treatment, because wastewater treatment is the same exact

principle. If you have high flows, high discharges, and you need to build more wastewater treatment plants, if you can bring those flows down, you don't have to build that much capacity, that's saving millions and millions of dollars for the rate payers.

Mary Ann:

So we like to think it's a cost reducer, and we'll talk about some work we've done to document that. And we think the revenue loss, actually is due to a lot of other drivers as well. It's really due to a lack of a careful examination of where at the system is, because if water conservation is factored in carefully, every gallon that's saved is one of the doesn't have to be pumped and delivered. So you save those variable costs, and it's a long-term savings for new capacity development if you have to do that. So if you have reduced utility costs, it can mean that your customer rates long-term become lower, because you're avoiding those infrastructure capacity increases. And here's a chart that explains what I mean by that. This is a chart that comes from the American Water Works Association manual on water conservation.

Mary Ann:

It's a stylized diagram which shows utility demand rising. And again, this is stylized. Nobody's demand rises that fast. [inaudible 00:16:25] just showing you is this is an example. So this is the baseline demand if nothing happens. This is the dotted line of demand reductions after conservation, including the passive savings coming from these federal plumbing standards. And what it does is it lowers the baseline demands, such that your existing capacity now stretches, maybe 10 years more than you expected. And when you go to increase the size of a reservoir or a treatment plant, [inaudible 00:16:57] water treatment plant, you can now downsize it because you're not going to need the same capacity that you might've needed if you haven't done conservation.

Mary Ann:

And all of this area in between the baseline demand and the demand that the conservation, is economic value to the water utility. And the way you calculate if water conservation makes sense to you, is to calculate if this area under the curve and what you've avoided in terms of those costs. We looked at a couple of communities around the country that had been suffering from some very controversial rate cases. And Westminster, Colorado was one of them, where typically the citizens were complaining about being asked to conserve, they said, "Why should we conserve if rates are always just going to go up anyway?" So the staff at Westminster and our staff at the Alliance, we looked at what their marginal costs were for future infrastructure if they hadn't done conservation.

Mary Ann:

They've been doing conservation programs largely since 1980. So if they had not done those, what would their demand have been? What would they have had to build to meet that demand? So that was analyzed, and then compared with what the situation is now, in terms of what the rates are they're being charged now. So the analysis concluded that 80% reductions in connection fees occurred, and 91% reductions were achieved in the rates, because they would have been much higher had they not done conservation programs. But again, Westminster is a fast-growing city in Colorado, so that's an example where conservation clearly pencils out. What will your story be? Regional water is a different utility. Every utility is going to be different. There are different drivers that drive your costs and drive your revenue.

Mary Ann:

So what we wanted to do in the rates workshop that we held in Connecticut in March, was to help utilities consider what were the key questions to determine the case for water efficiency in the utility. We know that there's great political interest, environmental interest in having utilities do more in conservation and leaving more for stream flow. So there has to be a calculation as to what that is going to cost the rate payer, how well that pencils out. So of course you already do this. This is something Regional is very good at, figuring out where your costs are coming from, where your future costs are going to be rising. If you buy water wholesale or you actually deliver water wholesale. But some people buy water wholesale, as that increases, that's a concern.

Mary Ann:

If you've got capital improvements that have to be undertaken, that all has to be factored in. So figuring out the return on investment in efficiency is an important part of that equation, as you're considering how you want to set your rates and how to quantify it is always a big issue. So the Alliance for Water Efficiency, we've built for our members something called a tracking tool, which provides a very forward-looking analysis of what a conservation program could yield. Now, here's a screenshot from the tracking tool. And like the chart that I showed you earlier of the stylized demand, this is a water utility system with demand growing, this is the baseline demand here.

Mary Ann:

This red line is that reduction in demand just from the federal law. So you can see there's a real reduction just from that. And if you're not paying attention to that and factoring that into your rate projections, you will always be over assuming water sales. And that's probably what Fort Worth was doing. The blue line is if you're adding additional conservation programs, how your demand is further reduced and how that extends over time. And there's lots of other charts in the tracking tool that shows the benefit cost ratio of various conservation programs, again, how it changes your per capita demand. There's lots of great information that it provides. But one of the things it does that I've always really liked is, it talks about the utility revenue requirement, and what happens when you do conservation.

