

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY
WEDNESDAY, March 21, 2012, 5:10 P.M.

ALBUQUERQUE/BERNALILLO COUNTY GOVERNMENT CENTER
ONE CIVIC PLAZA, NW
ALBUQUERQUE, NEW MEXICO 87102

Before: Kelli Gallegos
PAUL BACA PROFESSIONAL COURT REPORTERS
500 Fourth Street, NW, Suite 105
Albuquerque, New Mexico 87102

A P P E A R A N C E S

COUNCILLOR KEN SANCHEZ, Chair
COMMISSIONER WAYNE JOHNSON, Vice Chair
COMMISSIONER ART DE LA CRUZ, Member
COUNCILLOR TRUDY E. JONES, Member (Excused)
COMMISSIONER MAGGIE HART STEBBINS, Member (Excused)
MAYOR RICHARD J. BERRY (Excused)
COUNCILLOR REY GARDUNO, Member
TRUSTEE PABLO RAEL, Ex-Officio Member
MARK SANCHEZ, Executive Director
ROB PERRY, Administrative Officer, Alternate Member

1 CHAIRMAN SANCHEZ: I will call this March 21st,
2 2012, meeting of the Albuquerque Bernalillo County
3 Water Utility to order. Let the record reflect that
4 Commissioner Hart Stebbins and Councillor Jones are
5 excused and all other members are present this
6 evening.

7 The next item on the agenda will be a silent
8 invocation, and that will be followed by the Pledge of
9 Allegiance, which will be led by Councillor Garduno.

10 (Whereupon, there was a moment of silence.)

11 (Whereupon, the Pledge of Allegiance was led
12 by Councillor Rey Garduno.)

13 CHAIRMAN SANCHEZ: Thank you, Councillor
14 Garduno.

15 The next item on the agenda is the approval
16 of the minutes. I make a motion to approve the
17 February 22nd, 2012, minutes. We have a motion by
18 Commissioner De La Cruz, and a second.

19 Any questions? Seeing none, all those in
20 favor, please signify by saying yes.

21 ALL MEMBERS: Yes.

22 CHAIRMAN SANCHEZ: Opposed, no.

23 That carries unanimously.

24 (5-0 vote. Agenda Item 3 approved.)

25 CHAIRMAN SANCHEZ: Next item, proclamations and

1 awards, but before we go through the agenda, I want to
2 acknowledge our community achievement, a very
3 important milestone in conservation. As announced at
4 a media news conference last week, we have reached a
5 usage goal of 150 gallons per person per day, years
6 ahead of schedule.

7 There have been put in our water bank, I
8 believe it's close to two billion gallons of water for
9 all the water conservation efforts by residents of
10 Albuquerque and residents of Bernalillo County. I
11 think it's a great achievement. Now, I know we need
12 to look at lowering that goal to maybe 140 gallons per
13 individual per day.

14 It stills sounds like a lot of water use
15 when you talk 150 gallons per day per individual, but
16 that's a milestone and a great accomplishment, and,
17 again, thank you to the residents of this community.

18 And we will have a detailed update later on
19 the agenda. However, I just wanted to thank our
20 community. And we have a -- we have cupcakes here,
21 celebratory cakes for the public that are in
22 attendance today. So enjoy your cake as you sit
23 through this meeting.

24 Next item on the agenda is public comments.

25 Ms. Jenkins, how many members of the public

1 do we have signed up to speak this evening?

2 MS. JENKINS: Seven.

3 CHAIRMAN SANCHEZ: They will be given two
4 minutes to speak, with a warning bell at one and a
5 half minutes.

6 Ms. Jenkins, you will you please call the
7 first speaker. And once your name has been called,
8 we'll call two or three names at one time, would you
9 please come to the front, we have seating available,
10 and be prepared to speak. Thank you.

11 MS. JENKINS: Dave McCoy, followed by Henry
12 Messerville.

13 MR. MCCOY: Chairman Sanchez, Board Members,
14 good evening all. My name is Dave McCoy, I'm the
15 executive director for Citizen Action New Mexico, and
16 a Water Utility ratepayer. I've furnished you with a
17 folder presentation.

18 And Citizen Action requests basically that
19 the Water Utility coordinate state and federal efforts
20 to bring about an effective and scientific plan to
21 clean up the Air Force's eight million gallon jet fuel
22 spill in our drinking water aquifer.

23 This has not been a main agenda item since
24 October 2011, and it should be monthly, along with
25 status reports. There needs to be WUA action planning

1 to minimize the upcoming possible Albuquerque well
2 losses. The Air Force is not displaying a sense of
3 urgency for this emergency. The Air Force has ignored
4 the New Mexico Environment Department's orders on four
5 occasions to produce an interim measures work plan for
6 full remediation of the jet fuel plume within five
7 years.

8 The Air Force has not removed a single
9 gallon of jet fuel from the groundwater in two years.
10 No soil vapor was extracted for the past seven months.
11 Colonel Conway stated at his March 13, 2012, public
12 meeting that the Air Force has no plans to remediate
13 the dissolved plume other than to shut down the well.
14 The Ridgecrest wells supplies up to 30 percent of
15 Albuquerque's potable groundwater. Is this the best
16 the Air Force can do?

17 Rather than wait for the shutdown of
18 municipal or private and lawsuits from residents, the
19 authority should demand that the Air Force pay for an
20 independent WUA advisor to review the present plan,
21 pay for design costs, construction of a water
22 treatment plant for the Veterans Administration, and
23 replacement of Ridgecrest wells, relocation of them.

24 CHAIRMAN SANCHEZ: Councillor Garduno.

25 COUNCILLOR GARDUNO: Mr. McCoy, I had an

1 opportunity to look at some of the material you handed
2 out to the board members, and you're right, there
3 hasn't been a Kirtland report for quite a while.

4 Also, I was looking through the material,
5 and it's not numbered, but the third page of your
6 handout, that's the page, and I'm confused because I
7 don't know, these are -- are these monitoring wells --
8 what are the dots.

9 MR. MCCOY: Okay. As you look at the star on
10 the sheet, and then you look over to the right from
11 the star, that's the Ridgecrest well field. There's
12 five wells there, and then Charles and Love and Thomas
13 and Ponderosa, and several others.

14 Now, when the -- if the plume of
15 contamination reaches the Ridgecrest well field, it's
16 also going to ping-pong into those other well fields
17 as well. And that reps about 44 municipal production
18 wells. So you're not faced with just maybe a possible
19 single loss of a single Ridgecrest well. You're
20 looking at potential contamination of the major
21 portion of Albuquerque's municipal wells here. So
22 that's what that is.

23 COUNCILLOR GARDUNO: Thanks for that, because I
24 didn't know what the dots meant. I assumed they were
25 well -- or at least wellheads.

1 Another question I had, and this is really
2 for my edification, but maybe other people would be
3 interested, too, I've attended almost every Kirtland
4 Air Force Base presentation on the fuel spill, and
5 it's always been sort of a -- what they call a
6 jellybean form. And, again, on your fifth -- Mr.
7 Chair, if I may ask this -- on the fifth page that you
8 handed out, the back, there's -- I don't know what
9 you'd call that. The shape is much larger than the
10 jellybean that they had, and it extends eastward.
11 What does that mean?

12 MR. MCCOY: Well, I spoke to a remediation
13 expert about that, and he said what that indicates is
14 when it has gone from the jellybean shape to this kind
15 of shape that it's becoming within the -- you know,
16 like the radius of influence of those Ridgecrest
17 wells, and you're getting this hydraulic movement of
18 that plume of contamination towards there.

19 So the indication here is that there may not
20 be decades, as some people would like to argue, to
21 wait to remediate this problem. This indicates an
22 accelerating movement of that plume towards the
23 Ridgecrest well field.

24 COUNCILLOR GARDUNO: Thank you. And the reason
25 I ask, Mr. Chair, and I think it's important that we

1 do ask Kirtland to, you know, come here more formally
2 and more often to present their position as to what
3 they're doing about this, and I go to every
4 neighborhood association meeting, and this is one of
5 the topics at Elder Homestead, at Siesta Hills, and
6 every one of those neighborhood associations in that
7 area, and I'm hard pressed sometimes to answer the
8 questions they have.

9 So I would appreciate it if Kirtland Air
10 Force Base were more forthcoming with that
11 information. So I don't know if we can just do this
12 as part -- kind of a pro forma part of the agenda or
13 how we can do that so that reports can be generated.

14 CHAIRMAN SANCHEZ: Okay. We have several other
15 speakers. Our next speaker.

16 MS. JENKINS: Henry Messerville, followed by Jim
17 McKay.

18 MR. MESSERVILLE: My name is Henry Messerville.
19 I'm an environmental activist from the East Coast,
20 Boston particularly. I've decided to come here for
21 several reasons. One of them is to work with
22 community people who are interested in the issue of
23 the jet fuel spill.

24 First of all, there are eight million
25 gallons of jet fuel sitting on our aquifer and moving

1 towards the Ridgecrest wells, as Mr. McCoy had
2 indicated, and other municipal wells.

3 Kirtland Air Force Base has acknowledged
4 that all the monitoring wells are contaminated by EDB,
5 a carcinogen with no acceptable limits threatening our
6 water supply.

7 According to the testimony, I've attended
8 several of the Kirtland Air Force Base meetings, and
9 according to the testimony last week, Colonel Connelly
10 says the Air Force does not have a current plan in
11 place to start remediation. After repeatedly
12 questioning him, he admitted that.

13 Also, the Air Force is not moving forward
14 with removing the jet fuel. At the March 12th
15 meeting, he was pressured, and, as I said, he did not
16 offer a backup plan. There was no backup plan in
17 place in the event that the wells are contaminated.

18 The contractor hired by Kirtland Air Force
19 Base, Shaw Environmental, is using a less sensitive
20 method of detection than the previous contractor, so
21 that the plume that Mr. McCoy just showed you is not
22 the plume -- is not the area of the plume -- the area
23 of contamination that Kirtland had shown us last week.

24 Kirtland Air Force Base was given notice
25 about the jet fuel spill in 1997 by hydrologist Dennis

1 McQuillen, and they did not alert the public until
2 2003. James Bearzi, who was the director of the
3 hazardous waste and in charge of making sure that they
4 did interim compliance, was reassigned by the
5 governor, and that was a political move.

6 We have no representation, and this is why
7 we are asking that the Water Utility's commission come
8 on board and become one of the stakeholders and
9 represent the people of Albuquerque, because this is a
10 tragedy waiting to happen.

11 CHAIRMAN SANCHEZ: Thank you. Your time is up.

12 MS. JENKINS: Jim McKay, followed by Joe
13 Wechsler.

14 CHAIRMAN SANCHEZ: Mr. McKay, welcome.

15 MR. MCCOY: Hi. Jim McKay. I've lived here
16 about seven years.

17 This is the largest spill in the history of
18 the United States that's affected a water supply for
19 population literally. That is a fact. By the
20 complexity of the problem to be solved, it's not being
21 addressed, the volume of water affected and how
22 dependent the population is here on that water. We've
23 been in drought for at least seven years, depending on
24 who you talk to. The federal climate people tell us
25 it's going to get worse. We are not going to be

1 getting more rain. That aquifer is it for
2 Albuquerque. That's it.

3 I wanted to say a couple things to you, Mr.
4 Garduno. I was going to say other things. But in
5 answer to the questions that you ask, a couple things.
6 That I'm aware, there have been 32, at least, toxic
7 spills in the United States on military bases. There
8 has not been one single successful cleanup, not one.
9 These things go on for 20, 30, 40 years. They all
10 have the same chronology. And it's not to make the
11 military wrong, but they just aren't good at this.
12 It's not what they're here to do.

