

ALBUQUERQUE BERNALILLO COUNTY  
WATER UTILITY AUTHORITY  
Wednesday, September 20, 2017, 5:04 p.m.

VINCENT E. GRIEGO CHAMBERS  
ALBUQUERQUE-BERNALILLO COUNTY GOVERNMENT CENTER  
ALBUQUERQUE, NEW MEXICO 87102

A P P E A R A N C E S

KLARISSA PENA, Chair

DEBBIE O'MALLEY, Vice Chair

PAT DAVIS, Member

MAGGIE HART STEBBINS, Member

WAYNE A. JOHNSON, Member

TRUDY E. JONES, Member

PABLO RAEL

ROBERT J. PERRY

BEFORE: KIM KAY SHOLLENBARGER, RPR, CCR #236  
Paul Baca Professional Court Reporters  
500 4th Street, Northwest, Suite 105  
Albuquerque, New Mexico 87102

1           CHAIRWOMAN PENA: Welcome, everyone. I call  
2 the September 20, 2017 meeting of the Albuquerque  
3 Bernalillo County Water Utility Authority to order.

4           Let the record reflect that all the members  
5 are present. Next we'll have a moment of silence and  
6 Pledge of Allegiance led by Commissioner O'Malley.

7           (Moment of Silence/Pledge of Allegiance)

8           CHAIRWOMAN PENA: Next is Item 3, approval of  
9 the minutes. I make a motion to approve the August  
10 23, 2017 minutes.

11          COMMISSIONER JOHNSON: Second.

12          CHAIRWOMAN PENA: There's a motion and a  
13 second. All those in favor say yes.

14          MEMBERS: Yes.

15          CHAIRWOMAN PENA: Oppose, no. Motion passes.  
16 The next item we have is proclamations and awards.  
17 Silver Peak Performance Award. And this will be done  
18 by Charles Leder.

19          MR. LEDER: Thank you, Madam Chair and  
20 Members of the Board. My name is Charlie Leder, I  
21 manage Plan Operations Division for the Water  
22 Authority and one of the units I oversee is the  
23 Southside Water Reclamation Plant.

24          Thanks to your vision and wise guidance  
25 concerning providing enough funding for the Water

1 Authority to renew assets of the Southside Plant. We  
2 have been able to really achieve great performance.  
3 In my five years on the job this is now the third year  
4 out of five that we have qualified for this award from  
5 the National Association of Clean Water Agencies. It  
6 means we have had five or fewer excursions from our  
7 National Pollutant Discharge Elimination System  
8 permit. And present this award to you.

9 Thank you for giving us the tools and the  
10 money and the resources to make this happen. We're  
11 not done here with the Silver Award. As many of you  
12 are aware, our executive director is now the secretary  
13 of that organization, and it's my hope he's probably  
14 on a leadership path to be president eventually. It's  
15 my hope that when he does become president we'll be  
16 here to share a Gold Award, which means no permit  
17 violations. In fact, maybe some point in the future  
18 we'll be asking, "what is a permit violation?"

19 At any rate, again, thank you for your help  
20 in achieving this award.

21 CHAIRWOMAN PENA: Congratulations. Any  
22 questions or comments? Congratulations. You guys do  
23 some fantastic work.

24 (Applause)

25 CHAIRWOMAN PENA: The next item we have is

1 public comment. Ms. Carreon, how many people do we  
2 have signed up to speak?

3 MS. CARREON: We have 19.

4 CHAIRWOMAN PENA: So to those 19 people,  
5 you'll have three minutes to speak with a  
6 two-and-a-half minute warning. Can you please call  
7 the first person.

8 MS. CARREON: First speaker is Don Schrader  
9 followed by Leah Nelson.

10 MR. SCHRADER: Why do the vast majority, over  
11 90 percent, of people in Western Europe not have  
12 fluoridated water? What do they know about the  
13 fluoridation that most people here do not? If you  
14 question religious dogma, do you ever question  
15 mainstream medical dogma? Do you know the many times  
16 in medical history the so-called experts were terribly  
17 wrong? How long did it take most doctors to condemn  
18 smoking? How long did it take for some dentists to  
19 stop using mercury in fillings? How many prescription  
20 drugs developed by highly-paid educated scientists  
21 were later recalled because of terrible, unintended  
22 consequences? Have you read in-depth the arguments  
23 and studies condemning fluoridation? Do you remember  
24 when nuclear power was praised and predicted to become  
25 too cheap to meter? Do you know that sodium fluoride

1     never, never is found in nature and sodium fluoride is  
2     not the same as calcium fluoride found in nature.  
3     Even if topical fluoride on teeth reduces cavities,  
4     are you absolutely sure fluoridated water coursing  
5     through our bodies 24 hours a day for a lifetime has  
6     no dangerous side effects to the rest of our bodies?  
7     Is that it?

8                 CHAIRWOMAN PENA:   Yes, thank you.

9                 MR. SCHRADER:   Okay.   There's no clock on the  
10     podium like there usually is.

11                MS. CARREON:   Leah Nelson followed by Tad  
12     Niemyjski.

13                MS. NELSON:   Good evening and thank you all  
14     for the opportunity to speak tonight.   My name is  
15     Dr. Leah Nelson, I'm a preventive medicine resident  
16     and I also hold a Masters Degree in Environmental  
17     Science and Engineering.   I'm here tonight to urge you  
18     all to approve fluoridation of the water system.   As a  
19     physician I know that both the American Medical  
20     Association and the American Pediatric Association, as  
21     well as their New Mexico affiliates, all support water  
22     fluoridation.   Water fluoridation reduces the rates of  
23     cavities and tooth decay, especially among low income  
24     and uninsured people, which New Mexico has a fair  
25     amount of and Albuquerque in particular has a lot of

1     uninsured and low income individuals. More  
2     importantly, the benefits of water fluoridation for  
3     children lasts up to 40 to 50 years, so when they get  
4     to be 50 they'll still have fewer cavities than if the  
5     water had not been fluoridated when they were young.  
6     Over 3,000 studies have been produced about the  
7     effects of water fluoridation and the vast majority  
8     have shown that there is significant benefit and  
9     minimal risk. I imagine that some of the speakers  
10    tonight will be talking about a recent news piece that  
11    was about a very small study from Mexico that showed  
12    that in their study, IQ may have been lower. I read  
13    that study this week, the actual study, not the news  
14    piece, and the study itself had about 65 pairs of  
15    mothers and their babies. Very, very small. And the  
16    fluoride that they were exposed to was not in the  
17    water supply, but it was natural fluoride, not the  
18    kind that we are adding to our water. A much larger  
19    Canadian study, also published this week with over  
20    2,000 children and much more rigorous methods, showed  
21    no such benefit, but of course did not make the news.  
22    I know I only have a few seconds. But I'm also a  
23    mother. I can take my child to the pediatrician, I  
24    can take my child to the dentist to get his teeth  
25    fluoridated every three months, but most families

1 can't. And for those reasons, both as a resident of  
2 Albuquerque and as a physician, I urge you all to  
3 please, please, please add fluoride back into our  
4 water system. Thank you.

5 (Applause)

6 MS. CARREON: Tad Niemyjski followed by Karen  
7 Armitage.

8 MR. NIEMYJSKI: Thank you. My name Tad  
9 Niemyjski. First, there is no clock. I know that  
10 also right here. This Water Utility Authority  
11 violating Open Meeting Act, which I'm talking about  
12 R-17 and public comments, that's two separate things.  
13 R-17 is final. This is public issue. People have  
14 right to speak. Two different issues. Thank you.  
15 Now, let's go to the issue, water. Anybody knows what  
16 kind of water we drinking? Well, I speaking to Water  
17 Sewer Authority. We drink sewer water, recycle sewer  
18 water from the South Valley Recycle Plant. Now,  
19 that's right. What is in the sewer, all kind  
20 chemicals. For example, asphalt. Anybody look at  
21 packaging when street being paved, all this oil. Yes,  
22 this oil goes to the river directly. And I can go on.  
23 How about hospital? All this human waste going  
24 through the sewer. How much chemical, how many  
25 chemical. Now, fluoridating. Dentists, I met couple

1 dentists, they know that it is causing cavity,  
2 fluoridation, but that for their business. They  
3 pushing this agenda. Well, how about sugar, that's  
4 causing cavity, isn't it, and fatness too, people get  
5 fat. Thank you. My time up. We need more time too.

6 MS. CARREON: Karen Armitage followed by  
7 Maggie Hertel.

8 SPEAKER: Hello. I want to thank you for the  
9 chance to give public comment on this topic and for  
10 your patience in listening to witnesses for many  
11 weeks. I'm a pediatrician and public health  
12 physician, and I wanted to talk about my own  
13 experience. Two things have happened. I have looked  
14 into the mouths of tiny children all over Northern New  
15 Mexico. I have been shocked to see very young  
16 children with multiple cavities. They were in  
17 communities where there wasn't any natural fluoride  
18 and no fluoride had been added to the water. Then I  
19 had the experience of being a mother. My children  
20 lived here in this town when people in your seats saw  
21 to it that the water was fluoridated. My children,  
22 who are now grown, never had a cavity. And I remember  
23 thinking, this is remarkable, that this minor change  
24 in public health could make such a difference. I know  
25 people feel strongly about this, but I would ask us to



1 remember that poison is tied to dosage and the tiniest  
2 amounts of fluoride that are added specifically and  
3 monitored all the time give our children a chance to  
4 have a life of no dental disease. I would like you to  
5 remember what it's like to see children hiding their  
6 mouths because there's something wrong with their  
7 teeth. People not smiling for wedding pictures, not  
8 opening their mouth very wide in job interviews.  
9 Dental disease is stigmatizing and it adds to the  
10 burden of cardiovascular disease in the forties and  
11 fifties. Thanks for being willing to take my  
12 testimony. I really appreciate your thoughtful and  
13 careful attention to this topic.