Mary Ann:

So there are two ways that this shows this. If you do water conservation on what we call pay-as-you-go basis, where you pay out, out of operating revenue any cost of the conservation program, you then have to adjust your rate to take care of that increased cost, and also your reduced water sales. So your revenue requirement jumps up. So the pay-as-you-go are all these red bars. The green bars are if you finance it. And I think I mentioned earlier, that I had done a water conservation program at Regional Water, along with a lot of other water utilities in Connecticut. We were required, during a period of time, everybody had to do it if you serve 10,000 or more people. And we did finance that. So when you finance it, it flips it. You don't have that rate shock right at the beginning.

Mary Ann:

It doesn't really start to inch up until you start outliving value of the water efficiency program, but it's a much more cost-effective way to do it. It doesn't provide as much of a rate shock to your revenue requirement. So this big jump is what has really been a factor in the rate shock that's occurred, and why consumers are complaining about, "Why should I conserve if you're just going to raise my rates anyway?" So that led us to a program that we developed called Financing Sustainable Water. We were

lucky and got some grant money to put it together, so that we could make it free of charge for every utility in the US and Canada. And the key concept in the program, was that we wanted to make sure everybody understood that revenue stability... Woops.

Mary Ann:

That revenue instability is a given. In the world we live in now, it's going to be a feature of all rate structures and all utility systems, and embracing that instability and figuring out how to deal with it is going to be the way to go forward. So if you identify what water efficiency objectives you have at the start, and you do it in a way that's customized for your system, as I said, one size does not fit all.

Mary Ann:

You'll make better rate decisions, because you're embracing that uncertainty and figuring out, what's the likelihood that you're going to collect the revenue requirement that you're scripting in this particular rate scenario, or that particular rate scenario. So a good rate analysis requires good data, requires a lot of analysis and hard work, and requires involvement by the customers. And customer understanding is key to this. Customers are always saying, "Rain's free from the sky. Why am I paying so much for this water?" And empowering the customers to help you in that decision making, that's going to be an important part of making sure you get to yes at the end of the line. But we also believe that sound financial policies can help you, the size of your reserve fund, whatever mechanisms you're using to make sure you can weather those [inaudible 00:23:56] years.

Mary Ann:

So we've developed a bunch of tools, they're all on the website, Financing Sustainable Water, you see a screenshot of it in the upper right-hand corner. But we've written a handbook, it's called Building Better Rates in an Uncertain World. And it's written in layman's language, it's not written as a rate economist, it's written for all of us to understand it clearly. And we designed it to be also distributable to board members, as well as utility staff. It's got case studies in it, it's got a lot of implementation advice. And it's got all those steps that you go through when you're designing your rate structure. But we also designed and make available free of charge, a sales forecasting and rate model.

Mary Ann:

And it's got lots of user-friendly tools, and we'll talk about those in a little bit more detail. But all of it is on a website, just financingsustainablewater.org, and you can download everything there for free. So again, what we want to emphasize in this program, is that water rates need to be very carefully evaluated looking forward. And we've always traditionally looked at it as in the past, our past cost recovery, and what is our per capita water use? And what do we extrapolate with population growth, that per capita water use should be? And that's not turning out to be a really good formula, because per capita water use is going down, and population isn't necessarily increasing quite as fast as some of the Regional planning agency projections. So you have to design a rate structure that it will be flexible enough, that when your system costs can change quickly, and perhaps unexpectedly if there's a drought or a sudden emergency, you might be stuck or you might not.

Mary Ann:

With a historical rate setting approach, you might not be able to cope with it. And your customers might not be getting the right information that they need to help them as well. So that's the heart of what's in

the handbook, and here's a slide that just shows the table of contents, what's in there. And again, you can download that free of charge as a PDF, but we also, for a small, just the printing cost, we make hard copies available too for people who would struggled trying to read a hundred page PDF on their computers. I still prefer just reading something in hard copy form, just because we're at our computers all day long anyway. It's better if we can stop looking at the blue screen for a while.

Mary Ann:

So this is the kind of thing that the handbook covers, gives you all the steps and then how you put together a rate structure. Then there's some questions that everybody asks, that we knew the handbook itself would not be enough for, that we needed to figure out how to answer those questions. For example, how does weather affect consumer demand? How does the consumer consumption vary based on drought shortages or some other economic shock? And if you change your rates, what happens? How can you expect your demand changes to occur in terms of volume and revenue? If Connecticut ends up declaring a drought, how would you set up some drought pricing? How do you plan where your water rates might change, with perhaps a surcharge? How do you figure that in?