13 One day passes, a few drops, the next day, a
14 few drops, a week, a month, a year later, it starts
15 seeping down, nobody's noticed. Nobody's noticed.
16 The reason I'm saying this to you now, Mr. Garduno, is
17 you ask questions that need to be answered. And they
18 need to be answered with evidence, convincing evidence
19 that's persuasive as to what's going on here. It's
20 not happening now. People are grossly misinformed as
21 to the severity of this problem, much less what it's
22 going to take to clean it up.

23 CHAIRMAN SANCHEZ: Thank you, Mr. McKay.

24 Next speaker.

25 MS. JENKINS: Joe Wechsler, followed by Marsha

1 Ogilvie.

2 CHAIRMAN SANCHEZ: Welcome.

3 MR. WECHSLER: Good evening. My name is Joe
4 Wechsler. I'm a civil engineer licensed in New
5 Mexico, which I say every time I come up here. You
6 guys got plenty of problems, and I just want to tell
7 you that there's -- the problem with the pumping into
8 the aquifer, the storage in the aquifer, was just
9 coming up, and the economics of it has not been fully
10 examined, as far as I know.

11 I'm trying to do my own research and my own
12 thinking and coming up with a cost of the actual
13 amounts of water, averaging between 2500 and 5,000
14 acre feet a year to be dumped into the aquifer and
15 then pumped out later when we need it. How much is
16 that going to cost us as opposed to keeping it stored
17 in Abiquiu? To do that, we have to know a lot of
18 information about Abiquiu, the water surface area, the
19 evaporation per year, which I believe is 60 inches at
20 that latitude and altitude. And this will be a
21 forthcoming study that I'm making with others,
22 coordinating with others.

23 It's a big operation and it has to be
24 thought about very carefully before we start putting
25 water into that aquifer, aside from the cost. And

1 that's all I want to say.

2 Also, there's a movie playing at the Kimo
3 tonight, The Texas Rangers, filmed in New Mexico in
4 1937, and it's actually showing -- it was filmed up
5 near Abiquiu, believe it or not. And some people
6 you'll remember from the old days.

7 CHAIRMAN SANCHEZ: Mr. Wechsler, thank you.

8 MR. WECHSLER: Okay.

9 MS. JENKINS: Marsha Ogilvie, followed by Elaine
10 Hebbard.

11 CHAIRMAN SANCHEZ: Welcome, Marsha.

12 MS. OGILVIE: Thank you. My name is Marsha
13 Ogilvie, and I'm a biological anthropologist here in
14 New Mexico. And I'm here today to ask the Water
15 Utility Authority to be my advocate for clean water.
16 I'm concerned about the legacy we're leaving for
17 future generations and I'm thinking that we need a
18 Water Utility plant and that the Air Force should pay
19 for it, because clean water is necessary for our
20 survival. Thank you.

21 CHAIRMAN SANCHEZ: Thank you for coming down.

22 MS. JENKINS: Elaine Hebbard, followed by
23 Geraldine Amato.

24 CHAIRMAN SANCHEZ: Welcome back, Elaine.

25 MS. HEBBARD: Hi. Thanks. My name is Elaine

1 Hebbard, and I'm an advocate for, I hope, better water
2 sanity. First of all, happy World Water Day. Today
3 is World Water Day, and the theme is water and food
4 security. And congratulations to the Water Utility
5 for achieving the less than 150 gallons per capita per
6 day, but with only two minutes, that's all I'm going
7 to say.

8 Currently, the customers are facing huge and
9 ever-widening gaps in infrastructure needs, as we've
10 seen by the asset management plan, steeply increased
11 debt obligations and a deficit between expenses and
12 revenues. At the same time, revenue may decline
13 because of conservation, and surface water supplies
14 may also decline due to climate change.

15 So rather than dwell on what I might say
16 with respect to Mr. Stomp's presentation on the water
17 resources management strategies, to be given at a
18 later date, time, or once again trying to convince the
19 board to not do away with the current drought
20 management strategy protections of the aquifer, I'd
21 like to use my limited time to urge the board to do
22 two things.

23 One, to refocus attention on non-revenue
24 water. It's currently about 13 percent, according to
25 the GCPD calculator that I was just reviewing of the

1 water produced. To give you some perspective, the
2 amount that we're putting into the aquifer or
3 proposing through the drought aquifer storage and
4 recovery is .02 percent.

5 The other point is that I'd like to invite
6 the board to join with me in creating a series of
7 community conversations throughout the service area to
8 discuss rates, revenue, use of the aquifer and all
9 these other good things that I think we need to be
10 discussing. I have covered this with a lot of other
11 folks as well and so I'd like to ask you to join with
12 me to create those. Thank you.

13 CHAIRMAN SANCHEZ: Thank you, ma'am.

14 MS. JENKINS: Geraldine Amato.

15 CHAIRMAN SANCHEZ: Councillor Garduno.

16 COUNCILLOR GARDUNO: Ms. Amato, if you don't
17 mind, I just wanted to ask, on the community
18 conversations, you're envisioning what, that the Water
19 Authority would be the lead or the host or the --

20 MS. OGILVIE: I was thinking that there would be
21 actually a group. I contacted Bruce Thompson from the
22 water resources program, and he thought that UNM and
23 the water resources program could also join with the
24 water assembly, the Utton Center.

25 I just thought of it this morning, sorry, so

1 I've only contacted about five or six groups. All of
2 them thought that it would be a very good conversation
3 for us to try to have a steering committee.

4 I'm envisioning getting together the week of
5 April 16th and planning for the series of the five.
6 And I'm thinking that each one would be scattered
7 throughout the region so that it would be in various
8 parts of each one of your districts, but it would
9 actually discuss different topics, with the focus on
10 how can we be more resilient fiscally and physically.

11 And by the way, it does fulfill Policy M of
12 the water resource management strategy, which talks
13 about an informed public contributes to the successful
14 implementation of water resource management solutions.
15 And it is the public that defines the values of the
16 region upon which the policies are based.

17 CHAIRMAN SANCHEZ: Thank you, ma'am.

18 Ms. Amato.

19 MS. AMATO: Unfortunately the public is not in
20 charge of how the resources of this nation are
21 distributed. And we also know that this body is a
22 subsidiary to the higher levels, so-called, of the
23 federal levels. So this body has no authority to
24 order the Air Force base to clean up anything. And
25 then you have Sandia Labs, as well, with an unlined

1 dump that's not being addressed either.

2 If the good people were in charge, as soon
3 as that plume was noticed, there would be immediate
4 action to remove whatever could be removed, whatever
5 technology was available in the present time.

6 You see what is happening? This has gone on
7 for years. They're going to hire some contractors to
8 do some more tests, but as far as addressing the
9 issue, that is not happening. Same thing with the
10 dump at Sandia Lab.

11 As a lower level, the other dichotomies that
12 happen around here, residents are told to water only
13 three times a week, for example, to conserve water.
14 So if you wanted to keep a garden, you couldn't do so
15 on three times a week in this climate, especially
16 during the drought.

17 Car washes go full force. I don't see a
18 dirty government car anywhere in town at any time. So
19 they must be ordered to take their cars to the car
20 wash on a regular basis. There's other ways of
21 keeping your cars from looking too tacky. I haven't
22 washed my car with water for years and it makes it an
23 acceptable showing and it's not filthy.

24 Intel and golf courses waste water
25 considerably and also pollute the water. And yet,

1 people are told with septic tanks in the county, that
2 their septic tanks are a threat to the water, and yet
3 all these other things are going on premeditatedly and
4 deliberately polluting the underground water, as well
5 as the river water.

6 And it's no wonder that there are more
7 outbreaks of toxic diseases from eating vegetables
8 when you have a sewage plant that needs a great deal
9 of upkeep. And if you throw raw sewage into the river
10 and somebody else irrigates with it downwind,
11 downstream there --

12 CHAIRMAN SANCHEZ: Thank you, Ms. Amato. Your
13 time is up.

14 MS. AMATO: Yeah, your time is -- you're so
15 interested in what the public has to say.

16 CHAIRMAN SANCHEZ: Thank you.

17 MS. AMATO: The most interesting part of these
18 meeting is the public comments here today.

19 CHAIRMAN SANCHEZ: Thank you.

20 Next item on the agenda is announcements and
21 communications. The next scheduled meeting is April
22 the 18th, 2012, at 5:00 p.m. in the Vincent E. Griego
23 Chambers.

24 The next item is Item Number 7,
25 introductions, the first reading of legislation.

1 COUNCILLOR GARDUNO: Mr. Chair, if I could. I
2 rarely correct anyone in public comment, but I wanted
3 to say Elaine Hebbard said March 21st. Actually, it's
4 March 22nd. March 22nd is World Water Day, and it was
5 begun or the first observation was 1993.

6 CHAIRMAN SANCHEZ: Thank you for that
7 correction, Councillor Garduno.

8 We are back on introductions. WUA R-12-7.
9 And Katherine Yuhas will make that introduction.

10 MS. YUHAS: Thank you. Mr. Chair, Members of
11 the Board, this is the first reading of the drought
12 management strategy update. I have just a few things
13 to go through for you since there are changes from the
14 previous strategy.

15 The reason for the update is -- there are
16 several reasons for it, and the first is that the
17 drought management strategy that's currently in place
18 was adopted in 2003, when the utility was a part of
19 the city. So many of the water usage reduction
20 methods that are in the strategy are powers that lie
21 with the city rather than with the authority. And so
22 it seemed appropriate to update those water usage
23 reduction methods to be things that could be enacted
24 by the Water Authority board.

25 Second, the drought management strategy

1 calls for updates every five years, so it's time to do
2 that. The new water resources management strategy was
3 adopted in 2007, and Policies C and D of that strategy
4 call for a drought management strategy, and this one
5 addresses that.

6 And finally, we've had two droughts since
7 the first strategy was adopted in 2003, the droughts
8 of 2006 and 2011. And we've learned a lot from both
9 of those droughts, and those lessons have informed the
10 update.

11 The customer advisory committee helped us
12 extremely in drafting this update. We met with them
13 in December of 2011 really for a brainstorming
14 session, where they helped us come up with what the
15 criteria would be for defining drought, how we would
16 enter it, and we've met with them again in February
17 of 2011, when we have really drafted the strategy, and
18 they went through it with us and worked through some
19 of the kinks and it's been updated again with their
20 input. We also issued a press release on this. It's
21 on our website, and, of course, it was available with
22 the agenda.

23 This drought stage criteria chart is really
24 the crux of the update, and so understanding how the
25 changes were made to this is important to

1 understanding the whole strategy. The previous
2 strategy only had one criteria for declaring drought,
3 and we've updated that. Now it's a dual criteria.
4 And once again, I want to recognize our customer
5 advisory committee. They're the ones who helped us
6 develop this chart. It was at their February meeting
7 that we got out the pens and the white board and
8 really put this together in the way it looks right
9 how.

10 Across the top is the criteria for
11 groundwater pumping. And down the side is the
12 criteria for our GCPD goal. Both of these criteria
13 will be measured in order to enter into the two
14 drought stages. When more than 50 percent of
15 Bernalillo County is in severe drought, we will be
16 making monthly updates to the board on both of these
17 criteria so that you will know where we are and we can
18 be taking the appropriate measures.

