



Agenda

DATE 6/27/13 TIME 12:20p
SERVED BY Laurie Trevizo
RECEIVED BY [Signature]

SANTA FE WATER CONSERVATION COMMITTEE MEETING
CITY HALL - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, JULY 9, 2013
4:00 PM TO 6:00 PM

1. CALL TO ORDER
2. ROLL CALL (NEW MEMBER INTRODUCTION)
3. APPROVAL OF AGENDA
4. APPROVAL OF CONSENT AGENDA
5. APPROVAL OF MINUTES JUNE 12, 2013 WATER CONSERVATION COMMITTEE MEETING
6. CONSENT AGENDA
 - A. DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE (Rick Carpenter)

DISCUSSION ITEMS:

INFORMATIONAL ITEMS:

7. SPECIAL PRESENTATION BY AMY LEWIS ON DOMESTIC WELLS (Councilor Ives, 20 minutes)
8. PRESENTATION ON WESTERN ADAPTATION ALLIANCE CONFERENCE (Councilor Ives, 20 minutes)
9. IDENTIFYING POSSIBLE "NEW NORMAL" SOLUTIONS (Councilor Ives, 10 minutes)
10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES INCLUDING IDENTIFYING OBJECTIVES AND GOALS OF INITIATIVES (Councilor Ives, 60 minutes)
 - A. GROUP #1 - WATER CONSERVATION AND DROUGHT MANAGEMENT PLAN UPDATE
 - B. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH
 - C. GROUP #3- PROMOTE OUTDOOR WATER CONSERVATION
 - D. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE
 - E. GROUP #5- PROPER REGULATION OF WATER USAGE AND WASTE AVOIDANCE BY LARGE WATER USERS

MATTERS FROM STAFF:

MATTERS FROM COMMITTEE:

11. NEW WATER CONSERVATION COMMITTEE MEMBER BILL ROTH (Councilor Ives, 5 minutes)

ITEMS FOR NEXT AGENDA - TUESDAY, AUGUST 13, 2013:

Demand Elasticity, if available

CAPTIONS: JULY 30, 2013

PACKET MATERIAL: AUGUST 1, 2013

ADJOURN.

Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6520, five (5) working days prior to meeting date.

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WATER CONSERVATION COMMITTEE
Tuesday, June 11, 2013

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**MINUTES OF THE
CITY OF SANTA FE
WATER CONSERVATION COMMITTEE
Tuesday, June 11, 2013
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 Peter N. Ives, Chair, at approximately 4:00 p.m., on June 11, 2013, in the City Councilor's Conference Room, City Hall, 200 Lincoln Avenue, Santa Fe, New Mexico.

2. ROLL CALL

Roll call indicated the presence of a quorum as follows:

MEMBERS PRESENT

Councilor Peter N. Ives, Chair
Melissa McDonald, Vice-Chair
Lise Knouse
Tim Michael
Grace Perez
Giselle Piburn
Doug Pushard
Lisa Randall
Karyn Schmitt
Stephen K. Wiman
[vacancy]

OTHERS PRESENT:

Laurie Trevizo, Water Conservation Officer
Marcos Martinez, Assistant City Attorney
Rick Carpenter, Water Resources and Conservation Manager
Caryn Gross, City Staff
Nancy Avedisian - Barker Realty, Prospective Member
Elizabeth Martin, Stenographer, for Melessia Helberg

There was a quorum of the membership in attendance.

3. APPROVAL OF AGENDA

Mr. Pushard asked that Item 8 be moved to the Consent Agenda.

Chair Ives said he would like to keep where it is, since it has been published as an informational item.

Mr. Pushard would like to hear Item #8 last on the Informational Items.

MOTION: Doug Pushard moved, seconded by Grace Perez, to approve the agenda, as amended.

VOTE: The motion was approved unanimously on a voice vote.

4. APPROVAL OF CONSENT AGENDA

Ms. Perez asked if something is listed on the Consent Agenda if she can ask a question about it.

Chair Ives said no, it has to be removed from the Consent Agenda for discussion.

MOTION: Lisa Randall moved, seconded by Doug Pushard, to approve the Consent Agenda, as amended.

VOTE: The motion was approved unanimously on a voice vote.

5. APPROVAL OF MINUTES

The following correction was made to the minutes: Correct mis-spellings of drought throughout the minutes.

MOTION: Doug Pushard moved, seconded by Lisa Randall to approve the minutes of the meeting of May 14, 2013, as amended.

VOTE: The motion was approved on a voice vote, with Melissa McDonald, Tim Michael, Giselle Piburn, Doug Pushard, Stephen Wiman, Lisa Knouse, Lisa Randall and Karyn Schmitt voting in favor of the motion, no one voting against, and Grace Perez abstaining.

6. CONSENT AGENDA

A. INFORMATIONAL

- i. [Removed for discussion by Grace Perez]*
- II. [Removed for discussion by Doug Pushard]*

CONSENT AGENDA DISCUSSION

6. (A)(i) DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE (RICK CARPENTER)

Ms. Perez asked if the City is in a drought situation at this time.

Mr. Carpenter said he is working on determining this. He said he has a meeting in Albuquerque on June 20, 2013, and will have more information in this regard after that meeting to help him to make that decision.

Mr. Carpenter said the bad news is the river level, and the good news is that 40 afy of water were released to flow into the river over the next four months. .

Mr. Wiman asked if there has been any talk about changing the trigger points of when the City moves to the different stages of water conservation due to drought.

Mr. Pushard said there has been some discussion. However, the trigger points are not attainable as long as the wells are being pumped and other water resources are in place. He said it is within the discretion of the City Manager to move to drought levels, independent of the numbers. Mr. Pushard asked if any analysis ever been done on orange and red stages and how much water would be conserved during those states.

Mr. Carpenter said he is unaware of anything that formally calculates that information.

Mr. Wiman said he is pleased that the City has not yet started pumping the Buckman wells, and asked Mr. Carpenter when he anticipates that will be done.

Mr. Carpenter said there will not be a lot of pumping, noting the sources of supply should be sufficient to make it through the summer, including the water in the reservoirs.

6. (A)(ii) CITY OF SANTA FE DOMESTIC WELL ORDINANCE

Mr. Carpenter said he does not have a formal presentation, noting his Memorandum of May 13, 2013, with attachments, is in the Committee packet, and he will be happy to answer any questions.

Ms. McDonald said she read Mr. Carpenter's report and thanked him for it.

Ms. Trevizo clarified that changes in Mr. Carpenter's Memorandum was made in the one which was sent out electronically, but not in the hard copy which was mailed out to the members, and provided the updated Memorandum to the Committee.

Ms. Perez asked who is the author of the "private wells" document which is in the Committee packet, and Mr. Wiman said he is.

Mr. Wiman asked what is the policy if someone reopens their well and the city knows about it. He asked if any private wells in the City are being monitored at this time.

Mr. Carpenter said there is some monitoring of private wells, commenting that it is not infrequent that people do not meter their wells.

Mr. Wiman asked about enforcement of that.

Mr. Carpenter said the City would have to know about the well in order to enforce it.

Chair Ives said he believes that is a function of the State Engineers Office.

Mr. Carpenter said the City does get involved with new wells that are drilled, as well as any supplemental wells that are put in.

Mr. Pushard thanked Mr. Wiman for doing the report.

Mr. Pushard asked, regarding the metering of private wells, if the person gets a permit to move a well, will they then fall under the new regulation and be required to report annually.

Mr. Carpenter said this is correct.

Mr. Pushard asked how many people currently are reporting.

Mr. Carpenter said he doesn't have that information with him, but he can get that information and provide it to the members of the Committee.

Mr. Pushard asked if there a connection between the number of people who received permits and the number of people reporting, and asked the penalty for not reporting.

Mr. Martinez said the City could apply the general penalties of the City for a fine of up to \$500 per occurrence and/or 90 days in jail.

Mr. Pushard noted that the number of wells in the old report was not correct, commenting that it has now been corrected. He asked Mr. Carpenter if he sees this as a problem.

Mr. Carpenter said yes. He said the City can issue a conditional permit and limit acre feet of water allowed to be used.

Mr. Pushard said the number seems, to him, to be a large unknown number.

Ms. Knouse asked how many wells existed in 2012.

Chair Ives said there are more accurate numbers in Mr. Carpenter's memo.

Mr. Wiman said it is 823 wells.

Ms. Schmitt asked Mr. Carpenter if he is saying in his Memorandum that most wells in the City are permitted, and asked if it is the same in the county.

Mr. Carpenter said he doesn't have that information.

Chair Ives asked Marcos Martinez when a permit comes a water right.

Mr. Martinez said this question hasn't been answered by the State Engineer, or anyone else for that matter. He said he has had conversations with the State Engineer's staff, and they say that permits are not water rights. He said owners do not have the ability to transfer the permits off the property. He said the Courts have adjudicated well permits as water rights, but you still cannot transfer those water rights off the parcel.

