



Agenda

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WATER CONSERVATION COMMITTEE MEETING

CITY HALL - 200 LINCOLN AVE.

CITY COUNCILORS' CONFERENCE ROOM

TUESDAY, September 13, 2011

4:00 PM TO 6:00 PM

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES August 9, 2011 WATER CONSERVATION COMMITTEE MEETING

INFORMATIONAL ITEMS:

5. Water audits follow up: Santa Fe Community College student interns. (Laurie Trevizo)

DISCUSSION ITEMS:

6. Discussion on recommending the Council consider more severe water restrictions.

MATTERS FROM STAFF:

MATTERS FROM THE COMMITTEE:

ITEMS FOR NEXT AGENDA – TUESDAY, October 18, 2011:

ADJOURN.

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Tuesday, September 13, 2011

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**MINUTES OF THE
CITY OF SANTA FE
WATER CONSERVATION COMMITTEE
Tuesday, September 13, 2011
4:00 p.m. to 6:00 p.m.**

1. CALL TO ORDER.

A meeting of the Water Conservation Committee was called to order by Councilor Christopher Calvert, Chair, at approximately 4:00 p.m., on September 13, 2011, in the City Council Conference Room, City Hall, Santa Fe, New Mexico.

2. ROLL CALL

Roll call indicated the presence of a quorum as follows:

MEMBERS PRESENT

Councilor Christopher Calvert, Chair
Melissa McDonald, Vice-Chair
Reese Baker
Lisa Knouse
Tim Michael
Grace Perez
Giselle Piburn
Doug Pushard
Karyn Schmitt
D.H. Strongheart
Stephen K. Wiman

OTHERS ATTENDING

Dan Ransom, Water Division
Laurie Trevizo, Water Division
Brian Snyder, Public Works Director
Melessia Helberg, Stenographer

There was a quorum of the membership in attendance.

The Chair asked everyone to introduce themselves.

3. APPROVAL OF AGENDA

MOTION: Stephen Wiman moved, seconded by D.H. Strongheart, to approve the Agenda as published.

VOTE: The motion was approved on a voice vote, with Doug Pushard and Lisa Knouse absent for the vote.

4. APPROVAL OF THE MINUTES: AUGUST 9, 2011, WATER CONSERVATION COMMITTEE MEETING

MOTION: Giselle Piburn moved, seconded by Karyn Schmitt, , to approve the minutes of the meeting of August 9, 2011, as presented.

VOTE: The motion was approved on a voice vote, with Doug Pushard and Lisa Knouse absent for the vote.

Doug Pushard arrived at the meeting
Lisa Knouse arrived at the meeting

INFORMATIONAL ITEMS

5. WATER AUDITS FOLLOW UP: SANTA FE COMMUNITY COLLEGE STUDENT INTERNS. (LAURIE TREVIZO)

Mr. Pushard said the idea is to se up a Residential Leak Detection and Home Water Use Program. He said we were to do two things since the last meeting. One was to talk to the SFCC College and the second was to do some audits to see what it would take to provide audits and to train he and Grace to do these audits.

Mr. Pushard they did 3 audits, noting he and Grace can now do audits. He said in every house they audited they actually found something which would save water, which was surprising to him. The audit takes about an hour. He said he and Grace agree that this should lead to a simple external audit – to see if they have an irrigation controller, a rain detector or an ET controller because they have rebates on those – but not a full audit.

Mr. Pushard said it is about water conservation but it is also about education. He said it was interesting to do the audits. He said having a packet to give them about rebates would be beneficial. He said there is an issue as to how much information gets back to the City, and he was less sensitive to that issue prior to doing this audit. He is now extremely sensitive to this issue, and said somehow we need to work through what information is shared with the City.

Responding to Mr. Strongheart, Mr. Pushard said there are a lot of people who are afraid the City is going to know what they're doing. He said he and Grace agree this will cut down the number of people wanting the audit, and there are things we can do that would alleviate this problem.

Ms. Perez agrees this is something we can work out, and there is a way to walk a line where people are comfortable giving us the Data.

Ms. Trevizo reported on the proposed partnership with the Santa Fe Community College [SFCC], commenting the Community College is very excited about this. She said it can be done as a professional project for 3 credit hours, with 50 hours of work per 1 credit hour or 150 hours of work to be performed. She said there are packaged internships with an objective and a deliverable outcome in terms of the number of audits done and a professional paper or report.