19 The first stage in drought is a drought
20 advisory. Those are the green boxes. The green
21 boxes, the drought advisory is just what it sounds
22 like. We just increase public education. We're just
23 out there with the public making them aware. And we
24 saw in 2006 and 2011 that that's a very effective way
25 for us to control water usage, and we have a really

1 well educated public. They respond well to that
2 message.

3 Then we move into further stages that start
4 to make mandatory measures important and required for
5 our customers if we're not able to achieve the savings
6 we want with just those voluntary measures.

7 I would say about the two criteria, as you
8 go across the top, when we are less than 120 percent
9 of our groundwater pumping goal for the year, then
10 we're in good shape. When we move into being between
11 120 and 130, that starts to move us into some of the
12 drought stages. And then we go to 130 to 140 and then
13 more than 140 percent of our goal.

14 As we go down the side of the chart, when
15 we're under -- when we're less than two GCPD over our
16 goal, then we're in good shape. And, again, it moves
17 down. When we're between two and four, that moves us
18 into Stage 1. When we're four to six, that's Stage 2.
19 And so they work together and you find where you are
20 across the top and where you are down the side, and
21 you meet in the middle to see what drought stage it
22 is.

23 Are there any questions about how these two
24 things work together?

25 One of the reasons we added in the criteria

1 for the GCPD for a customer behavior and usage is that
2 all of the methods for controlling water use lie in
3 the hands of our customers. And so by putting this
4 into our drought management strategy, it gives our
5 customers a lot of control about what's happening in
6 terms of mandatory drought restrictions.

7 The drought advisory, as I said, is the
8 first stage that we enter in the drought management
9 strategy, and we enter into that whenever the majority
10 of the Bernalillo County is in severe drought,
11 regardless of what water usage patterns look like.
12 And this is important. We can do that without
13 approval from the board. And the reason for that is
14 not to take control away from the board, of course.
15 It's to make us able to respond immediately and get
16 the message out to the public when we are in a
17 drought. And hopefully, by getting that message out
18 as soon as possible, we will avoid having to move into
19 some of the further strategies, the methods that are
20 mandatory.

21 First we have a Stage 1 that we'd into if a
22 drought advisory is not sufficient to keep water usage
23 under control, is a drought watch. The green that you
24 see on the screen, that's the public education piece
25 that came from the drought advisory. The two yellow

1 boxes show the drought reduction methods, water usage
2 methods, I should say, for this stage. The first is
3 to double fees for water waste. Water waste is
4 whenever customers are putting water out into the
5 street or watering at the wrong time of day.

6 And this is unique in drought management
7 strategies. At every drought stage, we have an
8 incentive for our customers that we are offering as a
9 positive way to help them do the right thing during
10 drought. At this stage what we're going to do are
11 offer drought smart classes. Customers who attend
12 this one-hour class would receive a \$20 rebate credit
13 on their bill. Right now, we offer a class called
14 water smart that offers a \$20 credit on the bill. The
15 structure for offering these classes already exists
16 and we have thousands of customers attend the classes
17 every summer. So we know this is something our
18 customers will do.

19 If a drought watch is not sufficient to
20 control our water use, we move into Stage 2, which is
21 a drought warning. Again, you know, there's the
22 increase in public education, there's the pieces that
23 existed from the drought watch, but now we're moving
24 into some much more stringent mandatory measures.
25 Surcharges would double. Surcharges are those

1 increases in the water bill that customers see when
2 they are increasing their use above their average
3 winter water usage. We also have the Water by the
4 Numbers program become mandatory. Right now, it's
5 just voluntary. So we would select the days of the
6 week that even customers would get, we would select
7 the days of the week that the odd customers would be
8 allowed to based on their address.

9 The time of day watering restrictions would
10 change; they would be expanded. Right now from
11 April 1st through October 31st, there is no watering
12 from 11:00 a.m. to 7:00 p.m. That would be expanded;
13 no watering from 9:00 a.m. to 9:00 p.m. There would
14 be no variances granted to the time-of-day watering
15 restrictions. Right now, if you are putting in turf
16 or reseeding your turf, you can ask for a variance to
17 the time of day restrictions so you can keep that
18 grass wet so that it will grow. Obviously, during a
19 drought is not the appropriate time to be putting in
20 new turf. So there would be no variances granted
21 except for athletic fields. We worked with the parks
22 department and APS and talked with them and there are
23 safety considerations if you don't have, you know, the
24 turf properly maintained on athletic fields. So that
25 would be the one exception there.

1 Finally, the positive incentive that we're
2 offering at this level will be a distribution of low
3 flow shower heads and shower timers and educating
4 about the need for five-minute showers. If you have
5 ever side to do that, a five-minute shower is not
6 easy, especially if you have long hair. But educating
7 our customers about this would be a great behavioral
8 change to bring about during a drought. It might not
9 be something we could achieve all the time, but we
10 could go for this.

11 And finally, if all of those measures are
12 not effective, we would enter a drought emergency.
13 Again, this keeps all of the other measures in place,
14 but now surcharges would triple. We would reduce the
15 Water by the Numbers program by one day per week. So
16 if it's July, and normally we would be saying water
17 three days per week, it would become mandatory to
18 water just two days per week. And, again, you know,
19 if we moved into October, when we're advocating
20 watering two days per week, then we would be cutting
21 people back to just one day.

22 And finally, the positive at this level is
23 that we'd offer a 20 percent reduction rebate. And
24 that's a rebate for signing up to voluntarily reduce
25 your usage by 20 percent. Exactly how that would be

1 structured would depend on what time of year we were
2 enacting this part of the strategy. But what I hope
3 is that our customers will do a great job and we will
4 never be in the position of dealing with this drought
5 emergency.

6 Finally, my last slide, just quickly, looks
7 at the anticipated savings from each water use
8 reduction method at the various stages. And you can
9 see that, you know, we have an increase as we move
10 through the drought stages. There is a difference as
11 we move through the drought stages. There is a
12 difference in the blue block, which represents
13 education. That drops off in the drought warning and
14 drought emergency. It's the bottom block and it's
15 kind of a royal blue color. And the reason it gets
16 smaller when we move to the drought warning and
17 drought emergency is that we have already increased
18 public education at the drought advisory and drought
19 watch stages. And if public education didn't work for
20 us at those two levels, then we don't think it's going
21 to work particularly well for us in the future. We've
22 already given the customers the message very heavily
23 and now we're not expecting such big savings there.

24 For all of these savings reduction methods,
25 we've looked at other cities and the savings that they

1 were able to achieve and we've tried to be as
2 conservative as possible in making our estimates so
3 that we will be pleasantly surprised when we save
4 more.

5 Thank you.

6 CHAIRMAN SANCHEZ: Thank you, Ms. Yuhas.

7 Are there any questions?

8 Let's go ahead and proceed to the consent
9 agenda. There are no items on the consent agenda this
10 evening.

11 And we move next to approvals. And the next
12 item is going to be WUA R-12-8. That is authorizing a
13 grant with the State of New Mexico for security
14 surveillance at south side water reclamation treatment
15 plant.

16 Mr. Sanchez.

17 MR. SANCHEZ: Mr. Chair, quickly. We were
18 notified that we were eligible for a Homeland Security
19 grant in the amount of \$200,000, which we applied for.
20 We anticipate receiving it. It is basically to
21 enhance security at our south side reclamation
22 facility. It would basically allow us to buy a camera
23 system for the perimeter.

24 CHAIRMAN SANCHEZ: I'd like to move WUA R-12-8.

25 COMMISSIONER DE LA CRUZ: Second.

1 CHAIRMAN SANCHEZ: We have a motion and a second
2 by Commissioner De La Cruz.

3 Councillor Garduno.

4 COUNCILLOR GARDUNO: Mr. Sanchez, so this will
5 be connected to what entity, the county sheriff, or
6 how's it going to be -- I know it's going to be
7 monitored, but how would people react?

8 MR. SANCHEZ: Mr. Chairman and Councillor
9 Garduno, we have our own security monitoring system,
10 so it would be integrated into that system. It's
11 simply enhancing the security we have currently at the
12 south side reclamation facility.

13 COUNCILLOR GARDUNO: And tell us why that's
14 important. I mean, I think I know what you said it's
15 for.

16 MR. SANCHEZ: It's basically to avoid a
17 terrorist attack or something of that nature.

18 COUNCILLOR GARDUNO: Thank you.

19 CHAIRMAN SANCHEZ: Thank you, Councillor
20 Garduno.

21 Okay. We have a motion and a second on the
22 floor. All those in favor, signify by saying yes.

23 ALL MEMBERS: Yes.

24 CHAIRMAN SANCHEZ: Opposed, say no.

25 That carries unanimously.

1 (5-0 vote. Agenda Item 9 approved.)

2 CHAIRMAN SANCHEZ: Next item is other business,
3 Item 10. The first item is water conservation update.

4 Ms. Yuhas.

5 MS. YUHAS: Mr. Chair, Members of the Board,
6 since you have cupcakes and commemorative glasses, you
7 already know what the good news is, that we achieved
8 our water conservation goal three years early and have
9 an extra two billion gallons of water in the aquifer
10 as a result of that, which is fabulous for our
11 customers. I wish I could give all of them a cupcake.

12 What I would like to go through with you,
13 and this is a little tedious, to please bear with me,
14 is why we achieved the conservation savings that we
15 did this year. As you know, there's a census done
16 every ten years. This is the year that we started
17 using the updated census data from 2010. The new way
18 in which we calculate GCPD, according to the office of
19 the state engineer, means that every ten years we will
20 have a correction year, like this year.

21 The way we calculate GCPD is we take the
22 amount of water we produce, which is all of our system
23 wells, all of our non-system wells, non-system wells
24 are those that are at golf courses and parks, water
25 that's being used by our community but isn't going

1 through our pipes, the northwest service area, our
2 surface water diversion and our shallow groundwater
3 reuse, so truly, all of our production added together,
4 and then that's divided by our population. And
5 there's a change in our population figures for this
6 year. And that's for two reasons that were in the
7 census data. And that is that the 2010 census showed
8 us that vacancy rates went down from 7.7 percent in
9 2000 for a single-family residential homes, to
10 6.4 percent in 2010. So that's a big reduction. Less
11 people buying new homes. People are moving into the
12 old houses.

13 The other thing that we saw is that the
14 people per household went up, which is unique.
15 Usually in censuses what you see is that number
16 continuing to go down as the economy expands, less
17 people per household.

18 In the 2000 census, which is the data we had
19 been using, there were 2.4 people per household.
20 That's been increased to 2.45. So those two factors
21 caused us to have an increase in our population of
22 about 27,000 people 2010 and 2011. Now, really, those
23 people have existed, you know, for that whole decade
24 that we haven't been counting them because we were
25 using the old census. But the state engineer's method

1 requires us to use the census data, so that's why this
2 happens.

3 Are there any questions about the
4 calculation, how that works, before I move on?

5 CHAIRMAN SANCHEZ: Councillor Garduno.

6 COUNCILLOR GARDUNO: Katherine, I'm not that
7 good at math, but it seems like you have a lesser
8 number of gallons produced in 2011, greater number of
9 people, and yet the number is less. How does that
10 happen?

11 MS. YUHAS: All of those things are correct. We
12 produced about a hundred million gallons less water in
13 2011, and then we divided that by a greater number of
14 people, 27,000 more people. And so that results in a
15 lower GCPD.

16 COUNCILLOR GARDUNO: But for my -- of course
17 we're talking what, six points?

18 MS. YUHAS: It is. It's about six gallons per
19 person per day different.

20 COUNCILLOR GARDUNO: I guess you're right. I
21 don't have a calculator in front of me, so I'm going
22 to have to defer to your calculator.