Chair Ives said the nature of a water right is the right to use certain quantities of water. He said personally, he thinks a permitted well is a domestic water right.

Mr. Martinez said this is correct, pointing out that in that instance the ownership can be transferred.

Ms. Knouse asked if the water rights can be sold.

Mr. Martinez said yes, with conditions.

Mr. Pushard said we are talking about a very large amount of water which is used by domestic wells.

The Committee discussed the status of domestic wells, and whether the owners of those wells are reporting as required, whether the City knows about each and every domestic well and how much water they are permitted to use. The Committee expressed concern with the lack of reporting of "re-dug" wells and/or wells that are moved.

Ms. McDonald asked if people who have domestic wells have to abide by the City's regulations.

Ms. Trevizo said yes, pointing out that there is language in the regulations providing that if you live within the City limits and are using your well, that you must adhere to all the city ordinances.

Responding to the Chair, Ms. Trevizo said we can't regulate the quantity of water if the person has a well permit saying they can use a certain amount of water. However, for example, if they do not water on the assigned days, the City can issue a citation.

Chair Ives asked Mr. Martinez if the City has ever done that.

Mr. Martinez said yes, commenting, for example, the City has cited the Gerald Peters Gallery.

Mr. Martinez said there are two State Statutes providing that the City may restrict the use of water for the purposes of protecting the City's water resources. He said this gives the City jurisdiction over the domestic wells to require the owners to comply with the relevant City ordinances.

Mr. Michael asked what happens, for example, if someone has a permit for 3 afy, and then they go into the water bottling business and sell water – is there anything to stop that practice.

Chair Ives said that would be a commercial use and not domestic use.

Ms. Avedisian said as she recalls, the Gerald Peters Gallery started digging its well after the city ordinances went into effect. The committee discussed the start date of the Gerald Peters well.

Chair Ives said we can have this as an ongoing discussion, but the Committee needs to move forward with its agenda.

Mr. Pushard said he understands Mr. Martinez to be saying that the City has jurisdiction in this matter through water conservation, and he said this is correct.

Ms. Randall said this is an educational issue, and Chair Ives agreed.

DISCUSSION ITEMS

There were no discussion items.

INFORMATIONAL ITEMS

7. WATER CONSERVATION OFFICE REBATE PROGRAM (CARYN GROSSE)

Caryn Grosse, Water Conservation Specialist, reviewed the information in her Memorandum of May 28, 2013, with attachments. Please see this Memo for specifics of this presentation.

Mr. Pushard said this report does not cover the outdoor rebates, which the City no longer is giving, and he asked if there are any details staff could share about that.

Ms. Trevizo said the Outdoor Rebate Program was pulled in August 2012, noting at that time 30 plus water audits had been done. She said staff attached the rebate information to those audits and processed only two rebates. She said the feeling was that it was an unsuccessful program, noting it currently is being revamped, will be reintroduced in the next growing season. She said staff wants to make sure that the professionals understand what we are looking for.

Chair Ives asked how that program was created.

Ms. Trevizo said all rebates and rebate programs are ordinance and resolution based.

Chair Ives said the outdoor irrigation rebates are subject to the discretion of the Water Conservation Office, and Ms. Trevizo said yes, and they are very specific.

Chair Ives said the intent is to try to limit rebates to QWEL based training [Qualified Water Efficient Landscaper].

Ms. Trevizo said the City won't rebate the QWEL training for professionals but we will train QWEL auditors and they will perform audits in the city limits. She said the City would require a report with recommendations of new technology and other items, reiterating "We will adhere to QWEL training only." She said it a small commitment for professionals to make.

Chair Ives asked Ms. Trevizo if she is saying that if you have someone who is a licensed irrigator that a QWEL audit will find that they are able to get rebate.

Ms. Trevizo said an audit and review would have to be done and reviewed.

Mr. Pushard said he doesn't think it is a huge burden to do the training, noting the training is very specific to our area.

Ms. Trevizo said the information we will give them is specific as to how to apply for a rebate.

Chair Ives said he has no doubt that we will get push back from some members of the community on this.

9. STATUS OF VOLUNTARY WATER RESTRICTIONS OUTREACH CAMPAIGN

Ms. Trevizo the information in her Memorandum of June 1, 2013, with attachments, which is in the Committee packets. Please see this Memorandum for specifics of this presentation.

Ms. McDonald said at the last meeting, Ms. Trevizo said the inserts would go out in June.

Ms. Trevizo said it is the end of our fiscal year so City Purchasing is backed up, commenting, "I can't make other people move faster."

Chair Ives asked Ms. Trevizo if she is fairly certain it would happen in July and Ms. Trevizo said yes. Chair Ives asked her to let him know if that is not the case, so he can help her make this happen.

10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES INCLUDING IDENTIFYING OBJECTIVES AND GOALS OF INITIATIVES, INCLUDING DISCUSSION ON WHETHER WORKING GROUPS COMPLY WITH OPEN MEETINGS ACT

Chair Ives said these are working groups not the Water Conservation Committee and nothing is acted on until it comes before the Committee so we believe that we are in compliance.

Ms. McDonald said she felt it was important to vote on this brochure because it was a working group that produced it. She said we have to be careful that we are not putting things forward that are not voted on by the full Committee.

Chair Ives pointed out that for it to be an official act of this Committee it has to be approved by this Committee.

Mr. Pushard asked if an item is approved under consent it is approved – it does not matter how it is approved as long as it is approved.

Chair Ives said this is correct.

Mr. Pushard asked if it is necessary to get final approval by the Committee of the exact words in the final draft.

Ms. McDonald said she doesn't want to revisit this as a Committee. She said she can go over it with Mr. Pushard once again. However, she feels we need to be careful of how things move forward from this Committee. She said items need to be approved by the full committee prior to any action being taken.

Mr. Pushard said, "You are making a point so we do this in the future."

Ms. McDonald said, "I don't want to get into this again Doug."

Ms. Schmitt said she specifically had asked that this come through the committee for final approval.

Mr. Pushard said he wants to understand, asking if a majority of the Committee votes in favor of something, if it then passes out of the committee.

Ms. McDonald said, "I don't agree that the group voted to not let it go through this committee. "

Mr. Pushard said he wanted to go back to the consent agenda issue. He said there was discussion regarding the use of a consent agenda and how approval of those items on consent works, and the committee process and who has approval authority for decision making and action.

Ms. McDonald reiterated that in the future we need to be very clear that when we say something will first go through the committee that it does go through the Committee..

Chair Ives said he thinks it is important that things that are being put forth by this committee have been acted on by this committee, not only by a subcommittee. He said once it goes to Council, however the Council may decide to do something different as might other City committees.

Chair Ives thanked Ms. McDonald for chairing the committee at the last meeting.

Working Group Reports

Committee1 Update Santa Fe Water Conservation and Drought Management Plan

Ms. Perez said Group 1 met last Friday and made progress on marking up the plan. She said the next meeting is June 21, 2013, at 8:30 a.m. in Laurie's office, and they will start talking about a strategic plan for water.

Mr. Wiman asked the status of Bill Roth's appointment to this Committee.

Chair Ives said he submitted his name to the Mayor, and is awaiting a text from the City Manager to see if it is on the Council Agenda for the meeting of June 26, 2013.

Mr. Wiman asked if Mr. Roth has been recommended for appointment and Chair Ives said yes.

Chair Ives asked, regarding the strategic plan, if they have more information on exactly what the committee is doing on this issue.

Ms. Perez said the Water Division does not have a strategic plan for water conservation which is the reason they are working on it, noting it is required to be updated every 5 years.

Mr. Pushard said it was in the packet for the last meeting.

Ms. Perez asked the members of the Committee to let her know if they have any thoughts or ideas about the format or what should be covered.

Committee 2, Water Conservation Education/Outreach Program.

Mr. Wiman said they didn't meet and are waiting for the brochure to come out.

Ms. Perez said she has the final version of the brochure, commenting that the wording is different.

Ms. Trevizo said they did not change the content, and only corrected misspellings.

Ms. Perez said she believes there were changes .

Ms. Schmitt said the word “preferably” was supposed to be removed. It was advocated for and was omitted. She commended Grace for the hard work on the brochure. She said the voluntary aspect of the effort needs to be encouraged, but she believes the wording is dictatorial and will not encourage people. She said we all agreed on it, and it “went off the rails.” She said it is unfortunate, because the group hammered out the wording, but it did not make it into the brochure as we expected it to.

Ms. McDonald said, if it is reprinted, we need to make sure that the adjustments are made to the brochure.

Ms. Randall asked if the pdf version going to be sent to the Committee so we can forward it, and Ms. Trevizo said yes.

Ms. Schmitt asked if we can adjust the on-line brochure.