Mary Ann:

And then most importantly, what we wanted to make sure people looked at was, what's the likelihood that you actually will collect the revenue requirement you're setting out to do? Because if you don't collect it, you'll be in a shortfall. What's the probability you'll actually collect that revenue? And then what's the likelihood over a five-year timeframe, that you'll still be fiscally sustainable? And do you have the confidence in your restructure to do that? And then lastly, of course, affordability. Can your customers, especially the low income ones, afford your water service, and how does the rate structure compare with that? So what we did is we built a model that answers all of those questions, and it's called the sales forecasting and rate model. Rochelle has it, she was very kind and volunteered Regional to be a case study for the workshop that we held in March.

Mary Ann:

So you've done some model runs with our rate model. Well, we don't mean it to supplant what you do with a rate consultant, we mean it to be an added tool. And mostly because it helps in modeling that water demand variability, and hence the revenue variability that is attached to it. It gives you an analysis of how your customer bill will change, it gives you an analysis of how affordable your rates might look. So this is a model that's available free of charge, that any utility can download from the website. So here's a screenshot. Actually, here it shows the affordability or water service, because you can see that in the upper right-hand corner, where it says affordability index. And it's showing the current rate structure that's modeled here is doing well, it's affordable. It's not in the yellow or orange or red zone. And the proposed is doing well as well.

Mary Ann:

You could design a rate structure that would impact those low income customers, and this would give you a flag that that's happening. But it shows you lots of feedback, and is an opportunity to take a look at what your variability is and your ability to collect your rates. It has a section on drought pricing, to make sure you're revenue neutral in your drought pricing. As your water sales decline, how much do you have to charge as a surcharge to make sure your level? So the model will help you do that. So those are all things that we think are important. And an especially cool feature of the model, is it does Monte

Carlo simulations, and it does as many model runs as you want using your precipitation data, to show what's your variability in your weather patterns, and how does that affect your ability to collect the revenue that you're projecting.

Mary Ann:

But really, whatever you do, you're going to have to communicate what that change is to the customer. And that's what I really wanted to talk with you about here today, was the whole political reality of raising rates. It's just an ugly little mess most of the time. It's a painful, customers can be angry, they can come to hearings and really not be very cooperative in listening to why those rates are changing as they are. So here's a couple of news clips. I especially like the one from the Louisville Journal Courier, that says conservation driving of water rates. This was the big heading on the Sunday edition of the paper, and environmental concerns challenge bottom line at Louisville Water Company. Well, I read the whole article. I was mortified, because I knew Louisville didn't have a conservation program.

Mary Ann:

And it wasn't until I got to column eight of the article that I saw that they had lost their major industry in the region, that was 20% of their revenue. So when you lose 20% of your revenue from one customer, of course you have to readjust your rates. And they said, "Really, conservation? Just because you've lost your biggest industrial customer?" But this is the message that plays in the media. The media loves to say, "Oh my gosh, this is a double digit rate increase." Well, the actual monthly increase is about $7 a month, the cost of a hotdog and a Coke. But, "It's a double digit rate increase." So the messaging issues are really important, because rate increases and adjustments are unpopular, utilities tend to want to do it as little as possible, so you wait too long sometimes to make adjustments.

Mary Ann:

The energy industry adjusts every single year. I don't know too many water utilities that adjust on an annual basis like that. So conservation is often blamed for the spikes that are happening, and you see it from the other chart, the water and sewer rates are rising. They were artificially low for a very long time. We had lots of federal and state subsidies in the building of our infrastructure in the fifties and sixties, and that's all gone now. Maybe it's coming back with President Biden's infrastructure bill, we'll see. But now rate pairs have to shoulder the burden for all that system maintenance that they didn't have to really think about paying before.

Mary Ann:

So if you're blaming conservation because it's a simpler thing to say, well, it's not that we got fat in our budget at Regional Water, it's that you're conserving too much. That's probably not the best political message. So what we did to help our utility partners, was we created two videos, which I encourage you to take a look at. They're three minute videos, they're animated videos. And the first one is on communicating the value of water. And it talks about where water comes from, obviously comes from rainfall into reservoirs, and also from groundwater pumping. But then the water is put into distribution system, it's treated, it's pumped, it's delivered to houses, it's collected, it's treated again, and it's discharged. In all of that, there's a cost.

Mary Ann:

So that cost is explained in this video, and there's a little water meter in the right-hand corner, that shows as it's tracking the water going through the system, it shows how the meter is increasing until finally it stops at the customer's average water bill. So it's a national average. We can customize the video for any utility that wants to put its own average water bill there, and its own logo on the utility employee shirts. It's a very small customization charge, but you can use the video exactly as it is right now. It's gotten quite a bit of play. And it's one way to explain to customers that, it's not that they're paying for the water, it's that they're paying for the service, and they're paying for the delivery of that water. I was once asked at a hearing, and this was when I was on the water board, "Why isn't it free? I mean, it's raining. It's coming free, why do I have to pay for it?"