14 (Applause)

15 MS. CARREON: Maggie Hertel followed by  
16 Mariela Leyba.

17 MS. HERTEL: Hi, I'm Maggie Hertel, I'm a  
18 taxpayer and I have been a resident here for 40 years.  
19 I have a serious question for this Council and for the  
20 fine dental professionals here. When we were here two  
21 years ago when you made a preliminary vote on fluoride  
22 it was agreed that there were going to be outreach  
23 programs to the communities. What happened? Where  
24 are the outreach programs? Did anything happen with  
25 that? Are there any results? Here you are asking us

1 to vote on the silver bullet again, which is your  
2 fluoride solution, when nobody made the effort to  
3 reach out to communities, to educate them about dental  
4 hygiene, to educate them about diet and sugar. What  
5 happened to your commitment two years ago when we sat  
6 here before for this decision? That's what I want an  
7 answer to, and I think the community does. Because  
8 the last time a dictator tried to control their water  
9 situation and medicate their water supply, it was  
10 Hitler, and it was fluoride. So I have serious  
11 questions here for the Council and the dental  
12 professionals. Thank you.

13 (Applause)

14 MS. CARREON: Mariela Leyba followed by Bill  
15 Haggard.

16 SPEAKER: Madam Chair, Members of the Board.  
17 Thank you for the opportunity to give public comment  
18 this evening on this very important issue. You  
19 already heard of the many scientifically proven  
20 benefits of community water fluoridation in our past  
21 meetings and tonight. We have also heard some very  
22 interesting views from those opposed to this practice.  
23 Now, I understand the desire to allow the public to  
24 vote on this. However, I hope that we can avoid this  
25 for two reasons. Number one, the cost of campaigning

1 for either side is very unnecessary and wasteful.  
2 Number two, unfortunately scare tactics are effective  
3 to those who do not fully understand the benefit of  
4 fluoride. We all probably have at least known someone  
5 affected by cancer. It hits home more for some than  
6 others when mentioned as a risk. Even though there's  
7 no scientific evidence of such risks, people can  
8 become very swayed to believe nonsense just because  
9 they've heard it. And it's like preying on the  
10 vulnerable. As a mother, I want the very best for my  
11 child. I had the benefit of growing up with community  
12 water fluoridation and I want the same for my son. As  
13 a public health dental hygienist, a life-long resident  
14 of Albuquerque, I want what's best for our entire  
15 community. I urge the Board to keep this simple and  
16 utilize their knowledge and decision-making skills in  
17 this unique opportunity to do what's best for the  
18 health of our community and reinstate community water  
19 fluoridation. Thank you.

20 (Applause)

21 MS. CARREON: Bill Haggard followed by Rudy  
22 Blea.

23 MR. HAGGARD: Hi, I'm Bill Haggard. Water is  
24 my profession. I'm a colon hydrotherapist here in  
25 Albuquerque and I'm also a Vietnam Veteran who was

1 exposed to Agent Orange while I was over there and  
2 because of the chemicals in that particular spray that  
3 defoliated jungles, got on a lot of soldiers, it tore  
4 them down too, because we're just a stronger plant and  
5 it takes longer to take us down. So exposed to a lot  
6 of toxins. In my profession of colon therapy I help a  
7 lot of people regain their health by getting the  
8 toxins out of their body that they have either  
9 accidentally or somehow accumulated over their life  
10 span. And I fully want to not see fluoridation get  
11 into the water system to where we add another toxic  
12 burden to the body and no one has control over whether  
13 we get an overdose or too little. There's a lot of  
14 natural fluoride in our water as it stands, which is  
15 healthy. But anything done overage can cause other  
16 problems. And I understand that it calcifies the  
17 pineal gland, we don't need that. I would rather just  
18 see them apply it with the toothpaste. Even then it  
19 says, only use a pea size amount. I'm not very used  
20 to speaking in public, but thank you for giving me the  
21 opportunity.

22 (Applause)

23 MS. CARREON: Joe Martinez followed by  
24 Brandon Lund.

25 MR. BLEA: Good afternoon, ladies and

1 gentlemen, Madam Chairman and Members of the Board.  
2 My name is Rudy Blea and I'm with the Department of  
3 Health. On behalf of the Department of Health, the  
4 Association of State and Territorial Dental Directors  
5 and the Association of the American Public Health  
6 Dentistry leadership, employees and members, I'm here  
7 on their behalf to once again voice our support for  
8 community water fluoridation. We are also ready to  
9 stand by you as you vote in favor of water  
10 fluoridation; stand by you and do oral health  
11 education within the community and other activities  
12 besides fluoridating the water. As you are aware your  
13 water customers have been consuming fluoridated water  
14 for decades and continue to do so at below optimal  
15 levels. You have not heard or will not hear from any  
16 opponent that they have developed an illness that can  
17 be certified by a practicing physician or even a  
18 dentist, that that illness has been caused by  
19 consuming fluoridated water. We have seven years of  
20 research supporting fluoridation with no health  
21 effects. State and federal regulations ensure the  
22 safety of consuming fluoridated water. Your staff,  
23 the water engineers of this system, are your guarantee  
24 that the regulations established by both the state and  
25 the federal government are enforced. Therefore, you

1 can then guarantee to your customers that the water  
2 that they are drinking is safe. As educated men and  
3 women and leaders of the community it is your duty to  
4 promote good oral health, especially via community  
5 water fluoridation. Providing fluoridated water to  
6 your customers is a good public health policy and in  
7 the end you will be rewarded along with your  
8 constituents. Thank you for allowing me to speak to  
9 you.

10 (Applause)

11 MS. CARREON: Brandon Lund followed by Jesus  
12 Galvan.

13 SPEAKER: Thank you, Members of the Water  
14 Authority Board. Every day, every month that a  
15 decision is delayed prolongs the pain, the discomfort,  
16 the inability to eat properly for many children, many  
17 elderly, for many persons with disabilities, for many  
18 families. The decision to resume fluoridation of the  
19 water system is not complicated. Most communities  
20 across the country of similar size or larger size  
21 already do this as a common practice to prevent tooth  
22 decay for many of its users. For all of its users.  
23 To delay this decision means that dental disease for  
24 many could correlate, could progress to diseases of  
25 diabetes and heart disease, very serious consequences

1 for a failure to make a decision that you have an  
2 authority to make. Please make that decision tonight.  
3 To delay is to not take responsibility for something  
4 very positive that you can do. Do not delay. Make it  
5 happen for the benefit of so many people in this area.  
6 Thank you.

7 (Applause)

8 MS. CARREON: Jesus Galvan followed by Brian  
9 Baki.

10 SPEAKER: I want to thank you all for taking  
11 the time to hear us out on this. I think this is a  
12 very important issue, especially dealing with the  
13 fluoride. What I want to say here so far is, I heard  
14 a lot of argument between people saying for and  
15 against fluoride, but I think what's not happening  
16 here is communicating the distinguishment between  
17 naturally-occurring fluoride versus artificial  
18 fluoride. Naturally-occurring fluoride is calcium  
19 fluoride, it's natural, it's good for you, it's great,  
20 but the supplemental stuff is hydrofluosilicic acid,  
21 this is toxic. I was here last month and they talked  
22 about it and I wasn't impressed with that being added  
23 to the water for the problems of dumping the water  
24 upon everybody for the sake of just a few. I think  
25 it's time to know the difference between this so we

1 can make an accurate decision. Before you here I have  
2 two toothpastes. I have one, which is Crest, very  
3 popular toothpaste. You all may have it in your  
4 cabinet at home. And over here is a natural one. The  
5 problem with the Crest toothpaste here, it says,  
6 "contact the poison control center if you consume too  
7 much of it." Probably even more than a pea size. The  
8 natural toothpaste here, which is fluoride free, does  
9 not contain anything about contacting the poison  
10 control center. We're putting this stuff in the  
11 mouths of our children. How good can this possibly  
12 be, especially when we're dealing with a lot of toxins  
13 already in our environment. What is the last straw on  
14 the camel's back that's going to continue to cause  
15 more problems on the health of society, especially  
16 when our cancer rates are going up and our life  
17 expectancy is going down in this country. It's  
18 something I'm very, very concerned about. Another  
19 problem too with fluoride, they say a small amount of  
20 it is okay, but you don't have a problem with  
21 bioaccumulation. Fluoride and aluminum stick  
22 together, when it gets in our bones, it causes  
23 problems. Where I grew up I lived in a community  
24 where there was fluoride in the water and I saw a lot  
25 of dental fluorosis, so there's problems with that



1 too. Overall, I think that the real question here  
2 that we really need to get down to is oral hygiene and  
3 what people are eating, especially for children.  
4 Because my dental health has gotten better since 2011,  
5 it's because I did what my dentist told me to do. And  
6 I think if we need to focus on nutrition and care for  
7 children and what they're eating, that's going to  
8 yield far better results than simply putting fluoride  
9 in the water, especially such a tiny amount. Once  
10 again, check your cabinets at home. Thank you so  
11 much.