Chair Ives said we are free to update it.

Chair Ives asked Ms. Trevizo to please make sure the final brochure gets posted to the website.

Ms. Piburn said she recalls Ms. Trevizo saying that rather than sending it out randomly we will send them all at one time.

Ms. Trevizo said if you want to get a jump start go ahead.

Chair Ives asked the Committee to get the final draft to Ms. Trevizo, and asked Ms. Trevizo please to circulate it among the Committee members and put it on the website.

Working Group 3, Evaluate/draft ordinances to promote outdoor water conservation.

Mr. Pushard said he will try to get the final tree and planting lists for next meeting. He said he and Bill [Roth?] are going to get a copy of the Commercial Code and meet to discuss the update of the city code. He wants to find out the timing of that code so we can provide water input into that. He said he and Bill will be meeting with the Home Builders Association as well to discuss both of these items with them.

Chair Ives said he would love to be included in those meetings, and Mr. Pushard said he will let him know when the meetings are set up.

Ms. Schmitt asked what they are evaluating.

Mr. Pushard said they are evaluating the plant guide. He said the Sustainable Santa Fe Commission is working on the Commercial Building Code, and they want to get a copy of what they are doing in the water section of the City Code with regard to the 2012 International Commercial Code, although it goes to residential as well. He said he wants a copy of that so we will know their timing on that issue.

Ms. Schmitt said, then you are working on the Code rather than on ordinances.

Mr. Pushard said, we have discussed this several times, and the word “ordinance” is broad.

Ms. McDonald asked Mr. Pushard to please make sure that she is able to get the information on commercial codes.

Mr. Pushard said he will do so, and asked if she just wants the section on water and Ms. McDonald said yes, commenting it would be good to know about that.

Working group 4, Reestablish Trend of Net Annual Reductions in Per Capita Water Usage.

Ms. Schmitt said they have the informational matrix ready to go, but it has not been finalized. She said this is a broad category and they are working on making our focus “more focused.” She said they will meet with the Water Manager. She said they are expanding their area and discussing whether they should move into other things. She said they are looking at ideas/ways to make homeowners aware of their water usage. She said the subcommittee will submit their findings to the Committee for their review and comment.

Ms. McDonald said they are focused on meters, and asked anyone with a larger vision to please join them.

Chair Ives noted that the City has issued an RFP seeking vendors on this. He said the City also is looking for an IT Director for the whole City.

Ms. McDonald said they will be talking more about this in their next report. She said, “I think it is critical that we contact Nick Schiavo, the new Public Utilities Director, and tell him that we feel it is important that this be dealt with.”

Mr. Pushard said when he met with Bill he told him that the new billing format will have comparison billing and more information for the consumer regarding their water usage.

Ms. McDonald said that is great.

Working Group 5, Proper Regulation of Water Usage and Waste Avoidance by Large Water Users

A copy of *Proper Regulation of Water Usage and Waste Avoidance by Large Water Users*, is incorporated herewith to these minutes as Exhibit “1.”

Ms. McDonald reviewed the information in Exhibit “1.”

Ms. McDonald thanked Mr. Michael for his help in preparing the matrix.

Commissioner Ives added his thanks to Ms. McDonald and Mr. Michael for the matrix.

Ms. McDonald said she and Ms. Perez attended the WAA conference.

Chair Ives said the WAA conference does not fit here, and suggested it be reported under Matters from the Committee

8. WATER CONSERVATION MARKETING AND WEBSITE UPDATE.

Ms. Trevizo asked the committee to go to the website, Save Water Santa Fe .com, and look it over, commenting that lots of new things are included, including a huge rebate section on the home page. She said as of last Wednesday we had 450 hits on the website.

Ms. Trevizo presented information from her Memorandum, with attachments, dated June 1, 2013. Please see this Memorandum for specifics of this presentation.

Ms. Schmitt said this is a very engaging website. It's really great.

Ms. McDonald said she likes the insert Ms. Trevizo prepared – *Save Water Santa Fe.*

Ms. Trevizo said she has 5,000 copies in the warehouse if Committee members need additional copies.

Ms. Grosse said to let her know and she will get them and make sure they are available to the members of the Committee.

MATTERS FROM STAFF

There were no matters from staff.

MATTERS FROM THE COMMITTEE

Ms. Schmitt reiterated that all matters need to go through the Committee before they are put out to the Council or the public

Councilor Ives commented that it is hard to catch everything, and said he will take the blame there, noting that the issue is not concluded.

Ms. McDonald gave a brief overview of the WAA convention, saying she would like to put it on the next agenda for discussion. She said they discussed very important issues. She said the WAA includes the 5 western states with water issues. She said the meeting was attended by a lot of water conservation

people, city planners and others. She said the conference highlighted behavior modification strategies, childrens health, peer pressure and billing systems, noting billing software and meters were also discussed. She said landscape classes for professionals and home owners was discussed. She said Boulder, Colorado has come up with a commercial water user budget and she be receiving the data and information on that for the next meeting. She will talk more about the details at the next meeting, noting she will email a summary to the members of the Committee.

Ms. Perez she will email some of her notes as well. She will speak to some of the issues at the next meeting such as the concept of triple bottom line, financial, social and environmental. She talked about organizational silos. She said this is where an advisory board such as our committee can help with them to deal with broader issues.

Chair Ives said the City Council will be adopting the Climate Change Adaption Plan, and he will get copies of that to the Committee members. He said it is interesting that most of the cities participating in the WAA convention are in the Colorado River Basin.

ITEMS FOR NEXT AGENDA – TUESDAY, JULY 9, 2013

- a. DEMAND ELASTICITY IF AVAILABLE**
- b. A Convention Report 15 min
- c. Private Well Discussion
- d. Doug's request for discussion on Demand Hardening.

Ms. Trevizo said there is no Demand Hardening, there is Demand Elasticity, and said if it is available it will go on the agenda.

- e. Another water conversation road show
- f. Consider offering a rebate for people who attend those presentations

Ms. Trevizo said, "I would like to request that Stephen Wiman send his items in writing in detail to me.

ADJOURN

There being no further business to come before the Committee, and the Committee, having completed its agenda, adjourned the meeting at approximately 6:10 p.m.

Peter N. Ives, Chair

Melessia Helberg, Stenographer

MEMORANDUM

TO: City of Santa Fe Public Utilities Committee
City of Santa Fe Water Conservation Committee
Buckman Direct Diversion Board

FROM: Rick Carpenter, Water Resources and Conservation Manager

VIA: Nick Schiavo, Acting Public Utilities Department and Water Division Director

DATE: June 21, 2013

SUBJECT: Update on Drought, Monsoon, and Water Resource Management

CURRENT PUC UPDATE

As the Committee is aware, our region is still suffering through a severe drought. Our region has gone through two consecutive years of record drought and heat. It is now apparent that we are in a third consecutive year of severe drought and heat which will present significant challenges to all water purveyors and irrigators. Approximately 98% of the state of New Mexico is in “extreme” drought conditions or worse. New Mexico appears to be the epicenter of the regional drought. This situation is unprecedented and the City’s Water Division takes this situation very seriously.

The National Oceanographic and Atmospheric Administration (NOAA) recently updated its monthly on its El Nino/Southern Oscillation (ENSO) Diagnostic. This report indicates that current model predictions more strongly favor El Nino conditions to be neutral to weak (dry) through the summer of 2013. The long-term forecast for this coming winter seems to be trending away from El Nino, towards neutral, with an increasing chance of a return to La Nina conditions. Above average temperatures are also expected. This current drought is extreme, but what sets it apart from previous extreme droughts is that, absent significant monsoonal rains and winter snow the rest of this year, the region will enter into next spring and summer without carry-over water in regional reservoirs – they are at historic low levels. This condition is unprecedented and could make next year much more challenging than the current year. However, the City of Santa Fe has invested in a robust and diverse portfolio of four distinct water supply sources that allows for flexibility in meeting demand: Buckman well field, City well field, Canyon Road Water Treatment Plant on the Upper Santa Fe River, and the Buckman Direct Diversion on the Rio Grande.

Water Resource Management

Some recent BoR/USACoE models indicate the probability of critically low flows that could affect BDD diversion capability later this summer. Also, the Canyon Road Water Treatment Plant may also experience significant supply shortfalls later this year. However, City water

resource managers are closely monitoring the water supply situation and are prepared to offer a variety of options to decision-makers. For example, the City has several years-worth of San Juan-Chama Project water stored in reservoirs, in case deliveries from the federal Bureau of Reclamation of San Juan-Chama Project water are curtailed and/or native flows are unavailable. The City could therefore choose to release some of that water if needed. Additionally, the City has been “resting” the Buckman well field since early 2010 in case decision-makers opt to pump significant amounts of water from the aquifer. Local reservoirs on the upper Santa Fe River currently have about 33% of full capacity, or enough water to average about 4 million gallons per day of production from the Canyon Road Water Treatment Plant, July through September, 2013. Also, policy makers may consider implementation of Emergency Drought Stages pursuant to the Conservation Ordinance. Therefore, City decision-makers and resource managers have a variety of policy options available in order to meet water supply demands during times of drought.