Mary Ann:

And I said, "If you take your bucket to the reservoir, sure. You can fill up your bucket and take it home, we won't charge you for it. But if you want tons of water delivered, treated to safe drinking water standards, to your house, and then carted away and treated so that it's suitable under state law for discharge, that's the cost that you have to pay for." And it's actually a very reasonable cost compared to what consumers are paying for bottled water these days. So that's one video that we've put together. We've also put another three minute video, the subject of water rates rising, and why is that? Again, it's written in customer-friendly language, and it's meant to talk about how investments in the system have to be paid for, but long run investments are going to keep your rates lower long-term.

Mary Ann:

So you're investing in your future, it's a sustainable investment in your future. So those videos, you can put them on your website free of charge. I encourage you to take a look. This is that first one, and then this is the second one. So they're on the Financing Sustainable Water web page. You can just download them and use them freely. I'm a big believer in public engagement. At Regional Water, I was the deputy director of public affairs. So I was a big believer in involving the public in it. If you can collaborate and get your citizenry to understand what you're doing or even participate in decisions, citizens advisory, task forces, for example. Especially if you can involve leaders from the community on such an effort, you get a little bit more buy-in for the ultimate decision. Which, again, can be a very painful one, but the more you involve your public and the message to your public about what this is about, it reduces that conflict and that pain.

Mary Ann:

If the public is perceived as a partner in the system, rather than, "It's just utility sticking it to us again." There's a real difference then in how they would accept and pay for the changes that you're making in your rate structures. So we have on the Financing Sustainable Water webpage, a whole water rates messaging plan, because we'd like to help change the conversation to make it more positive. And helping water utilities get to yes, we want them to get to yes in their design of their rate structure, so that... We want the systems to be viable and sustainable, and customers need to understand what goes into all of that. So we've developed some materials to help with that. So that's all on the website.

Mary Ann:

As I mentioned, just in concluding, we did this workshop, March 16th and 17th. All of it was recorded, there were lots of handout materials, including the handbook and all these other items we've been talking about. So there's a special Connecticut rates workshop page, you have the URL for it there. But if

you just go to the website, you can see it sits right along the navigation bar at the top. You just click on implementation and there's the Connecticut rates workshop. So I encourage you to go and listen to the workshop presentations, Rochelle was on a panel on the second day, and I thought it was a great panel, great discussion. And I encourage you to go take a look, as I mentioned, all of that is free. You'll see some of the fact sheets we've got on there posted as well. And then you have my email address as well if you have any questions, but I'm happy to answer any questions now that you might have.

Stephen:

Hey, Mary Ann, thank you so much. Questions from the committee?

Greg:

Mary Ann, this is Greg Malloy. When did you leave the Water Authority?

Mary Ann:

1992. I left on Columbus day, and I was shocked when I went to California and discovered that's not a holiday now.

Greg:

Is that where you're located in California?

Mary Ann:

Yeah, yeah. Yeah, my grandchildren are here now, so yeah.

Greg:

All right. Yeah, we don't celebrate Columbus day anymore though, Mary Ann.

Mary Ann:

Then we did.

Greg:

Back then you did. Yeah, I know.

Mary Ann:

I lived in Worcester Square, so yeah, that was big.

Greg:

Yeah. You've got that right. Now, one question. On the average, how often do other water companies raise rates?

Mary Ann:

Well, it depends. It depends on what their situation is with their politics. I told Rochelle this story, we did a rates workshop in Michigan, where the staff had come to the rates workshop and they said, "Oh yeah. We did a cost of service study. And we hadn't raised our rates in eight years. So the cost of service study

said that we should raise our rates 13%. And we took it to the board and the board said, 'Oh, no, we can't raise rates 13%. We can raise the rates, maybe 7% or 8%. Bring us back a cost of service study that'll justify a 7% or 8%.'" So this is the problem that everybody's having. If you wait too long, you end up with such a high buildup of the costs that are increasing, that you end up being in a politically difficult situation.

Mary Ann:

So a lot of the utilities across the country are now dealing with the fact that they went maybe four, five, six years without a rate increase. And now they're in double digits, which of course the press talks about as a double digit rate increase, even if the absolute dollar amount on a monthly basis is not very much. So that's part of our messaging problem. And we're starting now to see more routine looks at this, because of the spikes and costs, that's really what's driven this.