12 (Applause)

13 MS. CARREON: Brian Baki followed by Joe  
14 Valles.

15 SPEAKER: Listening to people talk tonight  
16 you would think it's all about the tooth, the whole  
17 tooth and nothing but the tooth. But it concerns me  
18 that these degreed dental professionals are so unaware  
19 of what they are talking about, while championing the  
20 young children, they claim fluoride is safe to ingest.  
21 Fluorine is a highly toxic element, symbolized by the  
22 letter F. Fluorosis rots your skeleton and is named  
23 after this element. The CDC claims this affects 41  
24 percent of American children, with numbers on the  
25 rise. There are no metabolic processes in the human

1 body that require fluoride. There is no such thing as  
2 fluoride deficiency. And to top it off, the FDA has  
3 never approved fluoride for consumption. Yet, we are  
4 force-fed this toxic industrial waste, with most of it  
5 coming from China. Odd, that China with their  
6 stringent environmental concerns no longer fluoridates  
7 their water. Amesbury, Massachusetts discontinued  
8 water fluoridation after concerns of its Chinese  
9 supply. The Public Works director said 40 percent  
10 would not dissolve, resulting in broken machinery and  
11 the inability to regulate dosing. Nothing ruins your  
12 day like when your poison is poisoned. People have  
13 died from nothing more than drinking their tap water.  
14 There have been numerous cases of mass poisons caused  
15 by water equipment failure, including Los Lunas in  
16 1978 when 34 school children were hospitalized with  
17 acute fluoride poisoning. A dialysis patient died in  
18 November '79 when a thousand gallons of excess  
19 fluoride spilled into the water. And the largest  
20 mishap occurred in Hooper Bay, Alaska, 296 people were  
21 poisoned, one of them fatally. Four months ago this  
22 was the front page headline of the Hindustan Times,  
23 fluoride contamination cripples more than 1,000  
24 children in Assam. We were warned. The 1944 Journal  
25 of the American Dental Association, drinking water

1 containing as little as 1.2 parts per million fluoride  
2 will cause developmental disturbances. While nail  
3 polish may strengthen your nails, honestly, how many  
4 here would drink it for the same purpose. As a human  
5 being, I humbly suggest that you do not F-up our water  
6 and consider getting the F out of it.

7 (Applause)

8 MS. CARREON: Joe Valles followed by Tom  
9 Schripsen.

10 SPEAKER: I thought there was a Jesus Galvan  
11 before me, but I'll proceed. Again, thank you, Madam  
12 Chair Pena, for the opportunity to address this issue.  
13 And I think you have to know that it's difficult to  
14 come up here time and time again and repeat the same  
15 stuff. I'll try to abridge it a little bit. I've  
16 come here before and I've stated that as President of  
17 the New Mexico Dental Association, that we have an  
18 unreserve support for supplemental fluoridation at the  
19 optimal safe, effective standard of .7 parts per  
20 million set by the Center for Disease Control. This  
21 standard is supported by numerous credible  
22 institutions that sort through multitudes of reports  
23 and analyses leading to the recommendations. And  
24 unless asked, I'm not going to go through all of  
25 those, there's a substantial amount, because I've read

1    them before into the record.  This standard is also  
2    supported by the West Side Coalition of Neighborhood  
3    Associations, the Inter-coalition Panel throughout the  
4    city, and other neighbor associations.  We have a  
5    crisis in this state, a rampant decay in all forms of  
6    oral disease, particularly in children.  We see it.  I  
7    invite you to our Mission of Mercy event this Friday  
8    and Saturday at the Convention Center where you can  
9    see firsthand the needs that exist in this state that  
10   we treat for free.  We've done it every year  
11   throughout the state.  The numerous other services  
12   that we provide to our patients at our loss is largely  
13   unknown by the public.  I'm proud to be a member of  
14   this noble profession.  I was asked by one city  
15   employee, "why are the dentists so riled up about  
16   fluoride?"  My response was that, it is our duty as  
17   doctors.  Our mission states, "to promote the oral and  
18   general health of the public in the State of New  
19   Mexico, to advance the art and science of dentistry,  
20   to represent the interests of the members and public  
21   which it serves and to foster an awareness of the  
22   obligation and responsibilities to society," that's  
23   why we do it.  The biggest bang for the buck is  
24   prevention.  The fluoridation plays a major part.  And  
25   I will say one more time, in 38 years I've not had one

1 patient come to me and complain of any illness due to  
2 fluoride. And I urge you strongly not to punt this  
3 down to some off year. Make the tough decision  
4 tonight. Thank you very much.

5 (Applause)

6 MS. CARREON: Tom Schripsen followed by  
7 Christine Nathan.

8 MR. SCHRIPSEN: Good evening. I'm Tom  
9 Schripsen. I'm a dentist here for the last 34 years  
10 and I'm also the Executive Director of the New Mexico  
11 Dental Association. I would like to frame this  
12 question, this choice, in terms that really should  
13 apply. This is a moral and ethical decision for you  
14 and you should make this decision on that basis. If  
15 you believe us, if you believe the science, if you  
16 believe the CDHC, the World Health Organization, the  
17 New Mexico Department of Health and all kinds of other  
18 organizations, you will agree that adding a pinch of  
19 fluoride and making our level of fluoride in our water  
20 optimal is the right thing to do, that's what the  
21 science says, that's the thing to do. But if you're  
22 listening to what you're hearing on the other side and  
23 you want to believe that, then the choice is not to do  
24 nothing, that's irrational. The only thing that you  
25 can do reasonably is to put the money in the budget so

1     that you start taking the fluoride out of the water.  
2     If this is truly a poison, if this truly causes all  
3     these diseases, if it's really that much a harm to  
4     people drinking it, then the choice is to put reverse  
5     osmosis filtration on every drop of water that comes  
6     out of the tap. If this is a contaminant you should  
7     be getting rid of it rather than doing that. That's  
8     going to cost millions of dollars. So, please, make  
9     your choice. Don't make your choice by sticking your  
10    finger in the wind and deciding which direction the  
11    wind is blowing. Make your choice based on the facts.  
12    Look at what's best for our people here in  
13    Albuquerque.

14                   (Applause)

15           MS. CARREON: Christine Nathan followed by  
16    David Manzanares.

17           MS. NATHAN: Hi, my name is Christine Nathan.  
18    I'm a dental hygienist for over 30 years. I'm also  
19    the Dental Hygiene Program Director at the University  
20    of New Mexico. I've written a few textbooks on dental  
21    public health and primary preventive dentistry that  
22    include chapters on fluoridation, and so I have  
23    individually read the research in those chapters,  
24    which are hundreds of scientific articles that show  
25    the benefits of water fluoridation. I also have a

1 mother who is a retired dental hygienist, so I knew  
2 from an early age from my mom what it was like before  
3 a lot of the public water was fluoridated, and the  
4 devastation that she had to see in children. So I  
5 realize the difference we were able to make, and  
6 really am disheartened by what's happened in  
7 Albuquerque when we had fluoride for such a long time,  
8 and luckily my children were able to benefit from  
9 that. I think the point that I like about fluoride  
10 is, we have problems with access to care in all types  
11 of health services, including dental health, whether  
12 it's getting children to dental offices or people  
13 accessing care. But the one thing that community  
14 water fluoridation does is it doesn't create any  
15 disparities because we all have the ability to have  
16 that water. So it's a really good preventive modality  
17 and I hope you'll take that into consideration. Thank  
18 you again.

19 (Applause)

20 MS. CARREON: David Manzanares followed by  
21 Elaine Hebard.

22 MR. MANZANARES: Good evening, Madam Chair,  
23 Members of the Board. I'm Dr. David Manzanares, I'm a  
24 general dentist here in Albuquerque. I'm also the  
25 Secretary/Treasurer of the New Mexico Dental

1 Association and a fellow of the Academy of General  
2 Dentistry. You have heard the arguments. I can say  
3 that fluoride does work. It helps prevent decay in  
4 kids. In older patients it's also effective. Because  
5 what we see is, with the increase in medications that  
6 patients are taking, it causes dystonia. We're  
7 seeing, as you age, your gums recede a little bit and  
8 that causes the root to be exposed. One of the new  
9 crisis that's breaking out amongst the older  
10 population is root caries. Fluoride helps to treat  
11 this. It helps to address issues of sensitivity. One  
12 of the things I hear all the time is people  
13 complaining about the cost of dental care. And I  
14 agree, dental care is expensive because,  
15 fundamentally, every single dental procedure that I do  
16 as a dentist is a surgical procedure. It involves  
17 cutting into teeth. It involves going in there and  
18 trying to repair surface that's been damaged. It is  
19 far better to make sure that we can prevent these  
20 issues from happening. This isn't a modality that is  
21 economic. It is safe. It is proven. It is simple.  
22 We've heard about the potential of having a  
23 referendum, and I appreciate this. But we already had  
24 one. Using that sort of mechanism is like abusive,  
25 especially when the people have already decided,



1 they've already spoken on the issue. We can't go back  
2 to the well and keep pulling on it like it's a slot  
3 machine and waiting until you get the result that you  
4 want. So I urge you tonight, decide to put fluoride  
5 back in the water system. If you do decide to go to a  
6 referendum, put it in because that's what the people  
7 initially decided and then make the onus on people who  
8 want to remove it. Make them remove it from the  
9 system. Thank you.

10 (Applause)

11 MS. CARREON: Elaine Hebard followed by J.P.  
12 Timmerson.

13 MS. HEBARD: Hi, my name is Elaine Hebard.  
14 And I'm glad to see all these other people show up to  
15 have public comment so that I'm not the only one, as  
16 usual. I'm a long-time observer of these meetings,  
17 however, and I do try to come up with some  
18 suggestions. Today I would like to refer you to Item  
19 9F, which is the 2017 fourth quarter performance  
20 indicator report. The cover memo notes that it is not  
21 directly tied to the objectives that the Board adopts  
22 every year, so how is one to know whether or not the  
23 objectives are ever met. For instance, there was an  
24 objective to continue development of a comprehensive  
25 energy master plan to reduce energy demands for FY15,

1 '16 and '17. It was removed in FY18. Was it ever  
2 done or dropped? Inquiring minds would like to know.  
3 And it would be beneficial, I think, to this Board.  
4 The cover memo also says the score card indicators are  
5 linked to the performance plan measures. Customer  
6 opinion survey responses and utility, effective  
7 utility management attributes. Those attributes have  
8 been updated -- they were supposed to be on the agenda  
9 for the TCAC this month, they weren't and next month  
10 they will be going to a -- the TCAC will be taking a  
11 field trip. So it would be good to have these  
12 discussions about these new updates with the TCAC.  
13 The performance plan has been posted, but it's never  
14 actually presented to the Board, so you don't actually  
15 have any idea. And what I want to show is that the  
16 Board -- sorry. There are low rates for the return on  
17 investments, so you are not spending very much, which  
18 sounds good, except that you're very low on your  
19 actual maintenance and replacements when looked at  
20 with other utilities. So I would suggest that these  
21 kinds of reports would be good to discuss with the  
22 TCAC and each other and not just have a cheery little  
23 summation. Thank you.

