

SANTA FE WATER CONSERVATION COMMITTEE MEETING CITY HALL - 200 LINCOLN AVE. CITY COUNCILORS' CONFERENCE ROOM

TUESDAY, JUNE 10, 2014 4:00 PM TO 6:00 PM

- 1. CALL TO ORDER
- 2. ROLL CALL
- APPROVAL OF AGENDA
- 4. APPROVAL OF CONSENT AGENDA
- 5. APPROVAL OF MINUTES MAY 13, 2014 WATER CONSERVATION COMMITTEE MEETING
- CONSENT AGENDA
 - A. RESERVOIR IMPROVEMENTS UPDATE (Alan Hook)

DISCUSSION ITEMS:

- 7. AUTOMATED METER READING SYSTEM (Nick Schiavo, 10 minutes)
- 8. DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE (Rick Carpenter, 10 minutes)
- 9. SPRING OWEL TRAINING AND QWEL RECOGNITION UPDATE (Robert Wood, 10 minutes)
- 10. IRRIGATION REBATE PROCESS (Robert Wood, 10 minutes)
- 11. UPDATE ON SPRING OUTREACH AND EDUCATION ACTIVITIES (Caryn Grosse, 10 minutes)
- 12. REBATE ANALYSIS FINDINGS AND RECOMMENDATIONS (Caryn Grosse, 10 minutes)

INFORMATIONAL ITEMS:

- 13. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITATIVES: (Councilor Ives 60 minutes)
 - A. GROUP #3- WATER CONSERVATION CODES, ORDINANCES & REGULATIONS (12 minutes)
 - B. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS (12 minutes)
 - C. GROUP #5- DOMESTIC WELLS WITHIN THE CITY LIMITS (12 minutes)
 - D. GROUP #1 WATER CONSERVATION & DROUGHT MANAGEMENT PLAN UPDATE (12 minutes)
 - E. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH (12 minutes)

MATTERS FROM STAFF:

MATTERS FROM COMMITTEE:

NEXT MEETING - TUESDAY, JULY 9, 2014:

CAPTIONS: JUNE 23, 2014 @3 pm

PACKET MATERIAL: JUNE 25, 2014 @3 pm

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.

WATER CONSERVATION COMMITTEE INDEX MAY 13, 2014

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Approval of Consent Agenda	Mr. Wiman asked to move Item 7-a and 7-b to discussion items. Ms. Randall moved to approve the agenda as noted, second by Ms. Perez, motion carried by unanimous voice vote.	Page 2
Approval of Minutes, April 8, 2014 and October 8, 2013 PAGE 4: 1 ST paragraph, 4 th line – for red wet water on the Santa Fe River	Ms. Piburn moved to approve the minutes of April 8, 2014 as amended, second by Ms. Randall, motion carried by unanimous voice vote.	Page 3
It was noted that the minutes should reflect who is absent with an excuse and who is not. Minutes of April 8, 2014 to reflect that Mr. Doug Pushard was excused.	Mr. Wiman moved to approve the minutes of October 8, 2013 as presented, second by Ms. Perez, motion carried by unanimous voice vote.	
Consent Agenda Moved to Discussion Items	Informational	Page 3-4
Discussion Items #8Green Lodging Initiative Resolution #9Forest and Water Climate Adaptation (Esha Chiocchio) #10-2013 Gallons Per Capita Per Day	Ms. Perez moved to postpone Item #9, second by Mr. Wiman, motion carried by unanimous voice vote. (Exhibit C – Forest and Water Climate Adaptation: A Plan for the Santa Fe Watershed The Water Conservation	Page 4-8

	Committee members followed a verbal presentation based on the handout.	
Informational Items Water Conservation Committee Outreach Opportunities, Laurie Trevizo Group #4 Group #5 Group #1 Group #2 Group #3	All reports informational. Agenda topics for next meeting: * F/U Letter in City Attorney's Office re: City Wells * Timeframe for completion for the Water Conservation Drought Plan at next meeting. * F/U for staff to get WCC presentation to Public Works, Public Utilities and Finance Committee. The Chair would like the presentation filmed. * Mr. Pushard would like to have a formal review of the model they are working on with Build Green NM.	Page 8-11
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Matters from Committee	* Group 6 – Grey Water/Black Water sub group discussion * Rick Carpenters report to be placed on agenda as a regular information item, take off consent agenda.	Page 11
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SANTA FE WATER CONSERVATION COMMITTEE

MINUTES - MAY 13, 2014

Fran Lucero, Stenographer

5/13/2014

MINUTES: DRAFT UNTIL ARRPVOED

SANTA FE WATER CONSERVATION COMMITTEE MEETING CITY HALL - 200 LINCOLN AVE. CITY COUNCILORS' CONFERENCE ROOM TUESDAY, MARCH 11, 2014 4:00 PM TO 6:00 PM

MINUTES

1. CALL TO ORDER

The Chair called the meeting of the Santa Fe Water Conservation Committee to order at 4:00 pm in the City Councilor's Conference Room. A quorum was declared by roll call.