Stephen:

Mary Ann, this is [crosstalk 00:40:27]. Oh, go ahead. [crosstalk 00:40:29].

Greg:

Yeah, go ahead.

Stephen:

Since you left the Regional Water Authority, a number of things have happened, and considerable debt has been incurred on the part of the organization, so that's a part of the issue.

Mary Ann:

That's a fixed cost. Yeah. It's a fixed cost.

Stephen:

That we're bearing in addition to any issues that currently happen. I have a question, having done this in the workshop, you may have a handle on it. For the Regional Water Authority, supply and also capacity are not issues. So if we were to not increase rates and try to keep our demand up to create the revenue, do you have a feeling about how that would go or how much we could do in that regard?

Mary Ann:

Well, I might want some help from Larry in answering this question, because bigger than Regional are the state politics involved, and what the state might want from you in terms of streamflow contributions. And that might have to come from a water conservation program. So that's part of what you'd need to analyze right at the outset, and look at what your capacity issues are if you have any water, sewer capacity increase issues. If you don't, and if the conservation doesn't pencil out, I mean, you don't have to spend a lot of money on conservation, but the consumer messaging should still continue. And support for the customers and what they want to do to reduce their water, you should continue. And when I was at Regional, we had to do water efficiency, not because it was required system-wise, but because the state of Connecticut had passed a law. And everybody had to have their program approved by the Department of Health Services, and you had to do a program.

Mary Ann:

And we decided to do it all together. We launched, out of Regionals office, we did a statewide program. Then we got 63 Connecticut utilities all signing onto the same program. So we were able to do it very cost-effectively, because we did economies of scale that way. And it was required by state law that we do it, because of the drought that was occurring at that moment in time. So you might still get some drought requirements from the governor as part of the G3 plan for climate change reductions. So you'll have to respond to whatever those state drivers are, they're going to be separate and independent of what your system drivers are. But I'd like to actually defer to Larry on this, because he knows much more exactly how Regional would fit into that picture.

Stephen:

Yeah. I mean, we can have that discussion with Larry, I guess my question simply is, is there a relative formula about raising rates and its impact on demand?

Mary Ann:

Well, it depends on the elasticity of your demand, and the rate model does calculate that. So as you are reducing your demand, it'll calculate for you what your probability is that you'll raise the revenue that you think you're going to do. That's the whole purpose of this program, is to make sure you're matching it correctly, that before you design a conservation program, you'll look at what the impact is going to be on your rates and how you'd have to make those adjustments. Because the people who have gotten in trouble, are ones who didn't make that adjustment, and just assume that they could do the historical per capita and multiply it by the presumed population increase, and be done with it. And that didn't work. I mean, that's what Fort Worth did, and that didn't work. So if you're carrying a lot of debt, you don't want your bond rating to change, you want to make sure you pay close attention to those drivers.

Stephen:

Yeah. But I think what we've done is, we're chasing the downward trend, and then anticipating it's going to occur, and adjusting the rates accordingly. But there's obviously a lot of tools here, and a lot of analysis that could be done to take another look at that. And I had another question about... Basically the message to the consumer is, "We'd like you to conserve, but rates are going to go up. And the rates would go up even more if you didn't conserve."

Mary Ann:

Right. And that's what one of the videos says. It says that even if your rates are going up, if you conserve your bill will always be lower than your neighbors who don't.

Stephen:

Right. But do you have anything that has worked in the past, in terms of making that message believable or a success or more effective?

Mary Ann:

Well, we attempted to do the videos to deal with that very issue, because we are now evolving into a society where everything is a video. So we thought we should put together a video for the consumer, to get that point across. So that's a central point. There isn't a magic formula. I think you're looking for a

ratio or something, but it's going to be different for every system depending upon what your costs are, and what your expected demands are. And that's part of what your rate analysts are putting together for you. But I think that the concept of the consumer understanding that, yes, the rate might be going up, but the bill might not be. It's all about what the customer bill is going to look like. And that's the part that we think you should focus on, is the message should be on the customer's bill and not on the rate. Because the rate is an incomplete piece of information for the consumer.

Stephen:

Yeah. I think that's the way to look at affordability too. It's not whether the Regional Water Authority thinks it's an affordable rate, but whether consumers either are willing to pay, or can pay for the rate that exists. So in New Haven, it's 25% of our residents are at the poverty level defined nationally. So it's a lot of our customers.