24 MS. CARREON: J.P. Timmerson followed by E.  
25 Ward.

1                   SPEAKER: Good evening. As a thyroid patient  
2 I'm against water fluoridation. Did you know that  
3 fluoride was once used to treat hyperthyroidism,  
4 that's overactive thyroid. Today in areas that are  
5 fluoridated there are two times as many hypothyroid,  
6 or underactive thyroid, patients as in non-fluoridated  
7 areas. So to fluoridate the water is to treat  
8 everyone for overactive thyroid. A quick look around  
9 will help you understand that most people are  
10 suffering from an underactive thyroid. Because the  
11 water in so many areas of the country is fluoridated,  
12 fluoride is already in many of our, and if not most,  
13 of our bottled drinks, soups and manufactured foods.  
14 I don't know if I became hypothyroid because fluoride  
15 was in the water that I drank and bathed in when  
16 growing up, because I swallowed fluoridated  
17 toothpaste, or because eight mercury amalgams were  
18 placed in my mouth before my twelfth birthday. I  
19 assure you, that this is a condition I would rather  
20 live without. Fluorine is the most electronegative  
21 element in the periodic table, this means that it will  
22 rip an electron from anything to fill its outer shell  
23 and become stable. Why would you ever put this in  
24 your body. Unlike other elements, fluoride --  
25 fluorine has no nutritional value to a human body.

1 Fluoride is responsible for several health issues,  
2 brittle bones, lowered IQ, infertility, endocrine  
3 disruption, gastrointestinal issues and lower thyroid  
4 function are a few examples. When water is  
5 fluoridated we are overdosed. Think about it. No  
6 company reverse osmosis filters the water that they  
7 put into their food products. One, if fluoride is  
8 safe, why bother. And two, it would raise the cost of  
9 their products and what company wants to do that,  
10 which means we are receiving an excess fluoride, an  
11 amount difficult to measure because it's also absorbed  
12 through skin during showers and baths. So fluoride is  
13 packaged in food and drink. There's already plenty in  
14 Albuquerque, so we don't need to fluoridate the water.  
15 The people who believed in 1950s hype that fluoride is  
16 beneficial are able to purchase in a variety of  
17 toothpaste and mouth rinses. Allow them to dose it as  
18 they see fit. Please keep Albuquerque's water  
19 fluoride free. Thank you.

20 MS. CARREON: Our last speaker, E. Ward.

21 SPEAKER: Madam Chair. My comments tonight  
22 are mostly focused or driven -- derived from -- taken  
23 directly from the Cochrane review and that's a review  
24 on water fluoridation and preventive tooth decay,  
25 which I will direct pointedly to my colleagues in the

1 medical profession. So out of this massive review  
2 when the data was -- predominantly from before 1975.  
3 The introduction of water fluoridation resulted in  
4 children having 35 percent fewer decayed, missing and  
5 filled baby teeth and 26 percent fewer decayed,  
6 missing and filled permanent teeth. We also found  
7 that fluoridation lead to 15 percent increase in  
8 children with no decay in the baby teeth and a 14  
9 percent increase in children with no decay in their  
10 permanent teeth. These results are based  
11 predominantly on old studies and may not be applicable  
12 today. There is insufficient information about the  
13 effects of stopping water fluoridation. There is  
14 insufficient information to determine whether  
15 fluoridation reduces differences in tooth decay levels  
16 between children from poor and more affluent  
17 backgrounds. Overall, the results of the study would  
18 suggest that where fluoride level in the water is 0.7  
19 parts per million, there's a chance of around 12  
20 percent of people having dental fluorosis that is of  
21 cosmetic significance. It's like 40 percent have it,  
22 but about 12 percent is noticeable to other people.  
23 There were concerns about the method used of reporting  
24 of results in some of the studies. It's difficult to  
25 be confident of the size of the effects on the numbers

1 of people at different levels because it doesn't  
2 include dietary habits and genetics. Insufficient  
3 evidence to determine whether it changes disparities  
4 across socioeconomic status and there's not any  
5 evidence to determine the effectiveness of water  
6 fluoridation preventing caries in adults. So what  
7 you're looking at is your decision is making a benefit  
8 risk and then there's the cost benefit ratio to  
9 consider and is the hundreds of thousands of dollars a  
10 year where you want to use it or how would you use it.

11 MS. CARREON: And our last speaker is Jesus  
12 Galvan.

13 MR. GALVAN: Good evening, Madam Chair,  
14 Members of the Board. Thank you for the opportunity  
15 to speak with you this evening. Since I'm the last  
16 one, Jesus Galvan. I've been a dentist, general  
17 practice dentist, for over 40 years, and I have seen a  
18 huge, broad spectrum of types of patients. I saw  
19 patients in my practice, getting out of UCLA, working  
20 in the barrio of LA, I saw many patients coming up  
21 from Mexico who were entirely decay free. They had  
22 fluorosis, but they were entirely decay free.  
23 Albuquerque has fluoridated water. We keep hearing,  
24 don't fluoridate water in Albuquerque. Albuquerque  
25 has fluoridated water. We have had it since the

1 beginning of time. What science has allowed us to do  
2 is achieve the optimal level of fluoride that will not  
3 cause medical or dental problems, but decrease the  
4 incidence. Fluoride will not prevent cavities, but it  
5 greatly decreases the incidence of decay in all  
6 individuals. So if we have fluoride, why do we want  
7 to fluoridate the water. On average, our fluoride  
8 level in Albuquerque is .3 to 4 parts per million, the  
9 optimal level is .7. For every decrease in .3 parts  
10 per million of fluoride, optimal fluoride in the  
11 water, we lose two-thirds of the decay prevention  
12 capabilities of the additional fluoride in the water.  
13 So we are supplemental fluoride. We are a fluoridated  
14 community and have been all along. Thank you so much  
15 for your time tonight. And I do have some signed  
16 petitions that I can pass to you.

17 CHAIRWOMAN PENA: Thank you.

18 (Applause)

19 CHAIRWOMAN PENA: The next item we have is  
20 announcements/communication. Our next scheduled  
21 meeting is October 18, 2017 at 5 p.m. in the Vincent  
22 E. Griego Chambers. Next item, 7, introduction of  
23 legislation, we have none this evening, so we go on to  
24 consent agenda, we have none this evening, so now we  
25 are on Item 9, approvals.

1           We are on R-17-15, amendment to the approved  
2   operating, capital implementation program of the  
3   Albuquerque Bernalillo County Water Utility Authority  
4   for fiscal year ending June 30, 2018.

5           COMMISSIONER JOHNSON: Madam Chair, move  
6   approval.

7           COMMISSIONER HART STEBBINS: Second.

8           CHAIRWOMAN PENA: There's a motion and a  
9   second. I think now we'll open it up to discussion.  
10   Mr. Sanchez, do you have anything to add?

11          MR. SANCHEZ: No.

12          CHAIRWOMAN PENA: Okay, your name is just  
13   there. Any discussion? Mr. Perry.

14          MR. PERRY: Madam Chair, I have a floor  
15   amendment specified as floor amendment number 1,  
16   R-17-15, and this adds Section 4 to the bill.  
17   Basically what it does is it states in Section 4 that  
18   the optimum level for fluoride as determined by the  
19   U.S. Environmental Protection Agency, Center for  
20   Disease Control, is .7 parts per million. The Water  
21   Authority is directed to add the supplemental fluoride  
22   to achieve a target range of fluoride between 0.65 and  
23   0.72 parts per million into the distribution system.  
24   The Water Authority is further directed to continue  
25   quality water monitoring and to report the average to



1 customers in the Consumer Confidence Report on an  
2 annual basis. The reason why I put this amendment  
3 into place was, I think our last speaker pointed out a  
4 fairly interesting situation with the fact that  
5 fluoride does attenuate in water here in the  
6 Albuquerque supply system. But I think that when you  
7 look at the scientific issues that have been presented  
8 in more modern times and the EPA and Center for  
9 Disease Control's work since 2012 in order to find  
10 what that optimum level is, it's important to provide  
11 specific direction if we were to adopt this  
12 legislation. And this, of course, would cap out the  
13 maximum allowable fluoride content at those specific  
14 levels that I referenced. In addition, it provides a  
15 certain degree of transparency to the public to the  
16 extent that the water quality specifications and  
17 amounts will be reported back to the public in the  
18 Authority's Consumer Confidence Report. I've been on  
19 this Board for seven years, I've heard the fluoride  
20 debate probably about four years ago when we started  
21 it and then, of course, a year ago and more recently  
22 since May. And there are certainly some very, very  
23 interesting positions both for and against it. And it  
24 presents a conundrum, a dilemma of significant  
25 magnitude, which I really haven't seen and it's a

1 non-partisan dilemma because we all want to do what's  
2 right for the public health and dental health of the  
3 community, but at the same time we don't want to foist  
4 on folks that don't want that preventative component  
5 put into the water system that's massly consumed. And  
6 I've struggled with that. I asked a preeminent  
7 dentist who testified before, well, you've been a  
8 dentist for 35 years, and he said, "right." And I  
9 said, "you must have given a lot of advice in that 35  
10 years," and he said, "well, of course I have." And I  
11 said, "Have you ever had patients that haven't  
12 followed the advice," and he said, "well, yeah." And  
13 I said, "and you can't foist that on them, can you?"  
14 And he said, "no." And I think one of the reasons why  
15 is that the medical professional itself or the dental  
16 profession, you know, they don't have the right to do  
17 that. Who are we to basically foist that on folks  
18 that wouldn't want it. But who are we also to deny  
19 those folks that need it. And I think it's one of  
20 those aspects and issues that you have to look at the  
21 significant benefit with minimal risk to the public  
22 for the benefit of a greater good. And we have  
23 children in socioeconomic lots and other folks in  
24 vulnerable situations that I think, at least from the  
25 advocates from the scientific community and a lot of

1 science that supports it from those people that we  
2 tend to rely on for our science, they certainly see a  
3 prophylactic, significant benefit, and the  
4 supplemental fluoridation plan that's pointed out does  
5 attempt to do that and any minimization of it back to  
6 the natural attenuation loses a great deal of that  
7 benefit. So this amendment is intended to basically  
8 capitalize that with limits and provide the public  
9 health benefits of fluoridation to those masses that  
10 are in great need and are in vulnerable positions to  
11 that.