2. ROLL CALL

Present:

Councilor Peter Ives, Chair Nancy Avedisian Doug Pushard Tim Michael (Telephonically) Giselle Piburn Stephen Wiman Karyn Schmitt Lisa Randall Bill Roth Grace Perez

NOT PRESENT:

Melissa McDonald, Excused

Others Present:
Laurie Trevizo, Water Conservation Manager
Caryn Grosse, Water Conservation Specialist
Rick Carpenter, Water Department
Andy Otto, Santa Fe Watershed Association
Esha Chiocchio
Anna Serrano for Fran Lucero, Stenographer

3. APPROVAL OF AGENDA

Staff noted that Item #9 presented by Esha Chiocchio; she might be late and need to be accommodated.

Ms. Randall moved to approve the agenda as noted, second by Ms. Perez, motion carried by unanimous voice vote.

4. APPROVAL OF CONSENT AGENDA

Mr. Wiman asked to move Item 7-a and 7-b to discussion items.

Ms. Randall moved to approve the agenda as noted, second by Ms. Perez, motion carried by unanimous voice vote.

5. APPROVAL OF MINUTES APRIL 8, 2014
PAGE 4: 1ST paragraph, 4th line – for red wet water on the Santa Fe River

It was noted that the minutes should reflect who is absent with an excuse and who is not. Minutes of April 8, 2014 to reflect that Mr. Doug Pushard was excused.

Ms. Piburn moved to approve the minutes of April 8, 2014 as amended, second by Ms. Randall, motion carried by unanimous voice vote.

6. MINUTES, OCTOBER 8, 2013.

Mr. Wiman moved to approve the minutes of October 8, 2013 as presented, second by Ms. Perez, motion carried by unanimous voice vote.

- CONSENT AGENDA (Moved to Discussion Items) (DISCUSSION ITEMS)
 - A. Drought, Monsoon and Water Resource Management Update (Rick Carpenter)
 The Committee Members were presented with a memo dated April 22, 2014 32nd Monthly
 Update on Drought and Water Resource Management. (Exhibit A)
 - B. Reservoir Improvements Update

It was noted that this is the 4th year of a drought; this current drought is extreme and what sets it apart from previous extreme droughts is that, the region will enter into summer without very much carry-over water from the previous year in regional reservoirs – they are at low levels (except for the local McClure reservoir in Santa Fe).

The notices of intent were to be field by Wild Earth Guardians setting dangerous species Act issues against BOR service at McClure and the State of Colorado. It was expected for those lawsuits to be filed this week; they did not get filed this week. We helieve it is because we are in what they call minnow spike which is something that the Feds are doing, they started late last week and we are trying to mimic the snowmelt runoff that would normally have happened. The flows in the river as of Monday, May 12th were at about 2300 cfs.

The last update from BOR on San Juan Chama project deliveries was; they felt short of saying that we were at 100% but they said it would probably be more like 85% dive or take. That was before we had the small storms. With the storm as we have right now and in northern New Mexico it might creep up from the San Juan Chama project this year.

Mr. Carpenter said that we are moving closer to 100% especially with this latest storm. The only thing that could throw us off is if we otherwise had 100% of runoff, if we have a real warm spell like they are predicting this weekend, we could actually have too much runoff from the diversion structures on the Blanco can't handle it and we end up bypassing, that could happen if it melts too fast.

Nothing has really changed on Nichols and McClure; we have drawn down the reservoir quite a bit. We were a couple of days behind schedule; originally we wanted to begin filling Nichols around May 9th. We are retreating as much water as we possibly can.

Mr. Pushard asked about the source of supply utilization summary, on the columns – 6.3 million gallons and the 19.59 AF, what are the headers on those columns? Mr. Carpenter said that is his mistake; it should read 6.3 mgp (million gallons per day). Mr. Carpenter confirmed that the table reflects the totals for the month.

Mr. Pushard asked about the 5-year average in the combined reservoir is about 57% and we are currently at 43% because we had one reservoir off line. Mr. Carpenter said that when this was written we were actually at a low of 30%. Mr. Pushard asked what is the max it could be given we only have one – 49%? Mr. Carpenter said that Nichols is 25% the size of McClure, together they can pump 4,000 ac. ft. at one time. The max of one is 3000 and the other is 1000 ac. ft. Mr. Pushard asked if we get full delivery the Buckman should do the line and share of the water? Mr. Carpenter said we would get as much as we can from the canyon and that will be 4 mgp (million gallons per day). We have had some pumps off line and some shaft and valve issues but those are getting back on line. We should be at full capacity, as they should be fixed within 2 weeks. We should be, mechanically speaking, at full capacity within about 2 weeks and that could be up to about 15 mgp. With BDD churning away, whatever we get from the canyon that is enough what we can expect full maximum these days and if we go over that we can make that up with well water.

Ms. Perez asked on the work and timeline of the reservoirs, she asked Mr. Carpenter if in retrospect this worked well or not and what could be differently on timing of this project.