Local Conditions – Upper Santa Fe River

| | Reservoir Level | Santa Fe Snow Gage | Reservoir Inflow |
|---|-----------------|--------------------|------------------|
| June 21, 2013 | 33.0% | 0.0 inches | 0.65 MGD |
| 5-Year Average This Date (2008 – 2012) | 77.1% | 0.0 inches | 4.07 MGD |

The City of Santa Fe has rights to a total of up to 5,040 acre-feet per year in Nichols and McClure Reservoirs. City Water Division staff are estimating receiving only about 1,200 – 1,300 acre-feet of water from the upper Santa Fe River watershed this year. It is anticipated that this water will be available beginning in June through September. As of the date of this memo, there is no snow pack left in the upper watershed. Snowmelt runoff quantity into local reservoirs has begun to sharply decrease from the previous month.

Rio Grande Basin

Surface flows in the Rio Grande and its tributaries have been well below normal, storage levels in regional reservoirs are very low currently, and the federal BoR recently stated that if there is no “meaningful moisture” received this winter/spring then this would mark the lowest water levels ever in New Mexico reservoirs prior to entering into a new irrigation season. With large moisture deficits deeply entrenched across the region, meaningful improvement seems unlikely. For example, the most recent forecast of runoff into the Rio Grande at Otowi Gage (upstream from the BDD diversion structure) is for about 17% of normal flow. Legal and hydrologic compliance with the various Biological Opinions (Endangered Species Act, e.g., silvery minnow) in the middle and upper reaches of the Rio Grande will become very difficult, if not impossible, through the coming summer months.

Wild Earth Guardians has recently filed a notice of intent to file suit against Middle Rio Grande Collaborative Program signatories, citing violations of the current Biological Opinion under the auspices of the Endangered Species Act. However, the BDD Project is not a signatory to the Collaborative Program.

San Juan Basin

The streamflow forecast for the San Juan River Basin is 75 percent of the 30 year avg. (1981-2010). The San Juan-Chama Project delivery forecast was recently updated by BoR. BoR is now

projecting a full allocation of San Juan-Chama Project water to San Juan-Chama contractors for this year (up from a previous forecast of only 80%); however, conditions could significantly worsen for San Juan Chama Project deliveries next year if the drought persists due to a lack of carry-over storage in Heron Reservoir. If conditions do not change, after deliveries are made out of Heron Reservoir this year, that reservoir will be heading into the next water –year at historically low levels.

For the last few weeks, the snowpack, as measured in inches of snow water equivalent (SWE), in the San Miguel, Dolores, Animas, and San Juan basins has been declining rapidly. These basins reached their peak snowpack around March 22nd, and then began to melt. Recent snow surveys reported that the snowpack is more-or-less gone and there will be very little snowmelt runoff for the remainder of the water-year.

U.S. Drought Monitor

New Mexico

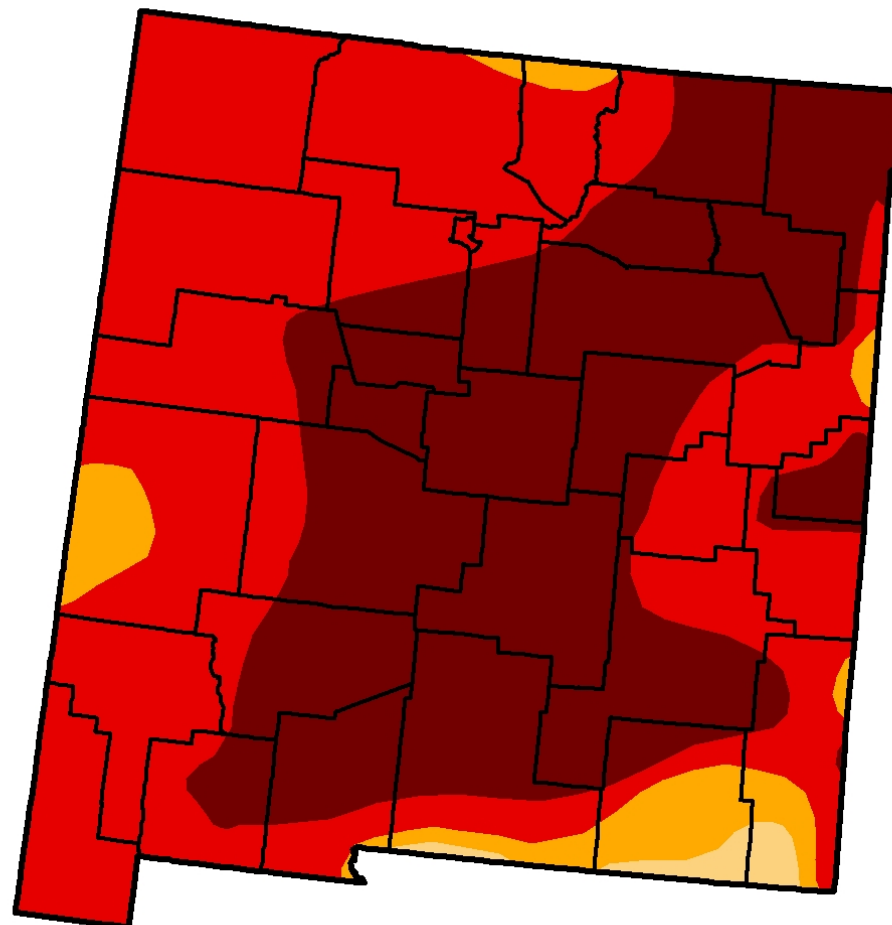
June 25, 2013

Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|------|--------|--------|-------|-------|-------|
| Current | 0.00 | 100.00 | 100.00 | 98.79 | 93.46 | 44.79 |
| Last Week (06/18/2013 map) | 0.00 | 100.00 | 100.00 | 98.49 | 90.18 | 44.13 |
| 3 Months Ago (03/26/2013 map) | 0.23 | 99.77 | 98.47 | 89.85 | 49.97 | 4.36 |
| Start of Calendar Year (01/01/2013 map) | 0.00 | 100.00 | 98.83 | 94.05 | 31.88 | 0.97 |
| Start of Water Year (09/25/2012 map) | 0.00 | 100.00 | 100.00 | 62.56 | 12.25 | 0.66 |
| One Year Ago (06/19/2012 map) | 0.00 | 100.00 | 99.64 | 81.29 | 25.17 | 0.00 |

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, June 27, 2013

Mark Svoboda, National Drought Mitigation Center

Western Adaptation Alliance (WAA)

Report on the Regional Climate Leadership Academy, June 3 – 5, 2013

The Western Adaptation Alliance (WAA) was formed in 2011 to address global climate changes and create adaptation strategies especially focusing on arid and semi-arid environments. The WAA includes 11 local governments across 5 states:

- Colorado (Aspen, Boulder, Denver, Fort Collins)
- Arizona (Flagstaff, Phoenix, Tucson)
- Utah (Salt Lake City, Park City)
- Nevada (Las Vegas)
- New Mexico (Santa Fe)

In 2012, the Western Adaptation Alliance (WAA) and Institute for Sustainable Communities (ISC) came together and partnered to produce the first Regional Climate Leadership Academy for Adaptation & Reliance. The Academy was designed to be a three-part series primarily focused on climate adaptation, communication, and implementation. The first gathering was hosted in Denver, CO. This was the second in Phoenix, AZ.

This year's topics included

- Framing Tradeoffs in Adaptive Urban Water Management
- Water Supply and Demand in the Face of Climate Change
- Wildfire/Forest Management & Watershed Protection
- Advancing Adaptation Planning
- Preparing for and Dealing with Health Impacts of Climate Change
- Stormwater Management, Green Infrastructure and Rainwater Harvesting
- Water Conservation & Efficiency : Promising Practices
- Building Economic Resilience
- Wastewater Reclamation Innovations
- Land Use/Growth and Water Demand
- Natural Area Protection
- Resilient Business Models for Water Service Providers

Santa Fe's Team included:

Katherine Mortimer, Sustainable Santa Fe Programs Manager / Sustainable Santa Fe Commission

Claudia Borchert, Water Resources Coordinator

Esha Chiochio, Climate Solutions Coordinator / SF Watershed Association

Melissa McDonald, Vice Chair City of Santa Fe Water Conservation Committee

Grace Perez, City of Santa Fe Water Conservation Committee

Santa Fe was highlighted in a case study for the city's Living River Initiative. Claudia Borchert presented on a panel for Adaptive Urban Water Management and Katherine Mortimer spoke about Green Building Codes.