23 MS. YUHAS: Oh, thank you. I appreciate that.
24 I used the calculator from the office of the state
25 engineer, so really, I'm pretty sure they're correct.

1 Now that we have achieved this goal of 150
2 gallons per person per day, our plan for 2012 and
3 going into 2013 is to hold neighborhood meetings and
4 town halls to talk with our customers about where we
5 should go from here.

6 And so I was very heartened to hear
7 Ms. Hebbard saying that that was something she was
8 interested in doing. So it's great to know that we'll
9 have an interested community when we get out there.

10 We'll also have an online survey for our
11 customers who aren't able to get to any of the
12 meetings. And I am going to be meeting with
13 stakeholder groups in particular, separate from these
14 neighborhood and town hall meetings, to get their
15 input.

16 So what we'd like to do is have this big
17 public process take place and bring to you a new water
18 conservation plan in early 2013.

19 CHAIRMAN SANCHEZ: Go ahead and proceed,
20 Councillor Garduno.

21 COUNCILLOR GARDUNO: Ms. Yugas, so what you're
22 saying is you're going to go out to the public and
23 outreach to them. But this is going to be more than
24 just showing them what has happened. Rather, it's
25 going to be an interactive or inclusive meeting, as

1 Ms. Hebbard talked about. Folks, not only experts in
2 the field, but folks who are just curious and want to
3 know and may have some really good ideas.

4 So is that the process you're talking about
5 also?

6 MS. YUHAS: Mr. Chair, Councillor Garduno,
7 that's exactly what we're looking for, is that public
8 input, public response, what do we want Albuquerque to
9 look like, how do we want to get there, what kind of
10 savings do we want to achieve, how quickly all of
11 those things, and I think our customers are going to
12 have great input on that. I know they will.

13 CHAIRMAN SANCHEZ: Go ahead and proceed.

14 MS. YUHAS: I just have a couple more slides
15 about the drought so that you're updated on where we
16 are. The slide you're looking is the U.S. drought
17 monitor from March 6th. That has since been updated
18 last week, but the update looks exactly like there
19 slide.

20 If you look at Bernalillo County, what
21 you'll see is that it is about half yellow and half
22 tan. The yellow is the part of the county that is in
23 D-0, which is about normally dry conditions. And the
24 tan part is the part that is in D-1, which is moderate
25 drought. Both of these are drought conditions that we

1 enter into fairly easily during the spring when we
2 have such dry, windy weather.

3 This next slide shows our water production
4 in comparison to 2011. The blue bars are 2011, the
5 green bars are 2012. The important thing to note is
6 that the green bars are shorter. We're actually
7 producing less water this year than we did last year,
8 by about 9.3 percent for the first two months of the
9 year. I don't have all of March's data yet, but the
10 preliminary data that I've looked at seems to track
11 along with this. We are continuing to use less water
12 in the month of March than we did in March of 2011.

13 What these two pieces of data are showing us
14 is that the drought is easing, water use is down. The
15 drought advisory is due to expire on April 1st. I
16 just got an update on predictions for the La Nina
17 conditions from the National Weather Service this
18 afternoon. And predictions are that La Nina will end
19 sometime in April or May and we will be back to
20 neutral conditions. Neutral conditions are what bring
21 us our average precipitation and average temperatures.
22 And so predictions are that by the summer, we will be
23 back to our regular weather patterns. So maybe we'll
24 actually have a monsoon season this year.

25 So with that, I'm not recommending that you

1 extend the drought advisory.

2 CHAIRMAN SANCHEZ: Thank you, Ms. Yuhas. And
3 thank you for all your work. I appreciate all your
4 effort and energy. And also the staff at the Water
5 Authority.

6 Okay. The next item is going to be water
7 resource management strategy update. And Mr. John
8 Stomp will present that.

9 Welcome, John.

10 MR. STOMP: Mr. Chairman and Members of the
11 Board, tonight I want to give you just kind of a
12 history of where we were 25 years ago, it's hard to
13 believe it's been 25 years, an update on the
14 activities that we're doing today and some of the
15 challenges we're going to have into the future. It's
16 hard to imagine, but back in 1987 -- and I'm going to
17 move as quickly as I can with the slide, so I
18 appreciate your patience. Back in 1987, one of our
19 groundwater hydrologists started looking at the
20 aquifer and comparing what the state engineer had
21 predicted would happen to the aquifer related to our
22 pumping, as compared to what was actually happening.
23 And that's when the first signs began to show that our
24 understanding of the aquifer and relationship to the
25 river were wrong.

1 Back then, we used to think the river was
2 directly connected to the aquifer so that every drop
3 that we pumped from the aquifer would be resupplied by
4 the river. And now we only know about half of what we
5 pump from the aquifer is being resupplied by the
6 river. And we also know there's going to be a point
7 at which we draw down the aquifer, and that land
8 that's being supported by both the dirt and the water,
9 once you take away the water, the land begins to sink.
10 And that's called land surface subsidence.

11 And that's a real phenomenon that's happened
12 in places like Tucson. Downtown Tucson, for example,
13 has sunk about 6 inches in the last 20 years from
14 their pumping. And there's other areas in the
15 southwest. We obviously don't want to get to that
16 point, which is why we're doing all of the unique
17 things that we're doing. And Katherine talked a
18 little bit about conservation.

19 So if you took a picture of the underground
20 water table and you connected the lines of equal
21 elevation underneath Albuquerque, this would be a
22 picture of what the aquifer looked like back in 2002.
23 And so you can see that there's a cone of depression
24 that's been created on the east side of Albuquerque,
25 centered somewhat around Los Altos Golf Course on

1 Interstate 40, and we also have a pumping cone of
2 depression on the west side. And in that far
3 northwest corner, you can see those elevation contours
4 coming close together. That's the effects of Rio
5 Rancho's pumping in the middle valley.

6 And so obviously this is not a sustainable
7 strategy. We're lowering the aquifer and we're
8 getting close -- we were getting closer and closer to
9 that land surface subsidence.

10 Back in 1963, we signed a contract for San
11 Juan Chama water, and this is a picture of the actual
12 San Juan Chama project in a GIS form. The San Juan
13 Chama water is imported Colorado River water, so it's
14 not native to the Rio Grande. And it's actually
15 brought into this basin through a series of tunnels
16 underneath the Continental Divide, the largest tunnel
17 being a 12-foot diameter tunnel going through the
18 mountains, 12 miles long. And the water is moved to
19 Heron Lake. So Heron Lake stores water from our San
20 Juan Chama project, and then that water is released
21 down the river, the Rio Chama, to Abiquiu, where we
22 store that water.

23 So this -- we've been paying for this water
24 since 1971. We have a 50-year repayment contract, so
25 that contract for construction repayment ends in 2021,

1 but our annual obligation to pay for the cost of this
2 project to continue operating is in perpetuity. We
3 get 48,200 acre feet a year from this project, so it
4 represents a very large percentage of our water
5 resources portfolio.

6 This is the drinking water project, where we
7 actually put that San Juan Chama water to use. It
8 began operation in 2008, and it represents the future
9 of Albuquerque. This is our primary water supply.
10 And it takes water from the river, I'll have a picture
11 of that, just south of Alameda Boulevard. It treats
12 it at the water treatment plant and then it's
13 distributed throughout Albuquerque. We've been using
14 this since 2008, and as I said before, this is our
15 primary drinking water supply. So people ask us a lot
16 of questions: You have a lot of debt in your
17 portfolio. Why do you have a lot of debt?

18 Well, we had to pay for this long term water
19 supply project and so it was an investment into our
20 future. This project itself cost about \$450 million,
21 and it's being paid for by our rate payers. And so
22 this provides the background and the supply that other
23 entities in the southwest, and specifically in the
24 middle Rio Grande, do not have.

25 So what is the strategy? It's a picture on

1 the following slide that shows it's a combination of
2 conservation, reuse and recycling, and then
3 transitioning to our surface water supplies. And the
4 whole point of this strategy is to reduce our effect
5 on the aquifer, to preserve and protect the aquifer
6 for future water supply. That's the entire intent of
7 what we're doing and what we're investing in. And so
8 conservation is a large part of it, reuse and
9 recycling, I'll talk a little bit about that. I
10 showed you to drinking water project. And then
11 there's that little triangle there called "new sources
12 of supply."

13 So even though we meet all our conservation
14 goals, and now we're talking to go beyond that, there
15 still is some component of new supplies that are
16 needed way out in the future. In this picture, it's
17 shown in 2050, but as those conservation goals go
18 lower and lower, that triangle will move out further
19 and further. But the need is still there.

20 This is a picture of our water conservation
21 strategy. And in terms of where we've been, it
22 started actually in 1995. I know Katherine talked a
23 little bit about reaching the goals. But we were the
24 largest water user in the southwest. We used more
25 than 250 gallons per person per day. In 1995, we

1 actually pumped 40 billion gallons in 1995. Katherine
2 showed you that we pumped about 34 billion last year.
3 So 17 years later, we're using a lot less water with a
4 lot more population, and that's what's shown on this
5 picture here. The red shows if we would have
6 continued to increase our use as we had in the past.
7 The black actually shows our usage, and then you see
8 kind of a breakdown of what that usage represents in
9 terms of reuse, surface water and groundwater, the
10 green being our strategy goal. And as Katherine said,
11 we've met our goal and we're going to be establishing
12 a new goal.

13 Some of the reuse strategies, we already
14 have two different reuse projects that are in
15 operation since 2003. One uses a little bit of chip
16 rinse water from the Sumatomo company, and then that's
17 blended with San Juan Chama water, and that provides
18 all of the irrigation supplies in the Northeast
19 Heights and the North Valley. We have the south side
20 reuse project, which I'll show you a little picture.
21 That's coming online in about a month actually. And
22 then we have other reuse projects where we're looking
23 at the West Side. But reuse is a big component of our
24 strategy because obviously it's one resource in our
25 portfolio that we already own, and just continuing to

1 put it to reuse, again, takes the pressure off the
2 aquifer.

3 So these are the sites that will be served
4 in the south side reuse project. We have the UNM
5 Championship Golf Course, Mesa del Sol, Puerto del Sol
6 Golf Course, Albuquerque International Sunport, a
7 whole host of other parks and golf courses, UNM sports
8 complex and so on. This project is under construction
9 and we're finalizing the construction at the south
10 side plant and it should be in operation in just a
11 very short period of a few weeks now. It's been under
12 construction for about a year.

13 We've also looked at reuse potential on the
14 west side of Albuquerque. We purchased land by the
15 bosque school to build a reuse wastewater treatment
16 plant in the future, and there's a whole host of sites
17 on the west side, like Ladera golf course, Desert
18 Greens Golf Course, and now the new APS facility
19 that's going to be on the West Side. That also is a
20 target for reuse into the future. So we need to
21 continue to move forward with this reuse, and we're
22 looking for federal opportunities to get additional
23 funding for this reuse, West Side being the primary
24 goal right now.

25 This is an aerial picture of the surface

1 water treatment plant. And I just wanted to
2 highlight. We've been kind of criticized for not
3 having operational goals for the drinking water
4 project, but we did establish operational goals. And
5 the idea was that initially we would ramp up the
6 project very slowly, and that would be because of
7 potential water quality concerns and also learning
8 about how to run the plants and the staffing and the
9 training and all the stuff that goes with it. And
10 then in 2011, beginning last year, it's basically our
11 primary source of supply. So we run the water
12 treatment plant as our primary source of supply and
13 when we reach a point at which the surface water is
14 not enough, then we start to supplement with
15 groundwater.