Ms. Trevizo said the SFCC is willing to partner on grant opportunities, noting educational institutions are allowed to apply, and the money could be used for stipends.

Ms. Trevizo said the City will look into issues surrounding student interns, noting they have worked for other City offices in the past.

Mr. Pushard said there is good linkage with the SFCC, and they are interested in this program.

Mr. Pushard said he and Grace will now work on a grant application, along with Mr. Ransom and Ms. Trevizo. He said they will put together some of the literature and prepare a packet for handout.

The Committee commented as follows:

- Mr. Strongheart said the barrier is that there is nobody to teach classes or to build the curriculum for the class. He said when Randy Grissom comes back from vacation, he will help to structure the curriculum. He said right now the description of the class in the catalogue is vague because of these reasons.

- Chair Calvert said right now the class doesn't exist, but it is in the catalogue.
- Mr. Pushard said it could be available in the Spring if we go to work right now.
- Responding to Ms. Schmitt, Mr. Pushard said we can use Mr. Ransom's checklist.
- Chair Calvert said it is the one in the packet, commenting that this checklist has been used for several years, so there is a lot of new information to be included. He asked if we will customize the audits to the customer.
- Mr. Pushard said it will be a standard checklist, nothing complex, and they will look at about 5 items.
- Ms. Piburn noted that Homewise had an audit it used, and asked if this could be used for our purposes.
- Mr. Pushard said he can get that information, but it is more extensive than what we want to do.
- Responding to a question from Ms. Schmitt, Mr. Pushard in the last Committee packet, there was a table of water savings in doing certain things, such as installing a low flow toilet, or purchasing a front loading washer.
- Chair Calvert asked who will be audited and how will those be selected.
- Mr. Pushard said this will be an audit of City-targeted high water users, commenting this can be part of an education program as well. He said we can make progress with small water savings with hundreds of people.
- Ms. Perez likes the idea of targeting high water use.
- Chair Calvert said this usually is a project of the Water Division, and asked Mr. Ransom to comment on this idea, and what he can do.

Mr. Ransom said high water users most usually have issues, and usually have a large landscape, noting the indoor water use is not that high. He said he can look at the water use and make recommendations, noting they have different tools to help them reduce the water use.

- Chair Calvert said then that is an area that you would like to reserve for your expertise.

Mr. Ransom said yes, commenting that it takes a lot of training to do an outdoor water audit, reiterating that the high water users usually have a lot of landscaping and an irrigation system. He said we can train people to do indoor water audits fairly quickly. He said they would like to do even more.

- Mr. Pushard said an outdoor water use audit is more valuable and he believes that people would be willing to pay to have that done. He said we are working on the low-hanging fruit, and this is the second issue which will require more time to get penetration as well to get a change in behavior to implement the findings of the audit.
- Ms. McDonald asked about a rebate from the City to pay someone else to go out and do a complete audit – is this possible, and Mr. Pushard said yes.
- Chair Calvert said the only problem with this, is getting people to act on the information from the audit, and how we can know whether or not it has been done. He said following through on the recommendation[s] from the water audit is where you get the biggest “bang for the buck,” in terms of water savings. He said we do have an active rebate program which would qualify an individual for a rebate for an audit. Chair Calvert suggested we could structure the rebate to be contingent on implementing the recommendations.
- Ms. McDonald said this might be one way to motivate people.
- Chair Calvert said actually getting them to do the “stuff” from the audit is the bottom line, reiterating that they wouldn’t get the rebate until corrective steps taken.

Mr. Ransom said they are working on the Audit Certification Program, and once more people are trained we can look at this suggestion in depth. He said there is an opportunity to expand on a lot of our programs in certification training, and to qualify as a water sense partner.

- Chair Calvert talked about putting in certain requirements, such as in the HERS program where a HERS rating is required, so people needed to get certified.
- Mr. Pushard said if we can create the requirements at the same time we are establishing the program he believes the SFCC would be more comfortable in setting this up – create the demand by creating the requirement. He said if people are certified, they are more likely to “get it right.”