What's next?

There is much we can do as a city and citizens of the region. The city is currently working on an adaptation plan with the Santa Fe Watershed Association. We were asked to put forth two to three ideas as short-term action items. We suggested:

- 1) Explore the creation of a network of citizen Water Advisory Board within the WAA to further the exchange of ideas
- 2) Explore adding water harvesting components to the water conservation's QWEL program for greater water savings
- 3) Create a triple bottom-line mechanism in our city's fiscal impact process

Obviously, there is much more that can be discussed. We look forward to continuing our efforts.

| # | Issue | Strategic Goal | Objectives | Tasks | Working Group Members | Reference Material | Fiscal Impact | Notes |
|----|--|--|--|---|--|---|---|--|
| 1. | Update Santa Fe Water Conservation and Drought Management Plan | | Assist in the 2015 Water Conservation Plan and create strategic framework and implement schedule | Read 2010 Plan and record suggested updates next meeting | Doug Pushard Grace Perez Lisa Randall Bill Roth Councilor Ives | City staff: Laurie Trevizo Caryn Grosse | | Draft timeline created. Goal: Jan 2015 |
| 2. | Water Conservation Education/Outreach Program Including marketing ideas for voluntary water use | | | | Giselle Piburn Stephen Wiman Tim Michael Grace Perez Lise Knouse | | Costs associated with a bill insert (printing and insert) | |
| 3. | Evaluate/draft ordinances to promote outdoor water conservation | Reduce GPCD through selective use of ordinances | | 1.Research ordinances by other cities for effectiveness 2.Research current ordinances for possible improvements | Doug Pushard Bill Roth Councilor Ives | | | <i>Request from D. Pushard to City Parks clarify Land Use Code 14-8.4 in E (4). Tree list also requested (pending land use approval)</i> |
| 4. | Reestablish Trend of Net Annual Reductions in Per Capita Water Usage | | | | Karyn Schmitt Melissa McDonald | | | |
| 5. | Proper Regulation of Water Usage and Waste Avoidance by Large Water Users | Contribute to annual water reductions in water use | Optimize water use by large water users | 1. Identify large water users 2.Estimate contribution to total demand 3.Identify ways to optimize water consumption 4.Engage in discussion | Tim Michael Melissa McDonald | Water Use in Santa Fe, Borchert, et al, July 2009 | Needs to be determined | Melissa will focus on Parks |

Water Conservation Plan Update

| | Task Name | Start Date | End Date | Duration | Predecessors | % Complete | Assigned To | At Risk | Comments |
|----|---|------------|----------|----------|--------------|------------|-------------------------------|---------|-------------------------------------|
| 1 | Strategic Planning | 10/01/12 | 12/30/14 | 587 | | 35% | | | |
| 2 | Create SmartSheet | 10/01/12 | 10/05/12 | 5 | | 95% | clgrosse@santafenm.gov | | |
| 3 | Check State Statute | 01/21/13 | 01/25/13 | 5 | | 95% | lltrevizo@ci.santa-fe.nm.us | | |
| 4 | Check Clerks office re:quorem | 01/21/13 | 01/25/13 | 5 | | 95% | lltrevizo@ci.santa-fe.nm.us | | |
| 5 | Climate Change Report | | | | | 95% | claudia borchert | | |
| 6 | Reclaimed Wastewater Report | | | | | 95% | claudia borchert | | |
| 7 | Stella Modeling | | | | | | rrcarpenter@ci.santa-fe.nm.us | | |
| 8 | Annual Water Reports- 2012 | | | | | 100% | Alan Hook | | |
| 9 | Demand Elasticity Report | | | | | | Jim Fryer | | |
| 10 | Residential End Use Study | | | | | | National Research Center | | |
| 11 | Identify Updates to Plan | 01/17/13 | 12/13/13 | 237 | | 68% | Working Group | | |
| 12 | section 1: Overview | 01/17/13 | 02/14/13 | 21 | | 100% | Working Group | | update ordinances, meter size rates |
| 13 | section 2: Water Conservation Program | 02/15/13 | 06/21/13 | 91 | 12 | 100% | Working Group | | |
| 14 | section 3: Drought Management Plan | 07/12/13 | 08/09/13 | 21 | | 100% | Working Group | | |
| 15 | section 4: Regional Water Plan | 08/23/13 | 09/20/13 | 21 | | | Working Group | | |
| 16 | section 5: Continued Improvements Plan | 10/04/13 | 11/01/13 | 21 | | | Working Group | | |
| 17 | section 6: Conclusions | 11/15/13 | 12/13/13 | 21 | | | Working Group | | |
| 18 | Prepare Documents | 01/10/14 | 12/30/14 | 253 | | | Water Conservation Staff | | |
| 19 | Committee Process | | | | | | | | |
| 20 | Informational update to PUC/WCC | 12/31/14 | 01/27/15 | 20 | | | | | |
| 21 | Include 2013 Annual Report | 03/03/14 | 03/31/14 | 21 | | | | | |
| 22 | Revisions | 03/03/14 | 03/31/14 | 21 | | | | | |
| 23 | GPCD Calculator | 04/01/14 | 04/30/14 | 22 | | | | | |
| 24 | PUC | 05/01/14 | 05/30/14 | 22 | | | | | |
| 25 | Finance | 06/02/14 | 07/31/14 | 44 | | | | | |
| 26 | Info Item to Council | 08/01/14 | 09/30/14 | 43 | | | | | |
| 27 | Finalize Edits/Comments to Water Conservation Plan | 11/28/14 | 11/28/14 | 1 | | | | | |
| 28 | In House Deadline | 11/28/14 | 11/28/14 | 1 | | | | | |
| 29 | Approval | 12/01/14 | 12/19/14 | 15 | | | | | |
| 30 | Vote to Accept/Present to OSE | 12/01/14 | 12/19/14 | 15 | | | | | |
| 31 | Water Conservation Plan due to OSE | 10/01/12 | 01/15/15 | 599 | | | | | |

GROSSE, CARYN L.

From: Grace Perez <giperez@earthlink.net>
Sent: Thursday, June 27, 2013 8:59 PM
To: IVES, PETER N.
Cc: TREVIZO, LAURIE L.
Subject: WCC Education/Outreach Working Group Questions & Preliminary Proposal

Dear Councilor Ives,

With respect to your request to minimize staff time, I am asking these questions on behalf of Working Group #2 (Education/Outreach).

The Working Group has discussed the value of the road show (slide) presentation and agreed that it's something we want to continue if attendance can be improved. We plan to revise it for improved clarity and to add climate change impacts/adaptability. In turn, we would like the City to provide limited funds for advertising and venues.

Working Group #2 would like to put together a budget for a pilot program of three WCC presentations to be advertised by the City and held at City venues (such as the Convention Center, Chavez Center and Southside Library). We do not need large rooms, as we feel that attendance in the 20+ range would be satisfactory for this pilot.

We hope you can help us with suggestions on how to proceed to get quotes for advertising these events and finding out about costs for using City facilities. As volunteers, we will do all we can to keep additional staff workload at a minimum. We would like to present a proposed budget for discussion at the July WCC meeting as part of the WG #2 progress update.

Stephen mentioned at the June WCC meeting that Albuquerque has had success with similar lectures by providing attendees with modest water bill credits. (NOT rebates.) We would like the City to consider giving attendees a \$20 water bill credit for attendance at these presentations. I realize that this is something that the WCC cannot implement by itself, but I do think the committee can begin the process. Our working group would like to get it started as soon as possible. As a first step, it seems appropriate to ask if this is something that would have to go through all the stages of approval...Finance, PUC, City Council, etc.

Recognizing that this will take some time, we do not think that it should be coupled with the slide show and stop us from resuming the presentations as a trial case, with the city funding the advertising and venues. Provided that you think the bill credit concept is valid, we will want to know what verification would be needed by the Water utility for attendees to apply a credit to their water bills, whether pre-registration would be required, etc. Perhaps you can point us to the appropriate person in the Water utility to help pursue these questions.

Just to reinforce the idea of how effective such credits are for the Albuquerque Bernalillo County Water Utility Authority, with respect to increasing attendance and saving water, please see the information in this link (Water Smart Classes Produce Substantial Savings in Albuquerque).

<http://www.watersmartinnovations.com/PDFs/2012/12-W-1220.pdf>

Our working group members believe in the value of spreading the conservation message through these presentations. We hope you will agree that we can be successful with a relatively small commitment of money and staff time.