Mary Ann:

Yeah. Well, the right model, that little index there, that the mean household income index. And yes, we're using the federal characteristics of affordability for that analysis.

Stephen:

Anyone else have questions?

Mark:

I do. You show that one of the think factors to help you reduce rates or keep rates steady, would be more customers. In our situation, we have added very, very few customers because of the area that we're in. That's one thing that [inaudible 00:47:34], because of the cost to extending service to other areas. Contractors are just like, they can't afford our costs to do that. And if we could gain more customers, if we could lower our construction costs and do that, would be very advantageous, I believe. If you get an outside contractor to do the same job, their cost is probably half, but if you use the Regional Water Authority to add new customers, it's a lot more. The other thing is, I'm very happy to say that the things you say, we've been doing. I think [inaudible 00:48:12] been doing in the last five years through Larry.

Mark:

That now instead of doing our budget based on a guess of what our estimate is going to be, it's done on previous amount of water usage and how much is going out and based on that. We've been doing that for a number of years. The other thing, when you see the state... No? Did I say something wrong?

Rochelle:

[inaudible 00:48:43].

Mark:

Okay. And the other thing is, the members who have been around a lot like Greg and Steve, remember when we were in Hampton and we had to revamp the treatment plant there, and put that on. I think it was $40 million or whatever it was, what crazy figure it was.

Stephen:

$60 million.

Mary Ann:

Lake Whitney?

Mark:

Yeah. And the state said we had do it, because we had to make sure that we could increase our capacity 16% or 20% more, than we actually had figured that it would be forever if there was no water treatment. So that really put a burden on us. And I'm sure states aren't doing that now. But I remember our consumer affairs council vehemently opposing it. And we still voted for it. So that's probably one of the mistakes we've probably made, to get us in the jam we are now. But saying that we have better proposed budgets now and rates, based on actual usage from the year before that we see. And it's wonderful that we've been doing that. And that's all I wanted to say.

Mary Ann:

And that's one of the reasons why we-

Mark:

[crosstalk 00:49:58] the job on that.

Mary Ann:

Yeah. That's one of the reasons why we featured Regional in the workshop, because you all have done a very good job with it.

Jamie:

This is Jamie Young from Killingworth. Thank you so much for this presentation, it was so informative. And Rochelle, thank you for finding her and bringing her to us, and Steve for inviting Land Use to join your committee tonight for this. I was intrigued by the drought charge. I'm assuming that's on the western states bills. And I was thinking, I'm not able to look at my paperwork, so I wasn't able to go back and look at the prior models to see how drought was handled, and whether or not it's even listed on the bill. But I find that interesting. I know our reservoirs are pretty hardy, but as you said, the state has been in drought situations. And educating the public that that's a possibility on a bill is a good communication tool, just to see it out there, even if there's a zero charge, zero charge, but if there ever was a need.

Jamie:

So I'm wondering... and Rochelle, I apologize, I don't have it at my fingertips. But I wonder how we handle it, and how other Eastern states or other states might be handling that.

Rochelle:

And right now we don't have a special drought charge, however we do have in our miscellaneous charges, charges if we are in a drought, there's penalties, and there are stages of penalties if you're

caught using more than you should be using, there's fees that we can assess. If that answers your question, Jamie.

Jamie:

It does in one part. And the second part really is more of an opportunity for communication. As she was talking I was thinking, that might be a useful thing for people, just the generic user, to start seeing on their bill as potential charge in the future, and make them thoughtful about droughts. Because as you said, we may have water but the state itself for fish reasons or for whatever the reasons, they may institute drought related things that are going to cost the Regional Water Authority money. And it might be a good proactive way to start to think about it. And I'm just thinking off the top of my head. So I haven't thought of all the limitations, regulations or steps we would need to put into place, but that might give you some room, Rochelle, going forward.

Jamie:

If we ever need to throw another fee in there, if we start getting people used to it and step in it by incremental steps, get people used to seeing it. Because our future, we'll see less water. Anyway, that was just a thought. But I really thank you, this has given me a lot of meat to chew on tonight. Thank you.

Stephen:

Thanks Jamie. Jeff, I know you've had this presentation before. Any comments, any questions?

Jeff:

It's just as good the second time as it was the first time. Seriously, I mean, it's such an important topic for all of us. The OCA, the RPB, the Five Member Authority Management. I think certainly over the last six or seven years, there's been a lot more dialogue and a lot more interest in what other water utilities are doing, as a way to vet and perform a sanity check on our rates structure. Certainly the cost of service study is a critical tool for the authority. And the comment that Mary Ann Dickinson made about focusing on the customer's bill, not the rate. I think that whether it's through the authority's messaging efforts or not, the OCA really never gets any complaints about rates. From time to time, we have issues about bill disputes, but those aren't rate driven as much as they are concerns about the accuracy of a meter, or the failure to detect a leak by the customer or the authority.