- Responding to Mr. Strongheart, Mr. Ransom said the course is 20 hours, so it is not a full course. He said it could also include training in Water Systems Auditing and Evaluation.
- Mr. Ransom said he is working on a curriculum and modifying it to New Mexico, to our climate. He said it already is approved by EPA Water Sense, so a person who is certified through the program can become a Water Sense Partner. He said it will cost about \$175 for the training and certification through this program which is done here in New Mexico, as opposed to elsewhere which could cost \$500 to \$850. He said the program is comprehensive so it covers a lot of information, noting it is important for the person to know how to control the systems. He said the Water Conservation Alliance is willing to apply for grant funds to have classes in Las Cruces, etc.
- Ms. Knouse said then the students will be doing the audits and leak detection as part of their lab work for the course.

Mr. Ransom said it might include the hands-on doing an audit. He said people also can audit the class and take the test, but still must do an audit as part of the test and submit that. Responding to Ms. Knouse, Mr. Ransom said leak detection isn't part of the class, noting it is a Landscape Water Class.

- Chair Calvert said we also are talking about an outdoor irrigation class, as a possible avenue to do this for a living, or part of their living.
- Mr. Pushard said he would like to be able to offer a small stipend to students as an enticement for them to do the audits for credit as a problems course for credit.
- Ms. McDonald said Work Force Development would pay for 6 months, and people might pick this if they think it will help them to get a job.
- Ms. Trevizo said the SFCC already is involved with the State.
- Ms. McDonald said we need to make the SFCC and the students aware that this is a potential area of employment.

Ms. Trevizo said this certainly is a possibility. She said Mr. Ransom has been training her to do the outdoor audits. She has done about 50 audits, and she is just getting to the point she can touch the controllers, commenting this is a very complicated process. She said there is the work in the classroom and then in-the-field work to apply what you have learned.

- Ms. Schmitt said it would be good to be able to send her employees to the SFCC to hone their skills at a reasonable cost.
- Mr. Ransom said they will be offering the class in different ways and times, so it will be convenient for people to take the course.
- Ms. Schmitt said this offers the homeowner an alternative to having the City come in, because she believes people would be more receptive to an independent audit done by someone not connected with the City.
- Mr. Baker asked if there is some sort of standard form.

Mr. Ransom said he's not there yet.

- Mr. Pushard said there is a form in the class that is the audit itself. It is a spreadsheet you fill out.
- Mr. Baker suggested it could be designed so the person could get a rebate.

Ms. Trevizo said staff can't do this right now, but it is important to keep it on the table, commenting it makes a lot of sense to her – but we aren't there right now.

- Chair Calvert said one of the options would be to alter the Green Building Code to do something similar for water as we did for energy – HERS ratings.
- Mr. Pushard said he could work with Ms. Mortimer to create the audit process. He said this would be a better way to save water, because it is a requirement. He said incentives such as rebates are good, but you run out of money and the venue gets saturated such as happened with low flow toilets.
- Chair Calvert said this would be an alternative to pursue. He said right now the Code regarding HERS applies only to new construction, but they will be moving forward on commercial and renovations.
- Responding to Ms. McDonald, Chair Calvert said ultimately it will apply to all construction.
- Ms. McDonald pointed out that could be very expensive when it is not new construction.
- Mr. Piburn said it might encourage people not to pursue an audit openly. She asked if it could get a different pool of people.

- Ms. Strongheart said it would be important to give the rebate after the audit and corrective measures were done.
- Chair Calvert reiterated that after a while the audit rebates would be saturated so we would need to do something else.
- Ms. Piburn asked the cost to do outside audits.

Mr. Ransom said it takes about an hour plus travel, so whatever the current rate is – less than \$100.

- Ms. Schmitt said the hourly rate is \$30 to \$40.

Ms. Trevizo believes we would need a follow-up report.

- Ms. Schmitt believes the savings could cover the cost.
- Responding to Mr. Baker, Mr. Ransom said the City audit is free. He said the real cost is what they have to do to take care of the problem.
- Mr. Pushard believes the customer who really cares, will choose someone who will help them fix the problem.
- Chair Calvert asked, with regard to customers with spiked bills, if there is any way, such as the age of a home to predict where you might have leaks. Are there indicators over time that are reliable. .