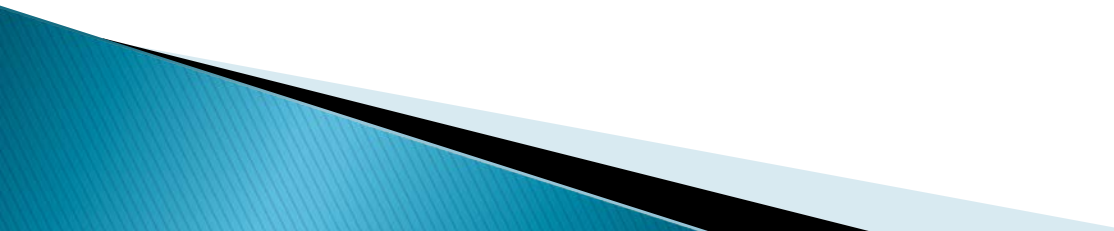
Sincerely,

Grace, for Working Group #2

Water Smart Classes

Produce Substantial Savings in Albuquerque

Presented by Richard Chapman
October, 2012

- ▶ **Program initiated by Katherine Yuhas,
Water Conservation Officer for the Albuquerque
Bernalillo County Water Utility Authority
(ABCWUA)**
 - ▶ **Smart Use, LLC is a contractor to the ABCWUA
1211 Roma Ave, NW, Albuquerque, NM 87102
(505) 400-0283 RichardSmartUse@yahoo.com**
- 

ABCWUA Water Conservation Accomplishments

- ▶ Reduced Gallons Per Capita Per Day (GPCD) by over 40% since 1995 (From 250 to less than slightly less than 150)
- ▶ Met the 150 GPCD goal 3 years early saving an extra 3 billion gallons
- ▶ Recognized by National Geographic Magazine and Time Magazine For Water Conservation Achievements. The only US City recognized in coverage of programs around the world.
- ▶ Multi-faceted array of rebates and incentives as well as an aggressively tiered rate structure
- ▶ Reduced large irrigation water use by over 10% since 2004 despite increases in irrigated areas

SUMMARY OF WATER SMART CLASSES

- ▶ There are two one hour classes offered: " Water Smart " and "Basic Drip"
- ▶ The Water Authority provides a \$20 water bill credit for attending the "Water Smart Class"
- ▶ The ABCWUA studied the 2007 – 2010 class attendees to learn program results : Savings increased each year and by 2010 class attendees saved more than 52,000 gallons/yr.
- ▶ About 6,000 people have attended classes provided by the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) since 2007, with about 1500 in 2012.
- ▶ Interest is increasing each year and the results are also increasing each year
- ▶ The classes are designed to provide practical information designed to help residents learn irrigation basic principles, how to easily determine their own water needs, and how to recognize obstacles to irrigation efficiency, and the confidence to pursue water savings.

“Water Smart ” & “Basic Drip” Classes

Water Smart Landscape Irrigation Class”

- Overview of Water Conservation program, goals, successes, and rebates
- Basic Irrigation Guide for the Albuquerque area – plant types and tips
- Typical irrigation problems that decrease water efficiency and how to fix those problems
- How to follow the bell curve associated with local area plant types
 - Follow the ABCWUA’s suggested 1-2-3-2-1 program
- Determining how much water your specific landscape needs
 - Four methods:
 - Suggested default irrigation schedules
 - Catch can readings (tuna or cat food cans)
 - Find the float – experiment by reducing times
 - Use the WEB site www.watersmart.us to calculate an irrigation schedule
- Technology improvements related to irrigation water delivery systems
 - Better heads – slow watering, matched precipitation, upgrades
 - Better drip system components – helps balance water delivery
 - Greatly improved irrigation controllers, easier to program, add sensors, set seasonal settings, and to obtain weather information

▶ Basic Drip Class

- ▶ The Drip Class provides information on the basics of drip systems, internet sources, the ABCWUA Xeriscape booklet, and hands on orientation to drip system components.

2007 – 2010 Program Results

- **ABCWUA studied the first 4 years (2007-2010)** – how many attended, cost of program, GIS mapping of the households represented.
- **Determined water savings** per class year and the average home savings
- **Subtracted reductions** the entire community had achieved
- **2010 class attendees saved an average of over 52,000 gallons/yr**
- **This program had the highest water savings and cost benefit of any other ABCWUA rebate/credit, program such as toilet rebates.**
- About **6,000 people have attended classes** since 2007, with about 1500 in 2012.
- **Interest is increasing** each year and the **results are also improving each year.**

Water Smart Attendees

| Year | Water Smart Class Rebates | # Water Smart Classes | Average Attendees | Water Smart Class Attendees |
|-------|---------------------------|-----------------------|-------------------|-----------------------------|
| 2007 | 781 | 12 | 81 | 976 |
| 2008 | 1,471 | 12 | 153 | 1,839 |
| 2009 | 383 | 14 | 34 | 475 |
| 2010 | 468 | 7 | 84 | 585 |
| 2011 | 332 | 5 | 83 | 415 |
| 2012 | 1,105 | 6 | 230 | 1,381 |
| Total | 4,540 | 56 | 101 | 5,675 |

Drip Class Attendees

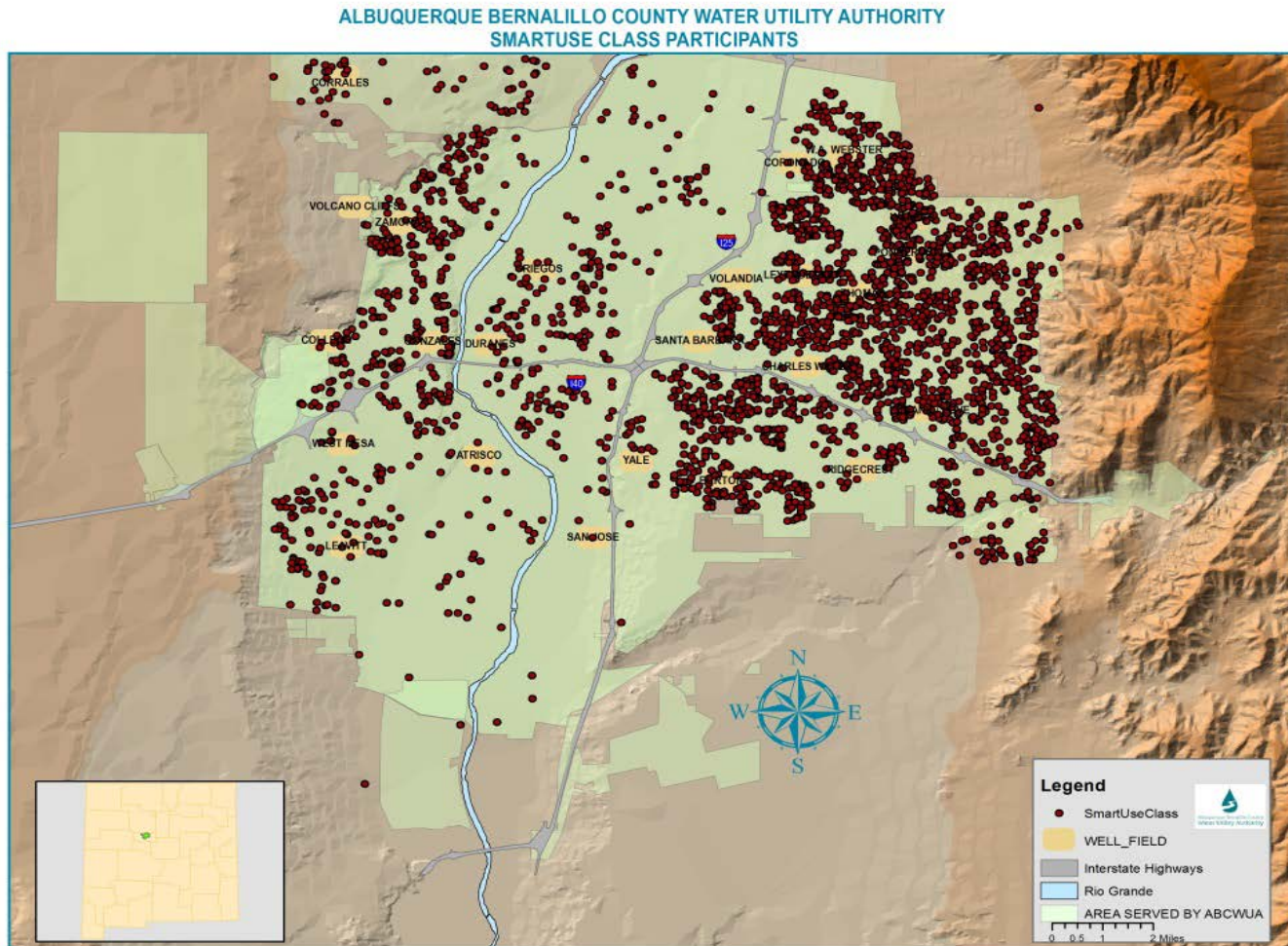
| Year | # Drip Classes | Average Drip Class Attendees | Drip Class Attendees - |
|--------------|-----------------------|-------------------------------------|-------------------------------|
| 2007 | 0 | 0 | 0 |
| 2008 | 4 | 45 | 180 |
| 2009 | 3 | 41 | 124 |
| 2010 | 4 | 47 | 186 |
| 2011 | 4 | 57 | 227 |
| 2012 | 4 | 88 | 350 |
| Total | 19 | 59 | 1,117 |

Program Results

Annual Gallons Saved from "Water Smart and/or Drip" ABCWUA Water Efficiency Classes

| Year | 2007 | 2008 | 2009 | 2010 | All |
|----------------------------|-----------|-----------|------------|------------|------------|
| Rebates (Households) | 781 | 1471 | 383 | 468 | 3,103 |
| Gallons Saved | 1,706,188 | 5,663,108 | 11,962,016 | 24,557,588 | 43,888,900 |
| Average Home Gallons Saved | 2,185 | 3,850 | 31,232 | 52,473 | 14,144 |

MAP OF PARTICIPATING HOUSEHOLDS



ALBUQUERQUE, NEW MEXICO

Why Are These Classes So Effective?