Jeff:

So I think certainly in the 13 years that I've been OCA, we haven't received complaints about the rates, but that doesn't mean that every rate application hasn't been scrutinized. And that doesn't mean that the authority hasn't been diligent in mitigating rate increases, and being sensitive to the consumer. So I think the authority's done a very good job, especially the last 10 years, 11 years, in trying to navigate this challenge. Because when we look at the early years of the authority, we saw several years in between rate increases a couple of times. And then when the rate increases did occur, they were relatively nominal, when you took into consideration the authority's operating and capital costs, when you took into consideration the growth of debt.

Jeff:

And we saw the authority got into a position over a 30 plus year timeframe, of becoming overdependent upon the issuance of debt to fund its capital program. So the authority over the last decade, has refocused on the internally generated cash to decrease dependence upon issuance of debt, and has been successful in doing that while also minimizing rate increases. So this is all great stuff for us to hear and talk about and think about, because to the extent that we can incorporate any of these thoughts as additional considerations and the authority's practices, that's something that the OCA applauds and appreciates.

Stephen:

Thanks, Jeff. I can see some things in here that would be probably topics for future consumer affairs meetings as discussion. And certainly there's substance here for strategic planning considerations as well. Yeah, we tend to see things one project at a time, and you really need to look longer than that, and how that's going to impact everything.

Mario:

Hi, Steve. Mario. If I could ask a couple of questions?

Stephen:

Sure. Go ahead.

Mario:

Thank you very much for the presentation, Mary Ann, it was quite informative. Couple of things. One, following up on Jamie's question on the drought charge. Do you find that like for the western states, the drought charge is in order to discourage overuse of water. So it's something that they get charged every month or every quarter, or is it something that if they hit a drought, that's when the drought charge would take effect?

Mary Ann:

So typically when the drought charge's instituted, it's because drought stage has been declared, there have been requests for restrictions of water use. So you're asking the customers to reduce their water use. So the drought surcharge covers two things, it covers not only the reduction in water sales that are anticipated as a result of those customers saving, but also the cost of any program you might be implementing to help that customer reach a lower level. So it's a combination of both. For example, the City of Los Angeles has had a drought surcharge, permanent one in place. They call it a conservation surcharge, not a drought surcharge, but it's a yearly... I mean, it's on every single bill. And it's a nominal amount, it's $1 or $2. And what that does, is it funds their conservation program.

Mary Ann:

So it can accomplish both of those things. Usually the rates, if you set your rates, if it's an inclining block rate of utilities, many broader providers will set the inclining rate in the top tier to be a little bit more punitive, so that they would cut back on their water use and avoid that top tier. But as I understand it, you have a uniform rate system. So as you raise your uniform rate, it gets more and more expensive to use too much water. I think that the big problem that you have in New England, as I'm noticing this, is that back when I was in Connecticut, nobody really had these automatic sprinkler systems. I mean,

everybody just dragged their hose around and did a sprinkler if you needed to. Most of the time you didn't need to. But now for convenience purposes, houses are now being built all with these automatic irrigation systems or retrofitted with these automatic irrigation systems.

Mary Ann:

And then are often left at a factory default setting, which is probably set for Phoenix. So it's going on every morning at 3:00 in the morning, and it's irrigating for 20 minutes, 40 minutes, whether it needs to or not. And that's the kind of peak demand that it's probably not good. If you have to build capacity to meet a peak demand, and many water utilities in the West are struggling with that. Bringing down that peak is really much more beneficial to the system. So to the extent that you're starting to see a lot of these automatic irrigation systems, that might be a little worrisome, it might increase your peak demand. So that's something that a drought surcharge can help you with as well.

Mario:

Okay. So most of the curves that you were showing were the traditional increasing demand and decreasing supply. Whereas have you got any curves that show a decrease in demand and a increase in supply or-

Mary Ann:

Well, that's what they all are. There's an assumption there that you get to a certain point in all systems, where your demand is going to outstrip the supply that you have. If you're not growing that fast, then it never reaches that point. We have systems that are actually, they're not growing, they're actually shrinking. So those, especially where you have large customers that are moving out of the service areas, so they're shrinking in terms of their billable demand. That's a problem. So all of those kinds of charts that you're asking for, those would be done on an individual utility basis. What I was showing you there, was just an example of how water conservation pencils out to be cost-effective for a utility.