12 CHAIRWOMAN PENA: Should we vote on the  
13 amendment first?

14 MR. PERRY: I move the amendment, Madam  
15 Chair.

16 COMMISSIONER JONES: Second.

17 CHAIRWOMAN PENA: There's a motion and a  
18 second for amendment number 1. I guess before we  
19 vote, some discussion. Commissioner O'Malley.

20 CHAIRWOMAN O'MALLEY: Thank you, Madam Chair.  
21 There's this target range, so why is the range over  
22 seven parts per million? We want to keep it as the  
23 optimal. We really don't want to go beyond it. Why  
24 does it say .72 parts per million, that's my question.  
25 Why don't we just have it at seven parts per million.

1           MR. PERRY: Madam Chairwoman, Commissioner  
2 O'Malley, I defer to technical staff at the Authority,  
3 but I believe that's the specification in the optimum  
4 range.

5           MR. SANCHEZ: Madam Chair, I think the range  
6 listed in the amendment is an acceptable range. If  
7 you wanted to amend it to seven parts per million that  
8 would be fine too. But .72 is essentially seven parts  
9 per million.

10          CHAIRWOMAN PENA: Commissioner O'Malley, did  
11 you have anything to add?

12          CHAIRWOMAN O'MALLEY: Well, I think if we're  
13 saying the optimum is .7 parts per million, then  
14 that's what we should say. We don't want to go beyond  
15 that if that's the optimal amount. I would want to  
16 amend the amendment to say between .65 and .7 parts  
17 per million.

18          CHAIRWOMAN PENA: So would the maker of the  
19 motion consider the seven parts per million?

20          MR. PERRY: Madam Chairwoman, Commissioner  
21 O'Malley, I understand what you're saying as the upper  
22 limit threshold. I think what the intent was that it  
23 provides the flexibility to be at that average of  
24 seven parts per million. Because, as you can also  
25 see, the lower end is 0.65, I believe.

1                   CHAIRWOMAN PENA: Commissioner Johnson.

2                   COMMISSIONER JOHNSON: Thank you, Madam  
3 Chair. One of the things that -- I believe all of  
4 this started several years ago when I wasn't on the  
5 Board, when we decided not to fund fluoridation and it  
6 was because of some changes in the EPA standard. And  
7 I was wondering, this is the current standard of .7  
8 parts per million. Perhaps we should just tie it to  
9 the published EPA standard instead of having it -- so  
10 it can dynamically change if it becomes .5 tomorrow,  
11 then we would automatically adjust our fluoridation to  
12 match the current standard. And I don't have the  
13 language for it, but perhaps we can do a little  
14 wordsmithing on this amendment and make it instead the  
15 current EPA standard or standard published by the EPA  
16 with a plus or minus or plus deviation of .02 and a  
17 minus deviation not less .05, something along those  
18 lines, then we achieve a couple of things. First of  
19 all, we're always current with our standard, as far as  
20 the efficacy goes from the EPA and we're not over or  
21 underfluoridating the water.

22                   CHAIRWOMAN PENA: Councilor Jones.

23                   COUNCILOR JONES: Thank you, Madam Chair.  
24 I'm not sure where we are with this, except that  
25 obviously this is very clarifying and comforting to be

1   able to hit on either side of that mark so that we're  
2   not always required to have the .7. It seems to me  
3   that this is a no brainer and that it protects the  
4   Water Authority, it protects the consumers as much as  
5   we can when we're adding fluoride and it keeps within  
6   the requirements, but it doesn't cause us to have an  
7   issue of where we are. It just gives us a little  
8   flexibility so that we can do this correctly. I think  
9   to put in, it must .7 although we're recommend that,  
10   but it can fluctuate. It can fluctuate by the amount  
11   of water, it can fluctuate by the wells, what the  
12   natural occurrence is. There are so many variables in  
13   this. So I think this is only a wise thing to do.  
14   And thank you, Mr. Perry, to try to keep us from -- if  
15   we should choose to add more fluoride, to keep us from  
16   potentially having a problem. This just kind of gives  
17   us the variation that we might need to protect  
18   ourselves. Thank you.

19               CHAIRWOMAN PENA: Anyone else?

20               COUNCILOR DAVIS: Thank you, Madam Chair. It  
21   doesn't bother me whether we write the .7 CDC standard  
22   plus or minus, five or ten percent, whatever that  
23   number is. But I understood, and if we're wrong staff  
24   will correct us, but as Councilor Jones points out,  
25   our natural background for fluoridation depends a lot

1 on the source we're using and that's seasonal for us  
2 whether we're using San Juan water or groundwater and  
3 also which wells in the city we're choosing to pull  
4 from, particularly groundwater sector and what time,  
5 so I do think that. And this includes a report, which  
6 I think is really important as we do our annual  
7 report, to give the public some transparency on what  
8 the third-party validation is telling us about the  
9 fluoride levels. But I do know it needs to be there.  
10 So I'm fine with where it is as written, because I see  
11 that fluctuation being necessary and those levels  
12 certainly would be permissible by the CDC and even  
13 under. It would give consumers confidence in the  
14 Consumer Confidence Report, that we're doing the right  
15 thing. So I think this achieves what Commissioner  
16 Johnson was speaking of either way. So I'm fine.

17 CHAIRWOMAN PENA: Any other questions? So  
18 are we considering amendment or we're not? I would  
19 just like to ask a question to the staff, I don't know  
20 who would have the answer, because I can see what  
21 Mr. Perry is trying to accomplish, but if the  
22 recommended EPA is .7 and we add .2 to create that  
23 deviation of whether it would be, shouldn't we reduce  
24 ours a little bit to create that? I mean, because at  
25 7.2, their standard is .7, so going to .72 is actually

1     going over, even though it's whatever fraction it is.  
2     So who could answer that question? I think along the  
3     lines of what Commissioner Johnson was saying.

4             MR. SANCHEZ: Madam Chair, I think the point  
5     would be that having a range is important, because  
6     there will always be an average. And we certainly  
7     understand we never want to be at beyond .7 parts per  
8     million. If it's the desire of the Board to cap it,  
9     that's fine. Just realize the range would be greater  
10    more than likely at the lower end of that. It's very  
11    difficult to say it will always be at .7 parts per  
12    million and likely be under that slightly to make sure  
13    we achieve the addition, not exceed seven parts per  
14    million.

15            CHAIRWOMAN PENA: Back with Mr. Perry. So  
16    you're going with the floor amendment. There was a  
17    motion and a second. All those in favor of floor  
18    amendment 1 say yes.

19            COMMISSIONER JOHNSON: Yes.

20            COUNCILOR DAVIS: Yes.

21            COMMISSIONER HART STEBBINS: Yes.

22            MR. PERRY: Yes.

23            COUNCILOR JONES: Yes.

24            CHAIRWOMAN PENA: Oppose, no.

25            CHAIRWOMAN O'MALLEY: No.



1                   CHAIRWOMAN PENA: No. There's two nos. So  
2   that motions passes. Now we are back on R-17-15. Are  
3   there any questions?

4                   COMMISSIONER JOHNSON: Madam Chair, I move  
5   approval as amended.

6                   COMMISSIONER HART STEBBINS: Second.

7                   CHAIRWOMAN PENA: There's a motion and a  
8   second. Any discussion? Commissioner O'Malley.

9                   CHAIRWOMAN O'MALLEY: Thank you, Madam Chair.  
10   I just want to know -- and I did struggle with this  
11   issue. I was concerned obviously about some of the  
12   many points that were brought up by folks who are in  
13   opposition to it and I think it was important to  
14   listen to that and not dismiss all the comments as  
15   exaggerated or that they weren't well thought out,  
16   because I think people feel very strongly about this.  
17   However, given the very strong support, especially  
18   from pediatric dentists, and we had a toxicologist  
19   speak the last time about this small amount, that it  
20   -- really feel strongly that it makes a difference in  
21   children's health and their teeth. I feel like, you  
22   know, they're the experts and I think it's important  
23   to listen to what they have to say about this issue.  
24   So I just want to let folks know about that and that's  
25   why I'm supporting putting this amount of fluoride in

1 to achieve the optimal level. Thank you.