- ▶ **Rebate (\$20 credit) and short class duration make it popular**
- ▶ **Increased water rates & seasonal surcharges**
- ▶ **Classes are designed to cover key concepts; most common problems are explained**
- ▶ **Concepts are presented in the most practical terms**
- ▶ **Attendees are encouraged to ask questions and there is often good discussion even with large classes**
- ▶ **The goal is to give residents the confidence to put concepts into practice and save water**

| | | | | | | | | | | | | | |
|-------------------------------------|--|-----------------------------------|--|----------------------------------|--|-----------------------------------|--|-----------------------------------|--|------------|--|-------------------------------------|--|
| WINTER | | START | | SPRING | | SUMMER | | FALL | | END | | WINTER | |
| Jan Feb | | March | | April May | | June July Aug | | Sept Oct | | Nov | | Dec | |
| Only water if very dry winter | | Start to water & then taper up | | | | Hottest Months – most water | | Cooler nights – taper down | | | | Only water if very dry winter | |
| Only if needed* | | 1 x /wk | | 2 x / wk | | 3 times per week | | 2 x / wk | | 1 x /wk | | Only if needed * | |
| 5-10 minutes* | | 15 Minutes | | Minutes: Apr = 15, May =20 | | 20 minutes | | Minutes: Sep = 20, Oct = 15 | | 10 Minutes | | 5-10 minutes* | |
| 5-10 minutes* | | 12 Minutes | | Minutes: Apr = 12, May =16 | | 16 minutes | | Minutes: Sep = 16, Oct = 12 | | 8 Minutes | | 5-10 minutes* | |

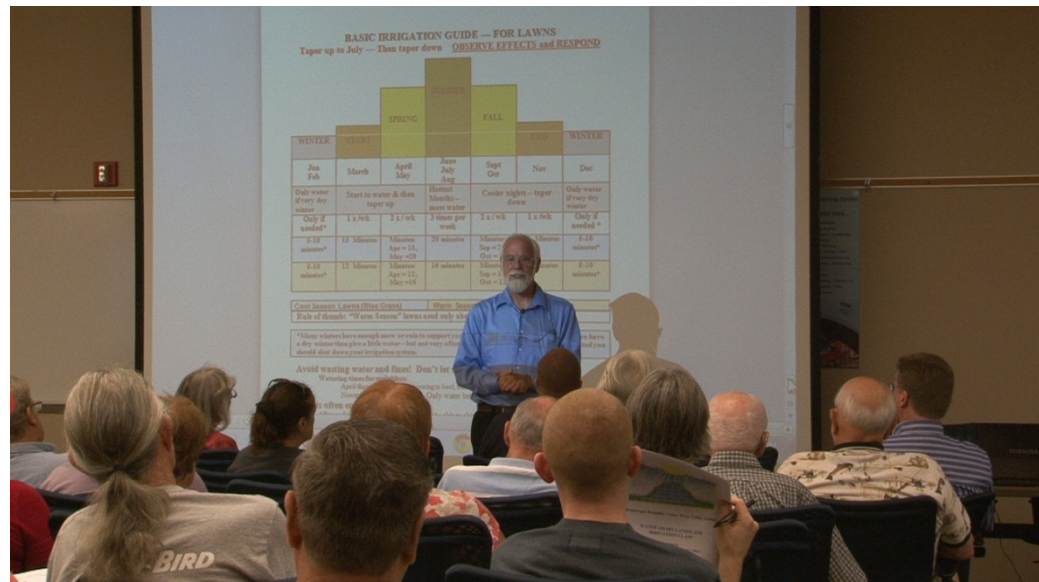
Cool Season Lawns (Blue Grass)

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOT |
|------------------|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|-------------|
| Inches Needed | 0.6 | 0.9 | 1.3 | 2.5 | 4.1 | 5.8 | 6.6 | 5.8 | 4 | 2.3 | 0.8 | 0.4 | 35 |
| Seasonal Setting | 9% | 14% | 20% | 38% | 63% | 88% | 100% | 88% | 61% | 35% | 13% | 6% | N/A |
| Percent of Total | 2% | 3% | 4% | 7% | 12% | 17% | 19% | 17% | 11% | 7% | 2% | 1% | 100% |
| # of run times | * | * | * | 2/wk | 2/wk | 3/wk | 3/wk | 3/wk | 2/wk | 2/wk | * | * | * If needed |

Catch Can Test

To know how long it takes your irrigation system to deliver .5" you should conduct a catch can test. This can be done simply with a tuna can or soup can, a watch or timer, and a ruler. On a non windy day, place an empty can in an area near the middle of your lawn, but not within two feet of a sprinkler head, then run your system for 20 minutes. Use the ruler to measure the amount of water (precipitation) in the can. **If it is .5" then 20 minutes is a good amount of time to run your system during the warmest months. If the amount in the can is more than .5", then your watering run should be less than 20 minutes, and with less than .5" more time is needed.** You can use more cans to learn even more about the efficiency of your system. Ideally, you want to see the same amount of water in all of your cans (Uniform distribution). **If you don't find them within about .2 between the highest and lowest of six or more cans then your system is not working properly and should be fixed before you proceed with these watering schedule calculations.** Use the table below to adjust your runtime to produce .5"

| | | | | | | | | |
|-----------------|------|------|------|------|------|------|----|--------------------|
| Inches in Can | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 7/8" | 1" | In 20 minutes |
| Run Time To Use | 40 | 27 | 20 | 16 | 14 | 12 | 10 | Your zone run time |



Working Group #4: Reductions in Per Capita Water Usage (Reestablish Trend of Net Annual)

Karyn Schmitt

Melissa McDonald

Goal:

To reduce GPD by at least 1% per year

- OSE gpcd calculator: Single family Residential 59
- 2012 Overall -106
- Down from 2011 which was 107

Objectives: Research/locate/ Implement programs that produce MORE water conservation by Santa Fe citizens, businesses, organizations and entities , and government

Tasks:

1. Determine accuracy ACTUAL GPD #'s for SF-determine actual number goals
2. Explore mechanisms being utilized by other cities
3. Create new options for water savings
4. Create Online resources for homeowners/businesses
5. Prioritize/Publish water use on the city level: parks, recreational areas, medians, golf courses (transparency for the home/business owner to encourage compliance to voluntary water restrictions

Reference Material:

- 1) Internet sources, city conservation websites
- 2) City of SF information of progress in mechanisms

Fiscal Impacts:

- 1) Low impact- utilization of committee members to research trends and innovations
- 2) Potentially high depending on software purchased by city of SF

Notes:

- Ongoing timeline
- Coordination with purchase process with water utility- water metering. Billing software
- Proposed meeting with new utilities director Nick Salvo - to discuss billing system
- Outdoor watering –Establish Irrigation efficiency- & focus
- Passive and Active Water Harvesting
- Online irrigation controller schedule-Possibly link to the Denver site which has a good option - from the Santa Fe Conservation website
- Ordinance review with overall reduction in min
- New city IT director position has been established –consult with this person once appointed
- Parks/Medians- focus water use on trees- native plantings only. I.E. install rockwork , colored glass, sculpture /art (appropriate for the city) youth projects to the medians,
- Median design (low/no water use)contest- high school/college/professional
- Caryn Grosse will be included in meetings if Laurie Trevizo is not available.