16 But as you know, and Katherine talked about
17 the drought management strategy, there's now a
18 provision in the drought management strategy where we
19 would come before this board and we would present
20 those operational goals on a year-by-year basis. And
21 Katherine showed the relationship between the use of
22 groundwater and the drought management strategy. So
23 those operational goals will provide the foundation
24 for you to make decisions about how to move forward on
25 droughts, for example.

1 Why aquifer storage and recovery? We've had
2 a lot of meetings and discussions about why ASR is so
3 important for us. And it's a huge, huge benefit for
4 Albuquerque to use our water, for us to use our water,
5 to store it underground and to preserve and protect it
6 from future evaporation and loss. And so some of the
7 policy goals are outlined there. But it does provide
8 us an opportunity to meet that future need. And then
9 when droughts come about, we can count on the water
10 that we've put in the aquifer during this ASR program
11 to help make up for that offset of that additional
12 pumping that we might incur during the drought.

13 We have a couple of projects that we've
14 already implemented. I think you guys are aware of
15 the Bear Canyon project, which is up on Spain and
16 Wyoming, where we're putting nonpotable water into an
17 arroyo and letting it soak directly into the ground.
18 That project was very successful. We did that for a
19 couple of years. We were able to store about
20 1100 acre feet of water. It's a small amount of
21 water, but still, really important. The next step is
22 to implement a large-scale project. And we have a
23 large-scale project planned right at the water
24 treatment plant.

25 But how is this going to operate? So this

1 is a picture of our actual usage. And you have time
2 on the bottom, so January through December. And you
3 can see that our usage increases in the summer months
4 and decreases in the winter months. People understand
5 that. But in terms of the capacity of the water
6 plant, we have gaps where the demand is less than our
7 capacity at the water plant. So we want to take that
8 additional capacity at the water plant, treat that
9 water and then store it in the ground during the
10 wintertime. We can pump it out the following
11 summertime, or we can hold it into the ground for a
12 period of time to make up for that pumping that occurs
13 in the summertime. So it's a way of balancing our
14 supplies without having to build huge excess capacity
15 at the water plants. That's one reason.

16 So this would be like a typical operating
17 schedule. And you can see from left to right we have
18 the capacity of the plant and the facility capacity,
19 in the bottom, and you have the recharge. So over
20 time, as population increases, and basically that
21 winter demand increases, we have less and less water
22 in those shoulder months, in the winter amongst, to
23 put water into the ground. And so this is just a
24 depiction of how that would change over time.

25 So why ASR? Well, there's a lot of reasons

1 to do aquifer storage and recovery, and one is to
2 reduce evaporative losses. And so here's kind of
3 technical drawing but it's kind of nice looking, too.
4 But in this scenario, we're that we had 10,000 acre
5 feet of water. And if we had that 10,000 acre feet of
6 water sitting in Abiquiu, and we are letting it
7 evaporate in Abiquiu, and we imagine that evaporation
8 over a period of time, that's what the squiggly lines
9 are. And so Abiquiu evaporates about 6 feet a year,
10 but that's based on how much water is actually in
11 Abiquiu. So the less water in Abiquiu, a little bit
12 less evaporation, more, there's more evaporation. So
13 you can see how much we would lose in just a short
14 period of time is the squiggly line. So you start
15 with 10,000 acre feet, if you imagine the blue line,
16 and over a course of about five years, we've lost
17 4,000 acre feet from that same amount of water sitting
18 in Abiquiu. If we put it in the ground, we have that
19 initial loss as it makes its way to Albuquerque, we
20 treat it and then we put it in the ground, and we have
21 about 9,000 acre feet. So just in this simple
22 scenario of starting with 10,000 acre feet, we've
23 saved 3,000 acre feet of the water or 30 percent of
24 the water by not storing it in Abiquiu and putting it
25 into the ground, where it's not going to evaporate.

1 And so it's a simple concept but the idea is that use
2 the aquifer as a storage reservoir, as it really is a
3 storage reservoir, as opposed to aboveground storage
4 that continues to evaporate.

5 Again, this is a picture of the surface
6 water plant. And the idea would be to drill a couple
7 of wells at the plant. We did get a lot of feedback
8 at the December 3rd public forum that we had that was
9 sponsored, and Commissioner De La Cruz led that
10 effort, and we talked about what particular ways
11 should we do it. We have a direct injection where
12 we're going to actually put -- drill wells all the way
13 down to the aquifer, put that water directly into the
14 aquifer.

15 One of the comments that was are brought
16 forth at that meeting is, well, infiltration provides
17 additional treatment. So there is kind of a
18 combination well that you can do where you can put an
19 injection well but only go about halfway down, and
20 then let the water soak into the ground, as it would
21 if you used an infiltration pond. That was one of the
22 comments that was brought forth at the December 3rd
23 meeting. We're looking at that concept because it has
24 potential benefits for cost savings, but also some
25 treatment benefits. That may be one of the things

1 that we implement that came out of the public meeting,
2 and there's other issues that came out of the public
3 meeting, too, that were very beneficial for us.

4 Mr. Wechsler talked about the economics of
5 the aquifer storage and recovery. And this is just a
6 very quick picture of what that would look like. This
7 is in no way, shape or form supposed to be a complete
8 cost benefit analysis, but just a simple analysis. If
9 ASR cost us \$5 million, a one-time cost, and we were
10 able to put in about 2,500 to 5,000 acre feet of water
11 into the ground a year, over about 20 years, which is
12 about the life of that well, that cost to us would be
13 about \$100 an acre foot.

14 If we had to buy that same amount of water
15 rights in the open market, assuming a value of about
16 \$12,000 an acre foot, which is significantly lower
17 than what we've been paying, but just assuming for
18 conservative purposes that's the number, that same
19 amount of water rights would be about \$600 per acre
20 foot. So it's not intended to balance all the costs,
21 but it does know that there's a clearly a benefit for
22 us to use our water and to put it into the ground as
23 opposed to continuing to buy and rely on other's water
24 rights at the same time.

25 As I said before, this is a picture of the

1 diversion damn in the fish way. You can see that's
2 just south of Alameda Boulevard. This is where we
3 take the water out of the river, and then we allow the
4 fish to move freely about the damn there, which is the
5 fish way on the outside, this is for those of you that
6 have never been there, have never had an opportunity
7 to see it from the aerial. You can sort of see the
8 diversion damn, it's a light white line across the
9 page right in front of the intake structures. But
10 just a nice picture of that.

11 And then, our wastewater treatment plant
12 treats about 55 million gallons a day. And it is a
13 water resource and it is part of our water budget and
14 part of our portfolio. A lot of people would like to
15 think of effluent as just something you need to clean
16 up and get rid of it as quickly as you can, but in
17 fact, this becomes a very huge part of our portfolio
18 in the future.

19 I showed an aerial picture there, that's the
20 plant that we're going to be upgrading. And I think
21 you guys aware of the upgrades that are going to be
22 done there. And then a picture of the effluent
23 channel. But the idea is that we have a huge
24 portfolio of water rights and water resources.
25 Effluent coming out of the plant is part of that.

1 So in terms of the water strategy, the
2 strategy was originally adopted by the city council in
3 1997. You adopted a new strategy after a town hall
4 meeting in 2007. And now we're talking about how do
5 we fill in that triangle, how do we get future water
6 supplies. Water conservation is going to continue to
7 be there. Katherine talked about the drought
8 management plan. We're going to need to evaluate the
9 effects on climate change and what that's going to do
10 to the surface flows in the middle Rio Grande and the
11 impacts on the San Juan Chama project, more reuse.
12 And so the idea is, let's develop is a water budget
13 model that allows us to use dynamic simulation in an
14 effort to try to balance all of those different needs
15 to figure out where we're going for the future.

16 So we get contacted by T-bone Pickens about
17 once every year or so, wants to pipe in water from
18 Amarillo. He continuously gives us a call and says,
19 "Hey, I got this water, buy it from me. It's this
20 value." And we have no way of really actually
21 comparing that value of that water rights from
22 Amarillo. Of course, people on the Ogallala would
23 really upset if they found out he was doing that, but
24 he's doing that on a regular basis.

25 And so the idea is, how do we use this water

1 budget model as a tool to compare these different
2 alternatives that we're faced with when people come
3 with us, and should we continue to purchase our pre
4 '07 water rights and at what cost does that cost to us
5 that it's too expensive and maybe we don't need to do
6 that anymore.

7 So the purpose of the model is look at the
8 timing of available supplies and compare all the
9 challenges that we have like global climate change and
10 what effect does that have on our future needs and how
11 does it affect that future triangle that I talked
12 about earlier. Should we do more ASR? Should we use
13 this as a way of actually doing our reporting?

14 And we have developed a draft model, which
15 represented to the customer advisory committee, and
16 we're using a dynamic simulation approach so that we
17 can look at all the interrelationships between supply
18 and demand and the uncertainties that go with it. And
19 we're trying to develop a model that's easy to use and
20 something that's part of our daily use so that we can
21 make sure that we use the model in the future. These
22 are just a couple of slides of what the model looks
23 like. And at some point in the future, we'll need to
24 do a presentation when we think the model is up to a
25 point which you would like to see a picture of that.

1 Finally, I'd like to show a picture of kind
2 of where we were and then some of the things that are
3 happening. This is a picture of that same aquifer
4 that I showed you before. There's little red dots all
5 over the place. And that's the network that we've
6 created to monitor the water levels in the aquifer.
7 We've spent about \$30 million installing these
8 networks of wells throughout the middle valley to try
9 to make sure that we can monitor the changes over time
10 and what the effect of our work and other people's
11 work are on the system.

12 We also modeled with this the USGS to try to
13 figure out if the drinking water project is
14 implemented over a period of time and based on the
15 simulated hydrologic scenario, what would the aquifer
16 change. And this picture shows that we believe the
17 aquifer is going to rise as much as 25 feet and could
18 rise as much as 40 feet in the middle of Albuquerque
19 as it relates to our conservation reuse and getting
20 off the aquifer with the drinking water project.

21 Well, the next slide shows what happens in
22 some of these wells. And as I talked about this
23 network of wells, I just took a snapshot of some of
24 these wells to kind of show you what's happening over
25 time. The Nor Este well is located right next to La

1 Cueva High School, Montessa is near Montessa Park, and
2 so on. I'm not going to tell you where all the wells
3 are, but the point is, you can see a little picture of
4 how the gradient has changed over time. You can see a
5 downward gradient, and then when the drinking water
6 project comes online in 2008, you start to see a
7 change.

8 And the next slide is another representation
9 of where these monitoring wells are. And you can see,
10 and we picked out some of these wells where you've
11 seen significant changes in the water level underneath
12 Albuquerque. One of the wells that I showed you
13 before, Nor Este, has jumped eight feet in elevation.
14 And so the aquifer was at a certain elevation; now, as
15 we begin, it's starting to rise.

16 And so what the USGS model predicted and
17 what we were hoping was going to happen is actually
18 happening. And it's happening very rapidly, actually.
19 Some of the monitoring wells, we talked about
20 Kirtland Air Force Base jet fuel plume, some of those
21 monitoring wells, we've seen the aquifer rise as high
22 as 3 feet in the last few years. So what we're doing
23 is working, and the huge investment that this board
24 and a few previous boards have made to our future
25 water supply is actually working. And it provides for

1 our sustainable supply for the future.