Mr. Ransom said this is a good question, but leaks are indiscriminate. He said if they have very old pipes we can look at those. However, if you dig up old pipes, there very likely will be issues, noting there are very old pipes in some parts of town and it's best not to "mess" with them.

- Chair Calvert pointed out that you do have control in that situation.
- Mr. Wiman said there are certain risk factors for part time residents who leave their homes part of the year without having someone checking their houses. He said this became a problem during a very cold winter when the pipes in those houses froze and people didn't find out until they returned.

Mr. Ransom said we have done a lot of outreach on that.

- Chair Calvert said Page 3 discusses staff training – “customer service staff.” He asked if these are Peter Ortega’s people.

Mr. Ransom said yes, but there is a need for continued training update because of turnover.

- Chair Calvert asked Mr. Ransom to please follow up with Mr. Ortega about this.
- Mr. Pushard said recently a City employee told one of his clients they couldn't open the meter box or they could be fined. He said he talked with his client as well as the contractor and told them this has been changed. He suggested that the City send this information out again to people who go into the field.

Mr. Snyder said it hasn't been formally announced, but all staff have been informed. He will send this information out to field staff and supervisors again.

DISCUSSION ITEMS:

6. DISCUSSION ON RECOMMENDING THE COUNCIL CONSIDER MORE SEVERE WATER RESTRICTIONS

Mr. Wiman said the BDD was shut down recently because of rains which washed ash into the Rio Grande following the Los Conchas fire and others fires north. He thought we are trying to rest the aquifers, noting the low reservoir levels, and the low effect of the monsoon. He said there are predictions for a La Nina winter. He asked if the City is aware of how we are depleting our water resources without recharging the aquifer. He questioned whether the City is doing enough to conserve water resources, and if this Committee should talk to the City Council. He said Albuquerque has shut its diversion until November, which has resulted in issues downstream.

Brian Snyder under the Ordinance, it comes down to his recommendation, and the City Manager may declare Orange, and if the reservoir is down to a certain level, he can declare Red. He said they are following the provisions of City Code.

Mr. Snyder said the technical water staff – Rick Carpenter, Ms. Borchert and others monitor our water resources and look at sources. He said we are using the BDD to rest the Buckman Well Field. He said they went down to do a sampling of ash related sediment in River – what's there, what rain events, the impact on the River, and also to be sure the water is safe. He said they did a lot of chemistry as to how handle the ash-laden water – when we do and do not divert from the

River. He said the protocol in effect most recently, yesterday, was they stopped the BDD when the ash appeared in the River after rains north of us washed the ash into the River. He said staff is taking this very seriously.

Mr. Snyder said at this point, the City demand does not exceed the supply. He said the City's customers are in the routine of reducing water use.

Mr. Snyder said he is concerned about what would happen if the City was in a very long drought. He said if we can't justify the water use we aren't sending the right message, which is the reason the Water Division staff monitors what is happening so closely. He everything below Cochiti is monitored by the Rio Grande Conservancy.

Mr. Snyder said staff provides a water use update to PUC on a monthly basis, which includes weather reports as well as monthly water use reports, and he can provide that information to this Committee.

Chair Calvert said there are concerns that we might burn up our equipment treating the ash, so we stopped the BDD. He said there also are ramifications of saying that Santa Fe has a water shortage which could result in people not coming to Santa Fe and the impact of that on our economy. He said it is necessary to weigh all of these things in making these kinds of decisions.

Mr. Pushard thanked Mr. Ransom for a copy of the Code. He understands there are very specific numbers which trigger an Orange and a Red water alert, and that right now we don't meet that definition because we have more wells and the BDD, so our supply far exceeds our demand. However, the issue is the community is becoming lax about saving water. He said, for example, when you go to a restaurant, you get a glass of water without asking for it. He asked how we can get the people to conserve water without being seen as "crying wolf." How do we get people aware that there are year-round restrictions.

Responding to Mr. Strongheart, Mr. Snyder said the City will evaluate the water situation after April 15, 2012, because that is a good timeframe to look at the snowpack, for example. He said last year there really was little snowpack, reiterating that the predictions are for the same kind of precipitation this winter. He said the supply far exceeds the demand because of the opening of the BDD, noting this was a good year for the BDD to come on line.

Ms. McDonald said we need to find a way to make people more aware of the issue.