2 CHAIRWOMAN PENA: Councilor Jones.

3 COUNCILOR JONES: Thank you, Madam Chair.

4 Councilor O'Malley was correct, we did hear from a lot  
5 of people, interestingly. We heard from many people  
6 on both sides of this issue. Many of the people  
7 oppose to additional fluoride in our water were, in  
8 fact, dentists and hygienists and scientists, they had  
9 some great statistics. Both sides have numbers and  
10 statistics. Because of that, there is -- it is  
11 obviously not a perfect science and not everyone will  
12 ever agree and I am opposed to adding more fluoride in  
13 our water until I see a more general approval rate on  
14 it and more statistics, a larger percentage of  
15 statistics to say it does help. I don't think at any  
16 time the government should add anything to our water.  
17 If some of us don't want it when we are bound by our  
18 water supply and then answer is, well, we can drink  
19 bottled water. And the answer is, well, the people  
20 who want more can add more, by various means. So I'm  
21 just philosophically opposed to this. I think it's a  
22 bad thing. We don't know what it is doing to some  
23 people because, again, we have all kinds of statistics  
24 and percentages on both sides. So I will not support  
25 this, even with the amendment which does make it

1 better.

2 CHAIRWOMAN PENA: Commissioner Johnson.

3 COMMISSIONER JOHNSON: Thank you, Madam  
4 Chair. I would echo some of those comments. I'm  
5 going to support this, obviously I moved it. But it's  
6 not one of those clear-cut things. One of the things  
7 that I am absolutely sure about is nobody up here  
8 that's making the decision is an expert on either side  
9 of the issue. And we as public officials oftentimes  
10 get caught in the middle of these questions that are  
11 highly detailed and highly scientific and at the end  
12 of the day we're getting quotes from both sides  
13 claiming to quote some of the same sources and get  
14 different answers and it becomes very difficult for  
15 public officials in these positions to make those  
16 decisions and at the end of the day you have to go  
17 with, well, a belief system and you have to go with  
18 the science that you're hearing. And in this  
19 particular case I have to go with what the AMA and the  
20 American Dental Association recommends, and the CDC  
21 for that matter. So at the end of the day that's the  
22 reason I'm going the direction I'm going in supporting  
23 this and moving this in the first place. So I do  
24 thank you for your opinions. I thank you for your  
25 discussion. I thank you for your civility, it's not

1 always the case. I know this can be a very passionate  
2 issue. So thank you very much.

3 CHAIRWOMAN PENA: Councilor Davis.

4 COUNCILOR DAVIS: Thank you, Madam Chair. I  
5 appreciate the conversation. You know, for more than  
6 four months now we've had this discussion at this  
7 Board and in public forums, in neighborhood meetings  
8 and through our emails and the paper, it's something  
9 we don't see very often, for the community to get  
10 engaged in a conversation that something that this  
11 Board is doing for that long and at such a level. And  
12 honestly, in places we've struggled in public service  
13 lately to include the peoples voice in very big  
14 decisions that affect them everyday. And I echo what  
15 everyone else is saying. At the end of the day -- you  
16 know, I also asked our staff to help draft a  
17 resolution that if this Board doesn't reach a majority  
18 opinion of what we do with fluoride, that we might  
19 offer that option as one to send to voters next year  
20 on a ballot perhaps if we can't settle that debate  
21 here. But having listened to those concerns, I agree  
22 with, which I have never said, Commissioner Johnson.  
23 That may not help you in your mayor's race, but the --  
24 as we looked at this earlier and as we heard from one  
25 of our pediatricians earlier, you know, the questions

1     that we have concerns about poisoning are tied to  
2     dosage.  As somebody pointed out, Vitamin D is  
3     necessary for us everyday in our lives, but excessive  
4     doses of it can be used as poison, as can any of the  
5     other minerals that are in our water that occur  
6     everyday.  I'm encouraged by this because what I heard  
7     from folks in a particular conversation for someone  
8     who was concerned about fluoride in their water  
9     because of their particular health concerns, was that  
10    they wanted to know how much was in our water everyday  
11    so that they could work with a filter at their home  
12    and to deal with their own personal concerns in a more  
13    predictable way.  And I learned that our fluoride  
14    fluctuates a lot in the city based on the season and  
15    where we get it from.  So I'm encouraged that we're  
16    setting -- this amendment sets a standard at the  
17    lowest CDC recommended public health level so that  
18    it's consistent and people can make a decision and  
19    that we're adding transparency so that in our report  
20    that folks get every year to judge what in the  
21    background is in our water, they know what's there and  
22    they can make decisions about their own family based  
23    on what's available.  So I'm encouraged by that.  I  
24    believe it's important that we know what's in our  
25    water.  I think we're taking an important step to do

1     that. And I agree, at the end of the day when there's  
2     a question of science, I believe we listen to the  
3     scientists and I believe the science -- the CDC and  
4     EPA review was clear, that the most updated science  
5     still shows a public health benefit and anecdotally  
6     our local dentists are telling us that and I think  
7     that's incredibly important for a state like New  
8     Mexico where we're challenged with children's welfare  
9     and health issues, that we at least do our part to set  
10    and help them at the very minimal level possible for  
11    us to do. So, Madam Chair, I will support this. In  
12    the event it doesn't carry forward I hope we'll  
13    consider another option to let voters weigh in. But I  
14    agree and I support this. Thank you.

15               CHAIRWOMAN PENA: Any other discussion? No,  
16    okay. I just have a couple of questions. Some of  
17    them have gone away based on the discussion that we've  
18    had. So the money that's used, the 250,000 that we  
19    have that's supposed to be allocated to accomplish  
20    this, do we have a method for the fluoride like  
21    concentration monitoring, is that part of the dollars  
22    used or are we doing to have to use additional dollars  
23    or find additional dollars to do that? Because it  
24    says, you know, to purchase the chemical and then also  
25    to -- for the equipment, but would that be a

1 monitoring system or do we already have that  
2 capability?

3 MR. SANCHEZ: Madam Chair, we already have  
4 that capability. We do water testing at our lab.

5 CHAIRWOMAN PENA: Another question is the  
6 manpower associated with this is part of the \$250,000  
7 that we've talked about here?

8 MR. SANCHEZ: Madam Chair, correct.

9 CHAIRWOMAN PENA: It is, okay. So for me, I  
10 guess, without going into everything, you know, I  
11 really appreciate everybody, you know, and their  
12 comments. I've really learned a lot about  
13 fluoridation over the past few years. For me  
14 personally, as Councilor Davis was talking about, you  
15 know, it's an overall -- I mean Mr. Perry was talking  
16 about, you know, a significant benefit for the public  
17 wellbeing. You know, there's a lot of things that we  
18 can do, I believe, that could be of significant  
19 benefit, you know, but to actually fluoridate the  
20 water and I just feel that, you know, because we have  
21 such fluctuating levels in the water already that I'm  
22 not comfortable with doing that. It's kind of like  
23 you stated, that, you know, if we put Vitamin D in the  
24 water and, you know, does everybody, you know, want  
25 Vitamin D. And, yes, there's the filtration system,

1 but unfortunately when we're talking about people of  
2 lower income and, you know, the benefit to them, to me  
3 it's an assumption that people with lower income don't  
4 brush their teeth, you know, and there's studies too  
5 that show that, you know, there's not necessarily a  
6 difference in terms of undeveloped countries where  
7 kids aren't brushing their teeth and low income people  
8 that are brushing their teeth. Anyway. And then my  
9 other thing is that, you know, I mean, for me  
10 personally this -- it does concern me obviously.  
11 There's people who have other health concerns that  
12 they have to deal with not just the, you know, the  
13 tooth decay, but there's other health concerns. A  
14 lady spoke about, you know, the children and we don't  
15 really know what that means to people. The National  
16 Kidney Foundation has actually put out a paper and  
17 they kind of withdrew a little bit because I think  
18 there's so much support for the fluoridation of water,  
19 you know, but people who have kidney disease there's  
20 really a lot of concern about fluoride and through the  
21 dialysis process. And then women who are  
22 breastfeeding and showering and, you know, so we're  
23 monitoring it here at the Water Authority in terms of  
24 how much is in the water, but are we really able to  
25 monitor what people are taking in. So for me there's



1 still a lot of questions, you know. I mean, I know  
2 there's a lot of organizations that do say that  
3 there's a benefit and they're talking about an  
4 ultimate benefit for everyone, you know, and so a lot  
5 of people through these discussions have cited the  
6 World Health Organization, you know. And I pulled up  
7 the report on the fluoridation of water in our water  
8 supply, you know, and one of the things that it does  
9 discuss in here is -- it has it -- I read it, it talks  
10 about all the benefits and what it can do and how it  
11 helps people. But I noticed that right in the  
12 first -- the second page of it, it actually also says  
13 that with all reasonable precautions have been taken  
14 by the World Health Organization to verify the  
15 information contained in this publication. However,  
16 the published material is distributed without warranty  
17 of any kind, you know, either expressed or implied.  
18 So, you know, these are all studies that have been  
19 done and conducted and obviously they've had a good  
20 result. But the World Health Organization kind of  
21 says that, you know, this isn't where they believe we  
22 should go. But anyway, with that, without kind of  
23 going on and on, I will not be supporting this. So I  
24 guess if there's no other discussion we can go on to  
25 R-17-15. All those in favor please say yes.

1 COMMISSIONER JOHNSON: Yes.

2 COUNCILOR DAVIS: Yes.

3 COMMISSIONER HART STEBBINS: Yes.

4 CHAIRWOMAN O'MALLEY: Yes.

5 MR. PERRY: Yes.

6 CHAIRWOMAN PENA: Oppose, no.

7 COUNCILOR JONES: No.

8 CHAIRWOMAN PENA: No. So with that, I think  
9 we have to go on to R-17 and I think I would need to  
10 withdraw that, right, because that didn't apply. So I  
11 will withdraw that. Do I need a motion and a second  
12 to withdraw? So I make a motion to withdraw R-17-16.

13 CHAIRWOMAN O'MALLEY: Second.

14 CHAIRWOMAN PENA: There's a motion and a  
15 second. All those in favor say yes.

16 MEMBERS: Yes.

17 CHAIRWOMAN PENA: Oppose, no. No. I know I  
18 can't do that, but so I'll switch it to yes. So the  
19 next one, I guess, would be R-17-17. So this one, do  
20 we need a motion to withdraw as well?