2 This is a snapshot, the next two slides are
3 just -- the question that we get asked all the time:
4 What happens to the downstream users? You guys are
5 using your water. What's happening in that reach?
6 And so we have the diversion that happens at Alameda
7 Boulevard. We return the water back at the Southside
8 Water Reclamation Plant, and then we have our
9 continuing effects on the river. And this first slide
10 is just a simple depiction. If we just continue to
11 use groundwater and only groundwater, how much
12 depletion would occur downstream of Albuquerque, and
13 that's the dash line. And the blue line represents
14 what happens in 2020 by implementing the drinking
15 water project. And the picture shows that there's
16 going to be more water in the river as a result of our
17 using our San Juan Chama water than if we didn't. And
18 that makes a lot of sense, because we're substituting
19 our native water use, which is the groundwater, with
20 imported San Juan Chama water, the water that doesn't
21 come from this basis.

22 And the next picture shows a huge difference
23 in the flows and -- in the river, and you can see by
24 2040, you're going to see a huge change in the amount
25 of water that's available in river downstream of

1 Albuquerque. And that, again, is the blue line. And
2 the difference between the blue and the dash line is
3 15 cfs, so that's like 30 acre feet a day. But even
4 during times of drought, which is the red line, when
5 we're not completely off the surface water, we're
6 going to begin to see even more water in the river
7 during those times of drought. So the drinking water
8 project, doesn't -- not only does it not have an
9 impact on the river downstream, but it has a positive
10 impact on the user downstream because we are
11 transferring our depletions and our uses to our
12 imported San Juan Chama water, which is, again, was
13 started back in 1963. So we're just implementing the
14 plans of dreams that people had back in the 1960s, and
15 now you guys are realizing the benefits from that
16 work.

17 I'll be glad to answer any questions, Mr.
18 Chairman.

19 CHAIRMAN SANCHEZ: Are there any questions?
20 Councillor Garduno.

21 COUNCILLOR GARDUNO: Since you mentioned the San
22 Juan Chama water diversion and the fact that it comes
23 from another aquifer, another watershed, how long --
24 remind me here again, tell me, when does that end,
25 that arrangement?

1 MR. STOMP: The contract the a perpetual
2 contract, there's no end date to it. It's all based
3 on the available amount of flow, so there may be years
4 that we don't get the complete amount that we had
5 contracted for, but that's no end date.

6 COUNCILLOR GARDUNO: But there could be a time
7 when folks in that watershed say, "Sorry, we can't
8 supply you any more because we're needing it here"?

9 MR. STOMP: Well, Mr. Chairman and Councillor
10 Garduno, there's certain legal protections that the
11 San Juan Chama project has. It was authorized by
12 Congress in conjunction with the Navajo Indian
13 irrigation project. Those two projects are actually
14 congressionally tied, where they share in the
15 available supply and they share in shortages.

16 So I think there's been protections that
17 were made by Congress, and it is part of New Mexico's
18 share of the Colorado River. And so from a legal
19 standpoint, New Mexico gets 11.25 percent of the
20 Colorado River. This is part of that. So from the
21 Colorado River standpoint, we're entitled to this
22 water, as all the upper basin states are, and we're
23 just using our share of that water. It comes from San
24 Juan River, and there's been a lot of people that have
25 been upset about that over the years, but the project

1 is needed and it's served its purpose for which it was
2 authorized for back in the '50s.

3 COUNCILLOR GARDUNO: And that's Colorado River
4 available to New Mexico?

5 MR. STOMP: Yes, it is.

6 COUNCILLOR GARDUNO: Not Albuquerque or --

7 MR. STOMP: Mr. Chairman and Councillor Garduno,
8 no. The Colorado River is for the State of New
9 Mexico.

10 COUNCILLOR GARDUNO: So someone else in the
11 state can claim part of that 11 percent?

12 MR. STOMP: Mr. Chairman and Councillor Garduno,
13 they do. There are other allocations of that Colorado
14 River to other users, including the Navajos, the
15 Jicarillas and other users on the San Juan River, and
16 now there's going to be a pipeline that's being built
17 to move water from the San Juan River all the way down
18 to Gallup. So the majority of the water that New
19 Mexico gets flows in the San Juan River, and there's a
20 lot of the users that depend on it.

21 COUNCILLOR GARDUNO: So there could be a
22 diminishing return in the sense that more users want
23 more of that 11 percent? The drought reduces that
24 11 percent to a less amount, so there could be a time
25 when we get considerably less than what we're getting

1 now?

2 MR. STOMP: Well, Mr. Chairman and Councillor
3 Garduno, this hydrologic studies that were done for
4 the San Juan Chama project predicted that there would
5 be times of shortage, and, in fact, in 2002, we saw
6 less water come through the tunnel than in the history
7 of the project. So we're going to see ups and downs
8 with the project, and there may be times that there's
9 no water in Heron Reservoir, and there's why these
10 conservation and reuse and making sure the aquifer
11 stays in shape is so critical to us, because it
12 becomes our drought strategy for the future.

13 So whatever surface water we get, we will
14 use. If we don't get our full allotment, we have
15 other opportunities to, you know, reuse some more
16 conservation. And, of course, if we have to go to the
17 aquifer, we will. That's not what we want to do,
18 that's what we're trying to avoid, but if that's what
19 we have to do in the short term, then we will do that.

20 COUNCILLOR GARDUNO: Mr. Chair, but there -- I
21 guess I need to ask it again so I can understand.

22 There will be a time when drought,
23 shortages, allotment, all of these things, there will
24 be a nexus where Albuquerque or the Water Authority
25 here will be at a really diminished position?

1 MR. STOMP: Well, Mr. Chairman and Councillor
2 Garduno, that's going to happen on a yearly basis. I
3 mean, the hydrology changes in the southwest all the
4 time. Heron has several years worth of water stored
5 in it, so we would have to have a really long period
6 where water never -- where we never had any snowfall
7 in the San Juan basin. That's never really happened,
8 but that doesn't mean that it can't happen.

9 Our purpose of our strategy is to make sure
10 that we have a drought management in place with the
11 aquifer. Our previous estimate was for a
12 ten-year-long drought, and I think the water resources
13 management strategy policy allows us to look beyond
14 that ten years at what -- how much water is actually
15 in the aquifer, how much could a sustained drought
16 actually be now that we understand a little bit more
17 about climate change.

18 So yes, the answer is we could get less
19 surface water, there could be years we get no surface
20 water. But in general, I don't think the hydrology is
21 such that we would never get any San Juan Chama water
22 unless there's some renegotiation of the Colorado
23 River compact and New Mexico doesn't get any share of
24 that at all, which I don't really envision that
25 happening.

1 COUNCILLOR GARDUNO: Well, and I think that
2 would be an important topic maybe to talk about in
3 these public forums, conversations, discussions,
4 because some of the things that I hear, you know, and
5 you can pay as much attention to that as you want, is
6 that there could be a time when the Colorado compact
7 becomes null and void or at least changes
8 significantly, so that the Colorado River now is being
9 diminished by other users that haven't been
10 traditionally using it are going to cut down on the
11 11 percent that we get.

12 And I think that we ought to have some of
13 those discussions to make sure that perpetually we do
14 have some use of that water. There may come a time
15 when the downstream users of the Colorado, like
16 Mexico, might say, "No," I mean, "we need water to
17 flow into the Sea of Cortez, and you folks aren't
18 allowing it," and, yeah, that sort of thing. So those
19 are discussions that I think need to happen.

20 MR. STOMP: I agree.

21 COUNCILLOR GARDUNO: Thank you.

22 CHAIRMAN SANCHEZ: Thank you, Mr. Stomp.

23 Thank you, Councillor Garduno.

24 Commissioner De La Cruz.

25 COMMISSIONER DE LA CRUZ: Thank you, Mr.

1 Chairman.

2 John, the assumption is it's a good thing to
3 recharge the aquifer. Have you found that there's any
4 problems with recharging it and the water rising to a
5 level that -- or is there a level that would not be
6 necessarily good?

7 MR. STOMP: When we're actually injecting -- I'm
8 sorry. Mr. Chairman and Commissioner De La Cruz, when
9 you're actually injecting water into the aquifer, you
10 actually begin to see a mounding effect, and that is
11 because you're putting more water into the aquifer
12 than the actual dirt will allow, and so it's kind of
13 like your faucet being clogged over a period of time,
14 it just doesn't drain as quickly. And that's what
15 happens with the wells.

16 But over time, that mounding effect
17 subsides, and so it gets into the aquifer. And so
18 you've got to be very concerned about that. You don't
19 want to be injecting water where you have a potential
20 problem where you could get into somebody's basement
21 or something like that with the mounding. So that's
22 why you put the monitoring wells in place, to do that.

23 We're never going to reach the pre-basin
24 levels that were in place long before we ever started
25 pumping. That's hundreds of feet and billions of

1 gallons of water that have been take out of the
2 aquifer. And so I don't see a point at which we own
3 enough water to put into the aquifer that's really
4 going to change, you know, the dynamic. Most of the
5 recharge comes from the river and it will continue to
6 come from the river as long as the river has water in
7 it.

8 COMMISSIONER DE LA CRUZ: Have you heard that
9 there may be a problem at Atrisco Little League
10 because of the groundwater being too high at this
11 point?

12 MR. STOMP: Mr. Chairman and Commissioner De La
13 Cruz, I did hear that there was a situation with a
14 pond that was maybe dug a little bit deeper than it
15 should have been that got into the water table. We
16 are seeing rising water tables, but the water tables
17 I'm talking about is really the deep aquifer.

18 The shallow aquifer, I think, is where
19 you're talking about. And the shallow aquifer does go
20 up and down depending on pumping and irrigation season
21 and so on. It tends to rise in the winter and drop in
22 the summer. But our pumping levels in the -- what
23 we're talking about is really 500,000 feet below the
24 aquifer. So I don't think our pumping had anything to
25 do with that. I think that's just the local shallow

1 groundwater effect, and maybe they just excavated the
2 pond deeper than they probably should have.

3 COMMISSIONER DE LA CRUZ: The pond was put in
4 sometime in the middle to late '90s, and I was
5 director of park and recreation when it occurred. It
6 was put in by the City of Albuquerque. And I can tell
7 you that there are two lower fields, they call them
8 the lower fields because they are in that pond area,
9 and they were to become wet basically if you had a
10 significant rain event. And the notion was that
11 within 24 hours, any water that would be put into that
12 pond would be drained within that time frame. And, of
13 course, to dry naturally thereafter.

14 I can tell you that there's never been water
15 on those fields outside of those rain events, but now
16 there is water on some of those fields. And I think
17 there's an idea that because maybe the Water Authority
18 has been pumping a well nearby that it's saturating
19 some of that lower fields, some of those lower fields,
20 I should say. And it's a problem for the children
21 obviously, because Little League season is about to
22 start, and if those fields are too wet then it's a
23 problem.

24 And so I don't know if anything can be done,
25 but I'd like to ask that you look into it a little bit

1 and see if there's something that can be done, and if
2 there is a well that maybe for the season could be
3 activated, to drop that just a little bit. If you
4 would look into that, I'd really appreciate that.

5 MR. STOMP: Mr. Chairman and Commissioner De La
6 Cruz, I'll look into that and I'll report back to you.

7 COMMISSIONER DE LA CRUZ: Thank you. The
8 families and the children of that Little League, and
9 there are about 700 children that use that -- it's
10 going to be a problem to take two fields offline. So
11 we've been out there with our county public works,
12 city folks, public works, and everybody seems to think
13 that it revolves around the idea that we've been -- we
14 haven't been pumping, which is a good thing, but can
15 be a problem for the children and the parents and
16 families.