Working Group 5

Issue: Proper Regulation of Water Usage and Waste Avoidance by Large Water Users

| | |
|---------------------------|---|
| Strategic Goal | Contribute to reducing water use by optimizing water use by large water users |
| Objectives | Optimize water use by large users |
| Tasks | <ul style="list-style-type: none">• Identify large water users• Estimate contribution to total demand• Engage large water users in the discussion of how to optimize water use• Identify ways to optimize the water consumption of large users• Engage in discussion Research on Smart Controllers for rebates/park installations• Explore and suggest potential rebate programs and potential savings for large users• Explore behavioral modification models as a means to reduction of use• Research commercial water budgets |
| Members | Tim Michael, Melissa McDonald |
| Notes | <ul style="list-style-type: none">• Research on Smart Controllers for rebates/park installations• Exploring with WCC on ways to localizing QWEL Training—adding passive water harvesting info to the curriculum• Participate establishing a WAA networking opportunities• Liaison with Parks and Open Space (POSAC--Melissa McDonald) |
| Reference Material | <ul style="list-style-type: none">• Water Use in Santa Fe, Borchert et al., July 2009• QWEL Guide and website• City of Tucson, City of Flagstaff, Salt Lake City, Boulder website & others (engage in discussions with other water conservation programs) |
| Fiscal Impact | To be determined |

Same information, another format.

Strategic Goal

Contribute to reducing water use by optimizing water use by large water users

Objectives

Optimize water use by large users

Tasks

Identify large water users

Estimate contribution to total demand

Engage large water users in the discussion of how to optimize water use

Identify ways to optimize the water consumption of large users

Engage in discussion Research on Smart Controllers for rebates/park installations

Explore and suggest potential rebate programs and potential savings for large users

Explore behavioral modification models as a means to reduction of use

Research commercial water budgets

Members

Tim Michael, Melissa McDonald

Notes

Research on Smart Controllers for rebates/park installations

Exploring with WCC on ways to localizing QWEL Training—adding passive water harvesting info to the curriculum

Participate establishing a WAA networking opportunities

Liaison with Parks and Open Space (POSAC--Melissa McDonald)

Reference Material

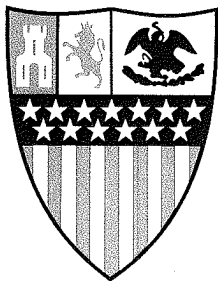
Water Use in Santa Fe, Borchert et al., July 2009

QWEL Guide and website

City of Tucson, City of Flagstaff, Salt Lake City, Boulder website & others (engage in discussions with other water conservation programs)

Fiscal Impact

To be determined



City of Santa Fe, New Mexico

200 Lincoln Avenue, P.O. Box 909, Santa Fe, N.M. 87504-0909

www.santafenm.gov

David Coss, *Mayor*

Councilors:

Rebecca Wurzbarger, Mayor Pro Tem, Dist. 2

Patti J. Bushee, Dist. 1

Chris Calvert, Dist. 1

Peter N. Ives, Dist. 2

Carmichael A. Dominguez, Dist. 3

Christopher M. Rivera, Dist. 3

Bill Dimas, Dist. 4

Ronald S. Trujillo, Dist. 4

July 2, 2013

Bill Roth
P.O. Box 22910
Santa Fe, NM 87502

Dear Mr. Roth:

The Santa Fe City Council, at its meeting of June 26, 2013, approved your appointment to serve on the Santa Fe Water Conservation Committee.

The staff liaison to the Committee is Laurie Trevizo. Ms. Trevizo can be reached at 955-4223 and can provide you with information regarding meeting dates and times.

Enclosed is a copy of the City's Code of Ethics Ordinance for public officials for your review. Also enclosed is a City Registration Form and Acknowledgement of Receipt which you will need to complete and return to Yolanda Y. Vigil, City Clerk, P.O. Box 909, Santa Fe, New Mexico 87504-0909, in the enclosed self addressed, stamped envelope.

Thank you for agreeing to serve as a member of the Santa Fe Water Conservation Committee.

Sincerely,

A handwritten signature in black ink, appearing to read "David Coss", written over a horizontal line.

David Coss
Mayor

Enclosure: Code of Ethics Ordinance
Registration Form
Acknowledgement of Receipt

xc: Laurie Trevizo, Staff Liaison

BILL ROTH

Mobile: 505-670-2879

Bill Roth Plastering Inc.

Clear Creek Management Corp. General Contractors

Affiliate of Evergreen Building Solutions, LLC

billrothplastering@mac.com

dry.creek.environmental@gmail.com

www.billrothplastering.com

www.arroyosanantonio.com

PROFESSIONAL EXPERIENCE

Plastering Contractor- with expertise in a broad range of finishes and systems. Licensed since 1988.

General Contractor- Licensed since 1998. Specializing in small energy efficient homes under 1500 sq ft.

Drafting Services- I provide 3D CAD drafting and design services with an emphasis on sustainable design practices.

3rd Party Inspection Services- Since 2011, as a subcontractor to EcoTerra Enterprises, I provide inspection services for the verification of proper construction techniques in regards to flashing and drainage plane installation procedures for both Pulte Homes and Centex Homes.

SELECTED ACCOMPLISHMENTS

- 2012 Chair Santa Fe Area Green Building Council
- 2011-2012 have inspected over 450 homes for EcoTerra Enterprises.
- In 2007, built the first two homes in the City of Santa Fe to receive Build Green New Mexico Certification, achieving Silver Status. Homes were of a contemporary design, utilized passive solar orientation, greywater systems, ultra low flow fixtures, etc. Homes won the 2008 Central NM Greenbuilding Council award for best site layout and design in 2008
- 2003 Won best remodel under \$50,000 Santa Fe Area Remodelers Council
- 2008-2009 -plastering company provided volunteer work for Habitat Homes, in including Blitz Build project.
- Plastering Projects have been included in numerous publications including Architectural Digest, Metropolitan Home, Trend, New Mexico Magazine, New Zealand Trend, etc...
- A home built in 1998 won a Honorable Mention, Home of the Year, Metropolitan Home Magazine
- Plastering Company has performed/done consulting work in Wellington New Zealand, St Tropez, France, Washington DC, Los Angeles, Denver, San Francisco, Aspen Colorado, Telluride Colorado, Phoenix, Az, and hundreds of both small and large, commercial and residential projects in New Mexico.
- As a short film maker I have had my animated films shown in over 25 different film festivals around the United States.
- Developed and built award winning infill multi home projects in Santa Fe NM.

EDUCATION

Attended Cal State Hayward, Hayward California-Music Composition

Attended College of the Redwoods, Eureka California- Building Trades Program

Attended University of California, San Diego California-Music Composition

Currently enrolled at Santa Fe Community College in the Architectural Drafting Program

Green Building Training

OSHA 10 certification

Tree and Natural Resource Preservation certificate (included Construction Site Damage Prevention)
NAHB GREEN VERIFIER
RESNET HERS RATER
ENERGY STAR FOR HOMES 3.0 Training.

ADDITIONAL

Habitat for Humanity Volunteer since 2008
2012 Santa Fe Area Home Builders Association: Green Building Council Chair
Second VP Santa Fe Area Home Builders Association

Santa Fe Water Conservation Committee

Ives, Peter

Chair/Councilor

Phone: 955-6816 Cell: 231-3977

pnives@ci.santa-fe.nm.us

Knouse, Lise

Other/General

314 South Guadalupe

Santa Fe, NM 87501

Phone: 988-3700

Lise@LiseKnouse.com

Pushard, Doug

Water Related Technical

Expertise/Sustainable Development

537 Garcia Street

Santa Fe, NM 87505

doug@harvesth2o.com

McDonald, Melissa

Landscaping Water Conservation Practices

551 West Cordova #458

Santa Fe, NM 87505

Phone: 424-4444

mel@sfpermaculture.com

Tim Michael

Water Related Technical

Expertise/Environmental Scientist

6513 Winding Ridge Loop

Santa Fe, NM 87507

Phone: 476-3799

timmichael@comcast.net

Perez, Grace

Other/General

525 Camino Rancheros

Santa Fe, NM 87505

Phone: 982-8832; Cell: 603-0458

giperez@earthlink.net

Piburn, Giselle

Educational Programs

1212 ½ Don Gaspar Avenue

Santa Fe, NM 87505

Phone: 989-4424

luminous@cybermesa.com

Schmitt, Karyn

Landscaping Water Conservation Practices

818 Allendale Street

Santa Fe, NM 87505

Phone: 982-1478

sunsilk@earthlink.net

Wiman, Stephen

Water Quality/Water Reuse

933 Baca Street

Santa Fe, NM 87505

Phone: 471-9036

skwiman@goodwatercompany.com

Lisa Randall

Educational Programs

6388 Entrada Milagro

Santa Fe, NM 87507

Phone: 505-204-1925

lrandall@sfps.info

Roth, Bill

Building Construction Practices

Mailing:

P.O. Box 22910

Santa Fe, NM 87502

Physical:

1713A Montano

Santa Fe, NM 87505

Phone: 505-670-2879

Sr.billroth@gmail.com

Lucero, Frances

Stenographer

lucerfr@gmail.com

Trevizo, Laurie

Committee Liaison

Water Conservation Office

P.O. Box 909

Santa Fe, NM 87504-0909

Phone: 955-4223

lltrevizo@ci.santa-fe.nm.us