21 COUNCILOR DAVIS: Madam Chair, I would like  
22 to make a motion to withdraw R-17-17, as this item is  
23 no longer necessary as we reached a decision.

24 COMMISSIONER JOHNSON: Second.

25 CHAIRWOMAN PENA: There's a motion and a

1 second. All those in favor say yes.

2 MEMBERS: Yes.

3 CHAIRWOMAN PENA: Oppose, no. Motion passes.

4 So I think with that, we move on to R-17-18,  
5 authorizing the Albuquerque Bernalillo County Water  
6 Utility Authority to submit an application for funding  
7 to the Water Trust Board for Los Padillas Water  
8 Systems Improvement Project. Mr. John Stomp.

9 MR. STOMP: Madam Chair and Members of the  
10 Board, this resolution before you is required for us  
11 to make a request to the Water Trust Board for  
12 additional funding for the Los Padillas water system.  
13 We've been working on that with Bernalillo County now  
14 for several months and both parties have committed  
15 funding to start the project, but we need additional  
16 funding to complete the project. So we urge your  
17 support to allow the executive director, to authorize  
18 the executive director to submit an application for  
19 one-and-a-half million dollars.

20 CHAIRWOMAN PENA: Thank you, Mr. Stomp. Are  
21 there any questions?

22 COMMISSIONER JOHNSON: I move approval.

23 COMMISSIONER HART STEBBINS: Second.

24 CHAIRWOMAN PENA: There's a motion and a  
25 second for approval. All those in favor say yes.

1 MEMBERS: Yes.

2 CHAIRWOMAN PENA: Oppose, no. Motion passes.

3 I just want to thank you. This is a really important  
4 part -- a project in my district and I really  
5 especially want to thank Commissioner Quezada because  
6 he was really -- as soon as he got elected he wanted  
7 to make sure that this project happened. So thank  
8 you, I appreciate it, John.

9 The next item is Item E, R-17-19 authorizing  
10 the Albuquerque Bernalillo County Water Utility  
11 Authority to submit an application for funding the  
12 Water Trust Board for the Uptown Water Reuse Project.  
13 Mr. John Stomp.

14 MR. STOMP: Madam Chair and Members of the  
15 Board, this is exactly the same as the resolution  
16 requesting funding for the Winrock Reuse System. We  
17 have been working with Mr. Goodwin and Mr. Sand from  
18 Winrock for several years on this project and so this  
19 would authorize us to make a request to the Water  
20 Trust Board for additional funding. They're both  
21 here, Mr. Goodman and Mr. Sand are here, if you want  
22 to ask questions of them. Or I'd be glad to answer  
23 any questions. And request your approval.

24 CHAIRWOMAN PENA: Any questions?

25 MR. PERRY: I move approval.

1 COMMISSIONER JOHNSON: Second.

2 CHAIRWOMAN PENA: There's a motion and a  
3 second.

4 COMMISSIONER HART STEBBINS: Madam Chair, I  
5 just have a quick question. I don't know if  
6 Mr. Goodman or John, could we get just like a very  
7 brief description of the project and what the funding  
8 is for.

9 MR. STOMP: Madam Chair and Commissioner Hart  
10 Stebbins, sure. I apologize for that. Winrock right  
11 now is under reconstruction and one of the ideas is to  
12 take some of the effluent from Winrock, clean it up  
13 and reuse it on site and then be able to reuse it for  
14 other city facilities, both Inez Park, Inez Elementary  
15 School and Jerry Cline Park, right across the freeway.  
16 So this would provide a reuse non-potable source  
17 inside of Winrock for their landscaping and their  
18 other uses and then outside of that. So it's a small  
19 project and it's about 50 or 60,000 gallons a day, so  
20 for us that's a very small project where it could help  
21 begin to forge that reuse inside the city limits as  
22 opposed to what we've been doing in a larger scale.

23 COMMISSIONER HART STEBBINS: Thank you. And  
24 I am somewhat familiar with the project. I just  
25 wanted to make sure the public was also aware of what

1     this effort entails.   So thank you.   Thank you, Madam  
2     Chair.

3                 CHAIRWOMAN PENA:   Thank you.   Question,  
4     Commissioner O'Malley.

5                 CHAIRWOMAN O'MALLEY:   I just have a question.  
6     So this is just an application to the Water Trust  
7     Board, but what kind of commitment in terms of funds  
8     are there?

9                 MR. STOMP:   Madam Chair and Commissioner  
10    O'Malley, the funding request is a public/private  
11    partnership, so we are requesting 60 percent grant  
12    funding from the state.   The remaining 40 percent  
13    would be provided by Winrock and so they would be on  
14    the hook for their portion of the funding.   We would  
15    be in charge of the design/construction, and then we  
16    would ultimately operate the facility when it's done.  
17    But the financial obligation would be on Winrock to  
18    match the funds.

19                CHAIRWOMAN O'MALLEY:   So operating the  
20    facility, what is the cost of that for the Water  
21    Authority?

22                MR. STOMP:   Madam Chair and Members of the  
23    Board, we would be charging, of course, for the reuse  
24    water to get some of that money back.   But right now I  
25    don't know that I can give you an exact number for

1     that. I would have to get back to you on that  
2     specifically. I apologize for that. I don't want to  
3     guess.

4             CHAIRWOMAN O'MALLEY: Thank you.

5             CHAIRWOMAN PENA: Mr. Perry.

6             MR. PERRY: Madam Chairwoman, this is, I  
7     think, the exact type of project that the city needs.  
8     When I went to a couple of water conferences last year  
9     some of the jurisdictions, particularly I think it was  
10    Orange County and some other folks that are in water  
11    trouble, really there was a lot of discussion  
12    regarding conservation efforts, particularly in the on  
13    site localized water treatment for reuse and on  
14    non-potable, and I'm surprised that we're a little bit  
15    that far behind already. I think we'll probably be  
16    seeing a lot more of this in the future. It has great  
17    storm water benefits, obviously environmental benefits  
18    and ultimately consumption benefits. So we obviously  
19    got to look at the cost of this to see that the  
20    financial analysis makes sense, but it's certainly  
21    something that I think we need to explore here in  
22    Albuquerque. And when you look at this particular  
23    site, in the uptown area, it's a great area to do it  
24    in as well. I'll support this.

25             (NOTE: Commissioner O'Malley not present)

1           MR. STOMP: Madam Chair and Members of the  
2 Board, I didn't mean to say that we haven't looked at  
3 this. We feel like this would be a single-person  
4 operation, probably once a day. The issue is with the  
5 energy. We've been talking with them about connecting  
6 to their solar system and so there would be an  
7 exchange of energy provided from Winrock's solar  
8 facility. So in terms of the energy that we would be  
9 using would be less in terms of that purchase. So we  
10 don't really have an arrangement in terms of the  
11 long-term operation, so we obviously thought about  
12 what that cost would be, but I didn't want to be here  
13 telling you an exact number without really having all  
14 the details. So again, I apologize.

15           CHAIRWOMAN PENA: No other questions?  
16 Councilor Jones.

17           COUNCILOR JONES: Thank you, Madam Chair.  
18 This is a great project, I think. It's leading the  
19 way and hopefully we can get more people to  
20 participate in the future and put their properties in  
21 something like this also. It's good for us. It's  
22 good for them. It's good for the city. And,  
23 Mr. Goodman, thank you. You have the led the way in  
24 any number of projects in the City of Albuquerque and  
25 we appreciate your being here and having face, enough



1 face in our city that you just keep putting money into  
2 it and we appreciate it. And that means that you're  
3 also hiring people. So thank you, Mr. Goodman.

4 CHAIRWOMAN PENA: So there's a motion and a  
5 second for R-17-19. All those in favor say yes.

6 MEMBERS: Yes.

7 CHAIRWOMAN PENA: Oppose, no. Motion passes.  
8 Thank you, Mr. Stomp. Next we have C-17-26, FY2017  
9 fourth quarter performance indicator report.  
10 Mr. Frank Roth.

11 MR. ROTH: Madam Chair, Members of the Board.  
12 Before you is the score card report. These are  
13 aligned to our goals and objections, benchmarking and  
14 the customer opinion survey. Overall we achieved our  
15 targets of 21 of the 23 indicators. And with the  
16 exception of 2, which are still a work in progress in  
17 the customer service category. However, we met all  
18 our targets in compliance, operational, financial and  
19 environmental. This is why we had such high marks  
20 from our customers. Over 96 percent of our customers  
21 are satisfied with the services from the Water  
22 Authority and 97 percent of our customers are  
23 satisfied with the reliability of the water to their  
24 homes and businesses. We will continue to work on  
25 these targets, especially the ones that are being

1 established for this current fiscal year in order to  
2 improve our performance and to meet our service  
3 levels.

4 CHAIRWOMAN PENA: Thank you, Mr. Roth. Are  
5 there any questions? Seeing no questions, is there a  
6 motion?

7 COMMISSIONER HART STEBBINS: I move approval.

8 CHAIRWOMAN PENA: There's a motion and a  
9 second?

10 COUNCILOR JONES: Second.

11 CHAIRWOMAN PENA: All those in favor of  
12 C-17-26 say yes.

13 MEMBERS: Yes.

14 CHAIRWOMAN PENA: Oppose say no. Motion  
15 passes. The next item we have is other business. We  
16 have Item A, OB-17-9 water loss control presentation.  
17 Angelique Maldonado.

18 MS. MALDONADO: Good evening, Madam Chair and  
19 Members of the Board. Tonight I'm going to talk to  
20 you a little bit about water loss control and why it's  
21 important.