17 MR. STOMP: I'll take a look at it, Mr. Chair.

18 COMMISSIONER DE LA CRUZ: Thank you, Mr.
19 Chairman.

20 CHAIRMAN SANCHEZ: Thank you, Commissioner De La
21 Cruz.

22 Mr. Stomp, thank you very much.

23 The last item on the agenda is Item C, ten
24 C, that's the water protection advisory board, the
25 2011 annual report. And to present that report will

1 be Lawrence Barela.

2 Welcome, Mr. Barela.

3 MR. BARELA: Thank you.

4 Okay. My name is Lawrence Barela. I'm the
5 chairman for the water protection advisory board for
6 2012. I'll be giving you a status briefing of our
7 work for 2011. This briefing is going to be a status
8 briefing, it's not going to be a technical briefing.
9 I'm not going to show any equations, any charts, any
10 flows. I'll give you an idea of what we did for the
11 year, what we've accomplished, what our plans going
12 forward will be. So I have some slides, and then I'd
13 like to give you some other things that we would like
14 you to consider, and then I'd like to conclude with
15 staff kudos.

16 Let me go back to this first slide. Just to
17 refresh your memories, we're all volunteers, none of
18 us are paid. We have regular assignments, regular
19 jobs. We show up second Friday of each month. We do
20 what's called a review and comment process. So the
21 PIC, policy implementation committee, assembles a
22 series of agenda topics, to include groundwater
23 protection, surface water protection, point source
24 contamination events, storm water events, the Los
25 Conchas fire, Laundromats, a lot of the point sources.

1 So our -- to give you a framework, what our board
2 meetings are like, they're a review and comment on
3 technical matters. Our product would be either no
4 comments or perhaps a letter to the Authority.

5 So on behalf of the other nine members, we'd
6 like to say thank you again. There are nine of us
7 that are appointed to this board, three from the city,
8 three from the county, two from the authority, one
9 appointed jointly by the county and the authority and
10 the city. So let me get started.

11 The board was formed in 1993. We have a
12 couple of charters that we'd like to go over. One of
13 the charters is -- I'm going to keep it really simple,
14 past, present and the future. So we're looking at
15 things that occurred in the past, we're looking at
16 things that occurred in the present and we're looking
17 forward as to what could harm or threaten our water
18 supply.

19 One of the major documents that you guys had
20 established prior to me getting involved in this is
21 the GPPAP. When I read it, it looks like it was a
22 groundwater document and a surface water document.
23 Apparently there were two of them. I think you guys
24 wanted to have one report, hence, this report.

25 Earlier I mentioned there are nine of us.

1 We're fully staffed. Everybody shows up to our
2 meetings. We've only had one cancellation, so we're
3 pretty effective in assembly and in reviewing and
4 commenting.

5 Our goal is to look at the groundwater
6 issues, surface water issues, provide some -- be the
7 advocates for the citizens of Albuquerque and to
8 promote interagency cooperation.

9 Our charter -- our basic charter is to study
10 and advise, give you an opinion. It could be
11 technical, it could be an opinion from a private
12 citizen, it could be a disagreeing opinion, favorable
13 opinion, a dissenting opinion. But we are your
14 advisors from the perspective of the City of
15 Albuquerque, the citizens that live here. All of the
16 board members live in Albuquerque. A few, I think,
17 live in the east mountain areas; they show up.
18 They're the advocate for that part of the city, as
19 well as the South Valley, North Valley and the
20 surrounding community.

21 The other purpose of our charter is to
22 oversee the plan, make sure that plan is being adhered
23 to. We'll view it and advise, and if we think there's
24 a deficiency, we'll point out that deficiency to the
25 Authority.

1 The other component of our charter is to
2 promote consistency, make sure that the left hand
3 knows what the right hand is doing. We monitor that
4 activity. We've looked at org charts, we've looked at
5 the state org charts, we've looked at the city org
6 charts, the county org charts, making sure that any
7 changes to those org charts, that everybody that would
8 be affected by that change understands that change.

9 The last bullet is we're your advocate.
10 We're the advocate for the citizens. So pretty much
11 anything is fair game at our meetings. Topics are
12 technical, health related. What we don't address is
13 sustainability issues. We're focused on water
14 quality.

15 2011 activities. Let me do a quick timeout
16 here and get prepared a little bit. So we kind of
17 broke it down in a couple of areas. Emerging topics,
18 interagency, interbasin, collaboration efforts, rules
19 and regulations, surface and storm water quality
20 issues, and then contamination type of activities. So
21 with regard to emerging topics, one of the things that
22 we've been looking at is Chromium 6. The state of
23 California is looking at the concentration levels
24 there. There's a move afoot to kind of understand how
25 that would impact City of Albuquerque. There's a

1 sample program looking at pharmaceuticals and seeing
2 how that -- those materials are entering into the
3 system, so we've reviewed several presentations in
4 that area.

5 In terms of the interagency, interbasin
6 collaboration efforts, EPS established a permitting
7 requirement based on some scientific studies with
8 members from the National Academy of Science. It's
9 involving 20 entities. We endorse further cooperation
10 with that permit.

11 There's a mapping project. I think it's
12 being conducted by Bernalillo. We endorse that as
13 well. There's the PIPE program, looking at making
14 sure those people who are of low income can hook up to
15 the city sewers. We encourage that as well.

16 With respect to rules and regulation, I
17 think one of the most notable ones is the septic
18 tanks, the 30-year requirement. There was a deadline
19 of 2015, I believe some residents on the east side of
20 Albuquerque had voiced their concern at several
21 council meetings saying maybe you should change that.
22 I think there's some changes with the 2015 deadline.
23 As far as the board is concerned, we think that there
24 should be a deadline, and there should be some
25 activity associated when the property changes

1 ownership and then make sure that those septic systems
2 are working correctly, and if not, then it should be
3 corrected.

4 Surface and storm water quality, PCBs is
5 something we're looking at. We've had several
6 presentations there. I think the county put together
7 a fantastic presentation, giving us an idea and flavor
8 of what's actually occurring, where that contamination
9 is coming from. So we've looked at that.

10 Everybody, I think, is well aware of the Los
11 Conchas fire. So we had the forest service in, USGS
12 staff. I'm not sure if some of the -- a staff member
13 from the Authority or the county, but we had numerous
14 presentations as to what that fire could possibly do
15 to the water supply here in Albuquerque. Forest
16 Service did an outstanding job in articulating the
17 threats. Mr. Stomp gave a fantastic presentation on
18 what he would do if a contaminant was coming our way.
19 So we feel that prudent action has been taken on
20 behalf of the Authority, so we're not concerned about
21 that issue at the present moment.

22 Groundwater sites. Obviously there's been
23 much discussion about the Kirtland plume. We've had
24 numerous presentations. We've had technical
25 presentations talking about vertical, horizontal,

1 lateral size of the plume. I think at the last -- or
2 several meetings prior to this one, there was some
3 presentations about the technology, the treatment
4 systems, the remediation, calculations used to assess
5 that plume. As far as the board is concerned, we
6 think there's a lot of work that needs to be done in
7 that area. And at the end of my presentation, I'll
8 give you some things to consider in that regard.

9 Accomplishment, continued. MS-4 permanent
10 storm water, I think we -- well, I know we sent you
11 guys a letter saying, hey, we'd like you to make sure
12 that you support that effort, make sure that all the
13 entities within the government here in Albuquerque,
14 city, county, the Authority adhere to that plan. It's
15 something we endorse.

16 The wastewater ordinance systems, you had
17 that old septic systems, that issue. A number of
18 studies again have shown that that is a significant
19 contributor of pollutants to the water supply. It's
20 pretty basic in large communities where you're
21 geographically dispersed. Septic systems make sense.
22 As the population density starts shrinking and
23 collapsing in on itself, it doesn't make sense and it
24 doesn't make sense when you have septic systems and
25 you have access to city sewer. So it's something that

1 we'd like you guys to continue to monitor; as well, we
2 will continue to monitor that.

3 Kirtland is another activity. It's -- I'm
4 not going to do a lot of details. We're going to
5 continue to meet with the base. The board is also
6 considering elevating the level of participation.
7 From the management, there's a two-star general that
8 is the highest ranking officer there at Kirtland.
9 Administratively, the colonel runs the base, but in
10 terms of public interaction and authority, and for the
11 board's benefit, in the military, rank is king. Rank
12 is how things are established. That two star can
13 speak on behalf of the U.S. Air Force and he can also
14 speak on behalf of the plume. So something to
15 consider there is possibly coordinating with him. And
16 perhaps that would help us reach a quicker resolution
17 on this issue.

18 Looking forward, our 2012 priorities, pretty
19 basic. Again, we're a review and comment. We develop
20 our own agenda. In a minute I'll give you some
21 statistics how we do that. But the number one
22 priority, stated again, is Kirtland. We're going to
23 aggressively look at that. We're going to perhaps
24 write a letter to the general and say we don't want to
25 talk to a colonel, we want to talk to a general. We

1 want to get his perspective, his opinion, as well as
2 the colonel's opinion, and his staff and the technical
3 director that's managing this problem.

4 In terms of the surface protection
5 implementation insurance, we are going to be looking
6 at some storm water surges and some best management
7 practices to address that. That's on our agenda
8 topics for the upcoming year.

9 Intergovernmental coordination, again, we're
10 going to watch the MS-4 permit, make sure that people
11 when engaging in that activity, that all agencies that
12 are responsible not to just include the City of
13 Albuquerque proper, if you will, but the other
14 agencies that are feeding into this basin, so we want
15 to continue to monitor that activity.

16 Data sharing, we want to make sure that
17 those people and those agencies that have data, that
18 they have given that data, they share that data, the
19 data is transparent. We would like to encourage cost
20 effectiveness where you can, make sure that if there's
21 information dealing with point source flows,
22 contaminant or past best management practices, that
23 other agencies know about it. So we encourage that
24 data sharing.

25 The last slide is basically a thumbnail of

1 your website. And the little arrow there is just
2 pointing to the two reports that we've published.
3 I've brought a copy. This is our report here.
4 Unfortunately, it doesn't have a signed cover letter,
5 but in the future, we're going to post a signed cover
6 with that as well.

7 That concludes what I would call the formal
8 presentation and the summary. So I'd also like to
9 just close with a couple of comments, things that we'd
10 like you to consider. In fact, I would say 50 percent
11 of the things I'm about to say have been fully vetted
12 with the other board members. But the Kirtland fuel
13 spill, most of you have been to all of the technical
14 meetings. You've got Shaw Environmental, you've got
15 New Mexico EMD, or the environment department. You've
16 got our own hydrologists, your own scientists.

17 What we're starting to sense is there's a
18 lot of energy being focused on remediation. Great.
19 That's okay. What we need to start thinking about is
20 worst case. What if this stuff gets into our system,
21 what if these calculations are wrong, what if they've
22 made the wrong assumptions.

23 I've sat, in my career, over hundreds of
24 technical briefings. And I guarantee you, something
25 always doesn't pan out the way we'd like. So with

1 that said, if you look at worst case, and I'm going to
2 make a stretch here, there could be a filtration
3 system, some type of neutralizing agent, but the point
4 I'm trying to make is we need to start thinking in
5 worst case. We could look at models all day long. We
6 could look at formulas all day long. But we need to
7 start looking at a comprehensive, cohesive strategy to
8 solve this challenge.