Chair Calvert said we don't have a water emergency as defined by City Code. He said right now we have more supply than demand, but we won't have that forever. He said in drought years we use the wells more than normal. He said we need to make the public aware that there

are year-round restrictions for water use. He said perhaps we could get a newspaper article reminding people of these kinds of things.

Mr. Wiman spoke about the shock factor in Houston when they realized they had a water shortage, because Houston has always had plenty of water. He doesn't want that to happen in Santa Fe, and we need to be more pro-active right now.

Responding to Ms. Piburn, Mr. Snyder said the prediction for the winter is a minimal snowpack. He said we also need to be concerned about Colorado's snowpack, because it would impact the BDD and there could be issues. He said it is not a good picture for the winter. He said we rested the Buckman for the past several years. He said the Canyon Road well is off right now so we won't go below 30%, and we are relying on the BDD when it's operable. He said even if we can't divert at BDD, there are still the cost of chemicals and the cost to treat the water.

Mr. Snyder said even when the BDD is off, there is still 1 million gallons on site which is untreated, so we are still treating water and pushing it into the system. He said once the ash-laden water moves down river, we can start the BDD again, reiterating there is on-site water storage in addition to the wells.

Mr. Pushard asked if there is a lag time between turning off the BDD and going to other water sources.

Mr. Snyder said it depends on the demand. He said the BDD can be turned off and on immediately, as opposed to other systems which take a week to bring back up once turned off. He said they don't like to go below 4 million gallons in reserves.

Mr. Pushard asked what this Committee can do pro-actively plus reactively, before we hit the 80% – what can we do prior to that.

Chair Calvert said there can be continuing education of the public, commenting that people get complacent. He said the climate change can lead to more fire events which complicates the water supply and the reservoir. He said the City is looking for a mechanism to pay for the maintenance of the watershed, because if you don't do that maintenance you will start to lose the water supply.

Mr. Ransom said it is important as to how to get the message to the public, and staff is working on that. He said they want input/suggestions from this Committee. He said as conditions change, we need to make changes as well.

Chair Calvert said part of the problem is that landscapers from Albuquerque don't know about our restrictions, and do plantings that are banned, for example.

Mr. Baker asked what drought stage the City would be in right now without the BDD.

Mr. Snyder said it definitely would be in Orange.

Chair Calvert spoke about the Northwest well which was obtained during the last drought to augment the City's water supply. However, that temporary permit is expiring and the City is applying to the State Engineer to make that well a permanent part of the City's water supply.

Responding to a question from Mr. Strongheart, Mr. Snyder explained the basis for the assumptions used for the recharge rates for City wells. He said the City uses models from past years and has specific models for our system which will fluctuate. He said we have 40-50 years of data which staff will update to reflect the climate change.

MATTERS FROM STAFF

Mr. Ransom said because of the Columbus Day Holiday, it is proposed to hold the next meeting on October 18, 2011, at the Main Library.

MATTERS FROM THE COMMITTEE

Mr. Pushard asked if the members of this Committee are listed on the website.

Mr. Snyder said yes.

Mr. Pushard said he looked for a link with PNM with regard to conservation programs, and the City isn't linked to any energy rebates and *visa versa*.

Mr. Wiman asked if this is the right water ordinance, and said he would like to "kick it around" in this Committee.

Mr. Snyder said he was hoping to be able to get the message across that we are on top of this. He said, "Is the right ordinance in place. Yes." He said everything is tied together and he believes the City is in good shape, but he certainly is open to a discussion of the Ordinance.

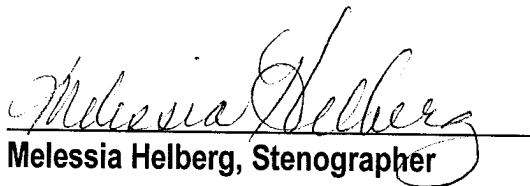
ITEMS FOR NEXT AGENDA – TUESDAY, OCTOBER 18, 2011

1. Revisit water stages.
2. Development of a communications plan to inform the public.
3. General conversation on the Ordinance. Committee members should read the ordinance and think about what we can do before the 80% is declared.

ADJOURN

There being no further business to come before the Committee, and the Committee, having completed its agenda, adjourned the meeting at approximately 6:15 p.m.

Christopher Calvert, Chair


Melessia Helberg, Stenographer