22 Water utilities around the world are faced  
23 with the challenge of trying to reduce water losses  
24 that are occurring from their distribution systems in  
25 the form of leakage or line failure or theft. About

1 more than 12 billion gallons are lost globally every  
2 day in terms of drinking water. More locally, state  
3 and regional reporting programs really aim to evaluate  
4 water loss. They're really encouraging utilities to  
5 proactively pursue water loss control measures and  
6 allocate some financial and educational resources to  
7 mitigating these losses.

8           The New Mexico State Engineer requires  
9 drinking water suppliers to assess their real water  
10 leakage, look at the lost revenue associated with that  
11 leakage and also consider the conservation potential.

12           The methodology that's utilized for this  
13 water assessment is based on the American Waterworks  
14 Association and Water Loss Control Committee  
15 recommendations and software.

16           So as we ask our customers to conserve water,  
17 it's important for us to set a good example and really  
18 lead the way in making our water delivery system as  
19 efficient as we possibly can.

20           Water loss control represents the efforts on  
21 behalf of the Water Authority to hold ourselves  
22 accountable as water stewards and reliably audit our  
23 water supplies. And so this allows us to implement  
24 controls to minimize these water losses.

25           In terms of scope, the Water Utility is the

1 largest utility in New Mexico and so when we're  
2 auditing our water supplies we're looking at the  
3 source water that we're producing for drinking water  
4 purposes, which comes from surface and groundwater  
5 sources and we're looking all the way down to the  
6 point where we deliver it to our customers. So we're  
7 assessing everything inbetween our distribution  
8 system, which encompasses more than 3,300 miles of  
9 pipe, 60 storage reservoirs, more than 46,000 valves  
10 and in excess of 18,000 hydrants. We have more than  
11 212 customer accounts, which represents about 630,000  
12 customers.

13           The methodology that we use as recommended or  
14 required by the state engineer is this water loss  
15 accounting. So it's a standard water balance and it's  
16 considered the best practices in terms of industry  
17 standard. What we're doing is we're looking at the  
18 inputs and outputs to our distribution system and it's  
19 only focusing on our potable water system. So we're  
20 trying to measure the efficiency and effectiveness of  
21 our delivery system.

22           Inputs would be all of our water that we're  
23 pumping from the ground and the surface water from San  
24 Juan Chama. And then outputs would be the water that  
25 we're selling to our customers. All of the water that

1 we sell to our customers is metered, so those metered  
2 volumes are looked at and subtracted from the water  
3 that we put into the system. So that would be  
4 considered authorized consumption.

5 Another form of authorized consumption is  
6 unbilled authorized consumption, which would be water  
7 we use for operational purposes and also water that  
8 firefighters use to fight fires. So when they tap  
9 into a hydrant they don't put a meter so we can't  
10 meter or bill for that water, but it serves a greater  
11 good.

12 So these water losses that occur from our  
13 water system, we're able to sort of parse out the data  
14 and look at where these losses are occurring in our  
15 system. They're broken down by apparent losses and  
16 real losses. Apparent losses would be those losses  
17 that would occur from things like meter drift or water  
18 theft and data handling errors. Real losses would be  
19 the water that's actually lost from the system in the  
20 form of leaks or line failures.

21 And so, the standards sort of shifted.  
22 Instead of just looking at water loss, the industry  
23 tends to look at it as non-revenue water. So since  
24 2010 we've been utilizing this AWWA standardized water  
25 audit software and one of the benefits to

1 participating in this is we get our water audit data  
2 validated by a third party, so it gauges the integrity  
3 of our data. And so, all of this water auditing  
4 method is based on the data that we put in. So our  
5 data integrity is really critical to getting a good  
6 outcome from this audit.

7           So in terms of our non-revenue water results  
8 from this audit, you can see that in the past five  
9 years we've reduced our non-revenue water from 10.5 to  
10 6.6 and when you parse out that non-revenue water and  
11 you look at the components, unbilled authorized is in  
12 the top in green and so that's going to be our  
13 operational water and water used from fighting fires,  
14 and so that's always in the order of about 2 percent.  
15 We have decreased that by about .4 percent. Apparent  
16 losses in terms of customer metering and accuracies  
17 and data handling errors has been reduced  
18 significantly from 2.1 to about .5 percent. And our  
19 actual real losses in terms of real water loss from  
20 leakage or line failures has been reduced from 6.1 to  
21 4.2.

22           If you look at annual water loss reduction,  
23 we've successfully reduced our water loss from 15.4 in  
24 2004 to 6.6 last year. So we've cut our losses in  
25 half, by more than half.

1           This data initiative, the water audit data  
2   initiative, that validates our water audit data also  
3   provides ability to sort of benchmark our success.  
4   And so, out of 21 utilities that participated in this  
5   data initiative, we get to see the average in terms of  
6   the performance indicators that are produced by this  
7   water audit. So non-revenue water as a percent of  
8   volume, the average is on the order of 23 percent of  
9   the water that they produce is lost. The Water  
10   Authority is at 6.6, so we're significantly below the  
11   average. Non-revenue water total cost in terms of  
12   million dollars per year, we are about a fifth of  
13   that. And in terms of the water audit validity score,  
14   our data integrity, the average is about 75 percent  
15   and we got an 87 percent in terms of our data  
16   integrity.

17           System leakage loss, when you're just looking  
18   at the actual real losses that are being lost from the  
19   system, it's measured on losses per service connection  
20   per day. So remember, we have in excess of 212,000  
21   customer accounts and so every day we're losing about  
22   16 gallons per connection per day. If you look at the  
23   median value that's above that's in black, right now  
24   it's currently at 40 gallons per connection per day.  
25   And being at 16 per connection per day, that's very

1 good.

2           The Water Loss Control Committee produced a  
3 document that summarized the 2015 water audit data  
4 initiative data and out of 27 utilities that  
5 participated in this initiative, we came in with the  
6 lowest amount of real losses out of all those 27  
7 utilities and we are the tenth largest utility in  
8 terms of these utilities that participated.

9           Operational success measures. When you look  
10 at waterline integrity, it's measured on amount of  
11 leaks or line failures per hundred miles of pipe. We  
12 have 3,300 miles of pipe, so you can see that we've  
13 reduced our line failures by 30 line failures per  
14 hundred miles of pipe in the past eight years. So in  
15 2008 we were at 49 leaks or line breaks per hundred  
16 miles of pipe and we're currently at 19. When you  
17 think of operational success measures or waterline  
18 integrity, there's a certain amount of work that goes  
19 into that and so you can really gauge your system.

20           The Water Research Foundation developed these  
21 distribution optimization criteria and it describes an  
22 optimized distribution system as having 15 breaks per  
23 hundred miles of pipe. So since we're at 19 breaks  
24 per hundred miles of pipe, we're really close to  
25 optimizing our distribution system.



1           Workforce success measures. A big part of  
2   reducing real losses from the system is responding to  
3   leaks and line breaks. So when we look at our work  
4   order system we're able to see how quickly we respond  
5   to line break failures. And our field crews have done  
6   a tremendous effort and reduced those line response  
7   times to line break failures, so that significantly  
8   decreases the water loss from your system.

9           Also a benefit from looking at the work order  
10   system is really identifying which pipes are failing.  
11   The types of pipe is important to understand the  
12   dynamics of your system. So we keep a pipe inventory,  
13   we can tell which types of pipes we have in our pipe  
14   inventory and then we can tell which types of pipes  
15   are failing. When you think about the requirements of  
16   the state engineer and how they really promote some  
17   proactive leak detection and loss prevention, a big  
18   part of that has to do with the pipe types.

19           Leak detection is a matter of listening to  
20   the acoustic sound of your pipes. So you can identify  
21   a leak by the sound. When you turn the water on in  
22   your home you can hear the water flowing through your  
23   pipe and it's the same idea when it comes to a leak.  
24   So to identify leaks proactively we go out and survey  
25   the system. We listen for leaks at hydrants, valves

1 and meters. And so every year we have a two-man crew  
2 that goes out and they listen for these leaks at our  
3 system. They survey almost the entire system every  
4 year. We've identified about a hundred leaks per year  
5 proactively, that really reduces the amount of  
6 catastrophic failure and funds needed to repair these  
7 pipes. And so, targeted leak detection is possible by  
8 knowing the pipe inventory. You can only listen for  
9 pipe leaks on metal pipes. So knowing where these  
10 pipe failures are happening and then looking at where  
11 the pipe materials are, we can send out these leak  
12 detection crews to be more effective in their approach  
13 for listening for leaks proactively.

14           So in conclusion, water loss control has  
15 reduced water loss by 3.38 billion gallons per year  
16 since 2004. If you add up all that water, that's 45  
17 billion gallons. That's a year-and-a-half supply that  
18 we've saved in 12 years.

19           Water audit data validity has increased from  
20 74 percent to 87 percent since 2010, so our data  
21 integrity is getting much better. Field crews have  
22 reduced response times to line failures by 30 percent  
23 since 2009 and water quality complaints have been  
24 reduced by 33 percent since 2008.

25           So that concludes my presentation. Do you

1 have any questions?

2 CHAIRWOMAN PENA: Any questions? Councilor  
3 Jones.

4 COUNCILOR JONES: Thank you. I don't have  
5 any questions, but excellent report. Great  
6 information and well presented. I really appreciate  
7 it. Thank you.

8 MS. MALDONADO: Thank you.

9 CHAIRWOMAN PENA: Yes. As stated earlier,  
10 you all are doing a tremendous job. So thank you.  
11 Appreciate it, Ms. Maldonado.

12 Next item. Since there's no other items,  
13 this meeting is adjourned.

14 (Meeting adjourned at 6:34 p.m.)  
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## REPORTER'S CERTIFICATE

I, Kim Kay Shollenbarger, New Mexico Certified Court Reporter, No. 236, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings taken to the best of my ability.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this matter and that I have no interest in the final disposition of this matter.

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Kim Kay Shollenbarger  
CCR No. 236, RPR  
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