9 The other thing is you guys have an org
10 chart on your website: taxpayers, the board, the
11 executive director. What I think is missing, this is
12 just an observation for your consideration, is to
13 include the two advisory committees in that org
14 structure. I don't know if there's some legal issue
15 associated with that, but the point there is that I
16 think Mr. Garduno you had some questions about a town
17 hall meeting and how we engaged the public, if it
18 would be the proper forum for this board, the board
19 that I represent, to host a town hall meeting of that
20 nature.

21 I think we started with what I would call
22 baby steps and letting people know that these advisory
23 boards exist. It's on the website, but I think it
24 needs to be highlighted so that people can see that
25 it's there, it's part of the organization and it's --

1 I don't want to use the authoritative party of the
2 organization, but it's a part of the organization and
3 it has a vote. And it does represent the citizens of
4 Albuquerque.

5 With regard to a town hall meeting, and I
6 apologize if I sound like I'm putting you on the spot,
7 we all gather and we all talk and we talk about the
8 meetings that occurred at the city council, and it was
9 expressed to me that you had a concern about how we
10 get information out to the community. I don't think
11 the board is ready to do a town hall meeting, and I
12 want to tell you why.

13 Our board meetings are technical, technical
14 presentations with questions and answers and questions
15 and answers. As the board, we deliberate as to what
16 topics we think need to be elevated to the authority.
17 If we put that in the town hall meeting context, I
18 think it would be too hard for me to manage. We will
19 look at some options to help address that, and if you
20 give us some time, we will report on that later.

21 The other thing I'd like to throw out there,
22 or I'd like to tender for your consideration is
23 obtaining the opinion of the medical professional here
24 in the City of Albuquerque. And it goes back to my
25 other comment about thinking worst case. You have the

1 University of New Mexico, which is one of the best
2 medical institutions in the country, and I'm not
3 saying that just because I went there, but it is. We
4 need to start engaging those folks, getting them in,
5 getting their perspective. Start that now, start it
6 early. Bring them on board. You've got a lot of
7 smart people there, we should use them. And it's
8 their community as well.

9 I skipped a little bit here. I want to give
10 you some statistics. We did 11 out of the 12
11 meetings. So that's good thing. The plan, the
12 WQPPAB, is 43 pages long. I have encouraged what I
13 called the other board members to read it. Some have
14 read it and some have not. We're going to reengage
15 that activity and make sure it's doing what it was
16 meant to do.

17 Interesting tidbit, 56 percent of the
18 current board members hold Ph.D.s, that's a good
19 thing. Most of those individuals are environmental
20 scientists. 67 percent hold technical degrees. We
21 had 22 presentations which resulted in review and
22 comment, which resulted in four letters to the
23 Authority. We're fully staffed. The 2011 report is
24 online.

25 And I wanted to highlight one of the

1 presentations that we had from the CDC. They have a
2 subagency called Agency for Toxic Substance and
3 Disease Registry. My understanding is they're the arm
4 of the CDC that handle RCLA, CERCLA issues associated
5 with health effects associated with contaminants. The
6 connection we're trying to make here is that there's
7 another government source that we can leverage to help
8 solve this Kirtland challenge that we're faced with.

9 The last thing I'd like to do is give some
10 kudos. And without the names of the following people,
11 my job would be a lot harder. So I always think it's
12 prudent to recognize the staff that contributes to the
13 success of the board.

14 First, Barbara Gastian does a great job for
15 us. Jane De Rose Baman, Katherine Yuhas, Allen
16 Porter, Kevin Daggett, Mary Lou Leonard, Billy
17 Gallegos, Alex Mora, George Schroeder, Sarah Holcrum,
18 Bart Faris, Katherine VerEecke, Mary Murnane, Dan
19 McGregor, Anita Steed, Doreen Johnson and Veronica
20 Carrillo.

21 And I saved the best for last. Rick Sheen
22 has done an outstanding job for us, helped me get
23 prepared for this, helped me understand the technical
24 issues. He's timely, very good at what he does. He
25 gets us prepared for all of our meetings. So I want

1 to acknowledge him as a special kudo. He does a great
2 job, so I'd like to acknowledge that.

3 That concludes my presentation. Are there
4 any questions?

5 CHAIRMAN SANCHEZ: Are there any questions?
6 Commissioner De La Cruz.

7 COMMISSIONER DE LA CRUZ: Thank you, Mr.
8 Chairman.

9 Not necessarily a question, but I just want
10 to thank you, Lawrence, for your service and, of
11 course, the service of all the other board members.
12 They're an absolute important piece that keeps us
13 connected not only to the community, but you function
14 as a technical as well as a facilitator and
15 coordinator with the large community. So thank you so
16 much for your service.

17 Thank you, Mr. Chairman.

18 CHAIRMAN SANCHEZ: Councillor Garduno.

19 COUNCILLOR GARDUNO: Thank you, Mr. Chairman.

20 I also wanted to thank you for being at a
21 lot of those meetings that Kirtland Air Force Base has
22 had, and also at the Coalition 6 meetings that we hold
23 quarterly. Kirtland does come and talk to us, and
24 you've been present at those I think every time.
25 Thank you for that.

1 But let me ask you a couple of things that
2 you brought up in your presentation. One of them was
3 septic tanks and how that's -- other folks have said
4 it, too, that they're a threat to groundwater, they're
5 a threat because of the nitrates. And I thought that
6 the county was looking at helping with that. Is that
7 something that you've heard or -- and Mr. De La Cruz
8 can maybe weigh in on that, too.

9 MR. BARELA: In terms of understanding the
10 threat?

11 COUNCILLOR GARDUNO: Ameliorating the problem,
12 maybe finding some kind of funding to get rid of those
13 septic tanks or bring them up to code or whatever
14 needs to happen.

15 MR. BARELA: It's my understanding that bringing
16 up the septic system would be the responsibility of
17 the homeowner.

18 COUNCILLOR GARDUNO: Right. But some folks
19 can't afford it, so hence the problem.

20 MR. BARELA: Are you talking about the
21 incorporated or unincorporated?

22 COUNCILLOR GARDUNO: Unincorporated.

23 MR. BARELA: Okay. I think that --

24 COUNCILLOR GARDUNO: It's mostly I think Tijeras
25 and Carnuel and --

1 MR. BARELA: Actually, there's two different
2 issues. There's the one issue about septic tanks
3 within the city, within the -- in the incorporated and
4 then the unincorporated. I believe there is some
5 funding available to help those individuals.
6 Unfortunately I don't have access to that data, so I
7 can't give you a good answer on that.

8 COUNCILLOR GARDUNO: Right. Well, and it's one
9 of those interesting situations where like you say,
10 it's an individual responsibility, but it's affecting
11 the larger community, if you will.

12 MR. BARELA: So it's a question of equity
13 fairness?

14 COUNCILLOR GARDUNO: Well, yeah, and also
15 availability of funds for those people to be able to
16 correct that. And I'm not saying that the WPB should
17 be doing that, but what would be a suggestion to
18 ameliorate that? Has the board talked about that? I
19 know this board hasn't.

20 MR. BARELA: Give me one second. I have some
21 notes there. The only thing that we did talk about is
22 something -- what we termed equity fairness. There's
23 obviously a group of socioeconomic backgrounds where
24 some people can afford it and some people can't. It's
25 something I think that hinges outside the scope of the

1 board that I'm leading.

2 Well, I take that back, in terms of the
3 financing, it's a little bit -- it's border lining on
4 the scope of what we're looking at. Obviously we'd
5 like them to hook up to city sewer. How we get them
6 to do that is a different task. Our only endorsement
7 would be to encourage that they do that.

8 COUNCILLOR GARDUNO: And, Mr. Chair, I think
9 sometime back, Councillor Harris introduced some
10 legislation that -- I don't know if it was mandate,
11 but it was a strongly suggested policy that everyone
12 get rid of their domestic wells and start getting
13 service from the utility. And that's in the city.

14 And I'm wondering if we can do that if we
15 can't do the other, and tell people you can't have
16 septic tanks unless they're up to code, or if they're
17 not up to code, come kind of funding needs to be
18 found. I don't know how the board would interact with
19 that, but...

20 MR. BARELA: Quite frankly, I wouldn't know how
21 to address that issue. I can bring it up to the -- as
22 an agenda topic at our next board meeting and get
23 their opinion. There's nine of us that have a better
24 sense of what the mechanics would be to address that.

25 COUNCILLOR GARDUNO: Right, and it seems, I

1 don't know if appropriate, but since you do have some
2 technical folks on the board, I think that would be a
3 great place to have this discussion, because they
4 would know more about it than lay folks that are even
5 on this board. So I would appreciate it if that were
6 a topic that was brought up.

7 MR. BARELA: Certainly we can do that and I'll
8 make it a point that we address that question.

9 COUNCILLOR GARDUNO: And I don't know if this
10 falls under your purview or under whom it falls, but
11 storm water monitoring, apparently we don't do that,
12 neither the city nor the county. And that apparently
13 is a tremendous source of contamination to the river
14 because there's no catch point at which --

15 MR. BARELA: That also will be another agenda
16 topic for us to look at. It's my understanding that
17 somebody was looking at the storm water.

18 COUNCILLOR GARDUNO: And this is not to say that
19 it's been a neglected point on the part of the board.
20 But I think everybody has sort of dropped it and sort
21 of said, "Well, it's not our fault. You know, it just
22 came from the sky and we don't get to monitor that."
23 And I think we should.

24 MR. BARELA: Agree. And as far as the board is
25 concerned, pretty much everything is fair game if it's

1 threatening the water and the quality of that water,
2 and we will address it. So that will be another thing
3 we look at.

4 COUNCILLOR GARDUNO: And I would appreciate just
5 from an edification point of view, if that could be
6 discussed, and why we don't have a monitoring system.
7 City, county, Water Authority, I don't know, and it's
8 just a question that's been asked of me and I can't
9 answer it because --

10 MR. BARELA: We'll certainly look at it and
11 obviously coordinate with the authority.

12 COUNCILLOR GARDUNO: Great. And, again thank
13 you very much for the work at Kirtland Air Force Base.
14 I absolutely agree with you that it's a danger, it's
15 is a cause that all of us need to be thinking about.
16 And it's not only going to affect the Southeast
17 Heights, which is an area that I represent, but it's
18 going to affect a lot of things, and heaven forbid
19 that it extends to a larger extent than we even think
20 today.

21 As you said, we need to start kind of
22 closing in on how we're going to address this, really,
23 if not dangerous, certainly, you know, an issue that's
24 been going on for a long, long time that we have not
25 dealt with. And I really appreciate your strong words

1 about that.

2 Mr. Chair and Lawrence, thank you so much
3 for the presentation and the advocacy.

4 MR. BARELA: If there are no further questions,
5 I'll conclude.

6 CHAIRMAN SANCHEZ: Councillor Garduno, it looks
7 like you set up the next agenda for the water
8 protection advisory board meeting.

9 And, Lawrence, thank you very much for all
10 of your work, and also your board members. I do agree
11 with you that this should be part of the
12 organizational chart for the Water Authority. You
13 know, I think you've got some really good, quality
14 people on that board that understand, you know, many
15 of the issues, the technical issues, and we can work
16 on that inclusiveness and bringing you in as part of
17 the organizational chart.

18 MR. BARELA: Great.

19 CHAIRMAN SANCHEZ: Thank you for all your time.

20 MR. BARELA: Thank you.

21 CHAIRMAN SANCHEZ: Are there any other
22 questions? If there's no further questions before
23 this board, this meeting is adjourned.

24 (Proceedings adjourned.)

25

1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO

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6 I, Kelli Gallegos, New Mexico Provisional
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