Mary Ann:

If you're not growing at all, and your demand is declining and you have no capacity issues, then water conservation will be an expense, will be a painful investment. And you'll just need to evaluate what you need to do to meet any kind of state requirements that might be there, and then just respond to customers who might be complaining about high water bills and helping them reduce that high water bill. And that's a form of water conservation as well.

Mario:

Sure. And then a question, maybe for Larry, Rochelle. So we do a periodic water supply plan that the state requires, and that planning process typically shows an increase in demand historically. And then we do the 10 year financial model. Have we looked at the water supply plan based upon our decreasing demand, and looked at it from that perspective? Because of the amount of supply that we have. I mean, we are water rich, fortunately.

Larry:

The last time, and I haven't looked at the water supply plan in a few years, but the last time that Ted and the engineering department were updating the water supply plan, we had a conversation about

whether we would do it the way it was traditionally, where you would show the typical increase in demand out for 10 years, or whether we would do it to reflect actual demand. And I had agreed with Ted that we ought to use what we know as the actual reality of it, but I haven't seen it in the past few years to see what the numbers are.

Mario:

Okay. Thank you. It's more difficult to sell to DPH, because they're always looking for that reference of this agency projects population growth, that's usually way outpacing anything that we've seen in the Northeast.

Mary Ann:

And that's a problem. Sometimes the regional planning agency projections for population growth aren't right either. So it's something to look closely at, for sure.

Mario:

Thank you all very much.

Stephen:

Yup. Any other questions for Mary Ann? If not, thank you, Mary Ann. We very much appreciate your time.

Mary Ann:

Yeah. Thank you. My only regret was that I couldn't come to Connecticut for that March workshop, I was so looking forward to it, get my Connecticut fix and come back. Yeah.

Stephen:

Well, you gave us something to think about.

Brian:

Brian Eitzer here, very nice presentation. I'm going to sign off now.

Mary Ann:

Thank you.

Stephen:

Thanks, Brian. [crosstalk 01:03:57].

Larry:

Good to see you again. I'm going to sign off.

Jamie:

I think I need to sign off too. This is Jamie. Thank you so much for letting me come.

Stephen:

Okay.

Greg:

I'm going to do so, Steve. So thank you for inviting us.

Stephen:

Sure. No problem.

Larry:

See you, Steve. Thank you.

Stephen:

We're going to continue on with our consumer affairs meeting, and item four is the consumer affairs report to the OCA.

Jeff:

Thank you, Steve. We don't have any pending complaints. We had the hearing obviously at the RPB last Thursday on the Ivy Street, Hamden proposed this position. And it's pretty quiet in the OCA's office. Like the [inaudible 01:04:44] repairman. Nobody needs us right now.

Stephen:

Yeah. That's good to hear for the time being. Appreciate that. Okay. Very good. I noticed in the bill, there were not a lot of things listed there.

Jeff:

No. Not a lot going on.

Stephen:

Which brings us to our next item, which is the approval of that invoice for May for 1165. Do I have a motion?

Naomi:

I say move.

Stephen:

Okay, Naomi. Thank you. Second? Is there a second on that?

Mario:

I'll second, Steve, if I can.

Stephen:

Sure, Mario. Are there any questions for Jeff on the invoice? [inaudible 01:05:27]. All those in favor?

Group:

Aye.

Stephen:

The motion carries. Item six is notification of the chair election, and that happens next month, correct Mario?

Mario:

Correct.

Stephen:

After everyone's approved. Okay.

Mario:

Getting your requests for your committees please.

Stephen:

So yeah. I mean, if anyone's interested, we can certainly discuss it at the next meeting. As far as item seven, volunteers for August and September, I may be able to do that. I don't know my time schedule yet. Is there anyone that at this point wants to volunteer for one of those?

Mark:

I tried to do June, but it's supposed to start at 12:30 and it didn't start until 2:30, actual 2:45 for me. So I had an appointment at 3:45 to the doctors, so I only was there for a little while, but I tried.

Stephen:

Okay. Well, would you like to do August or September?

Mark:

Put me in for September.

Stephen:

Okay. We can talk about August next time. Appreciate that, Mark. Thank you. And our next meeting is July 19th at 5:30. And with that, I'll entertain a motion to adjourn.

Mario:

So moved.

Naomi:

Second.

Stephen:

Thank you. All those in favor. Aye.

Group:

Aye.