Mr. Carpenter said that the construction was done through an Engineer and once construction is done it is done but it happened to coincide with a big drought. It did heighten awareness through the rains. There were other items listed and some of the answers did not coincide with the timeline. There were safety and operational concerns otherwise we would have been done.

The Chair asked what was the planning process on the timeframe to work through those improvements? Mr. Carpenter said that we have been talking about it for a while; there was a safety hazard on opening and closing of the gates and the defined space issues. For years we knew what needed to be done, we were fortunate to get grant money from the state and we were ready, we issued the contract and we were in the drought.

Thank you to Mr. Carpenter for his report.

DISCUSSION ITEMS

8. Green Lodging Initiative Resolution (Councilor Ives)
The proposed resolution endorses the green lodging initiative and directs staff to explore ways to
continue, fund and extend the green lodging initiative to all lodging facilities in the city of Santa Fe. It
is referred to as the Green Concierge Certificate program.

This is a program designed to certify lodging facilities in various aspects of being green. This company comes in and works with the properties to make them more water efficient, more energy efficient to reduce the use of chemicals in all their processes to increase their recyclables. The initial launch was funded with \$50,000 from a grant and there were 17 participating hotels representing 50% of the downtown rooms available. All of these hotels qualified for the Bronze level concierge certificate and they can work up to a gold level as they continue to improve their operations.

The Chair said he is interested in branding the city as intentional, creative and sustainable and part of that sustainable is being as energy efficient, as water efficient as chemical efficient, etc., as we can be across the entirety of the city. The Chair stated that he wanted to see the City move up to the plate and be supportive and this is the reason for introducing the resolution. The Chair understands that there is funding available from various sources that have been identified.

Mr. Pushard asked in on page 3 of the resolution; Toilets & Showerheads (partial calculation), I know when this came to us before the number was calculated on EPA standards and was hire than our existing standards. Do we know if that math has actually been fixed?

The Chair said that he did not. He offered that Nick Schiavo has reviewed and he hopes that that this is accurately reflecting reality based on city stats review. Hopefully yes, but unable to answer at this time.

Andy Otto, Santa Fe Watershed Association

The Chair commented that this Green Lodging Initiative was due in large part to the efforts of the Santa Fe Water Association.

Mr. Otto stated that the EPA Grant was used and very supportive of this program. In answer to the question, the Santa Fe Watershed Association worked together with the City and PNM to come up with savings. There were very broad numbers hut we should have the final report within the next two months and they are local numbers. We have 14 who earned their Bronze certification and we were just notified that one has elevated to Silver. The concept is that these properties will keep moving forward and getting oxygenated dishwashing systems and these sorts of things, which would increase the savings in water and power.

Mr. Pushard asked about the blanks in the resolution on volume for metric tons of Co2 in the water category, will those also be filled in the final report?

Mr. Otto said that they should be included in the final report.

The Chair commented that he hrought this forth to the committee as the city is in the midst of the budget and it will be presented with a sense of urgency.

The committee members expressed there thanks to the Chair for this effort.

Ms. Trevizo added a clarification and asked if it is expected for the Water Division to manage in assisting the Watershed Association on the Green Concierge Program?

The Chair said that the quick answer is, hopefully it will be run functionally similar to what we have done this past go round. Unless you were involved in the last go round except at the end we are doing figures.

Ms. Trevizo said that she has asked Caryn to work with Betty on the Green Concierges piece; her experience as a LEED AP would be helpful.

The Chair said that all participants welcome any additional help.

The general consensus of the Water Conservation Committee was to voice their support of the Resolution.

9. Forest and Water Climate Adaptation (Esha Chiocchio, Santa Fe Watershed Association)

Ms. Perez moved to postpone Item #9, second by Mr. Wiman, motion carried by unanimous voice vote.

(Exhibit C – Forest and Water Climate Adaptation: A Plan for the Santa Fe Watershed The Water Conservation Committee members followed a verbal presentation based on the handout.

Climate Projections: Hotter, dryer, more evaporation, erosion and runoff, extreme heat and cold and more risk of multi-year drought. They looked at many of the sectors, and they looked at the water sector as a whole and looked at the climate sectors, decrease surface water supply, decrease ground water supply, and reduce snow pack and more stream precipitation and greater evaporation. They also have the non-climate sectors, impermeable surfaces, too many impermeable surfaces and not enough infiltration right now that is leading to a lot of the erosion of the arroyos and our riverbeds. It

encourages all of that precipitation to leave the system. We have less recharge from all of the impermeable surfaces.

These are some of the solutions that they came up with, aside from Ms. McDonald not being at the meeting tonight as she had inquired about this topic. The question is how we can conquer the land, how can we increase that infiltration. Another solution, increase water conservation and that is where all of you come in, how do we really make that happen. What are the specifics? Increase use of reclaimed wastewater to reduce our ground water pumping. Another solution is reducing the over population of trees so that they have the moisture they need, reducing the risk of catastrophic fires.

Energy —it is an adaptation piece, we need to be prepared to reduce water supplies we are using for steam producing energy and shifting the water sources elsewhere. We will be seeing less water available for those things. Ms. Chiocchio spoke about the climate and non-climate stressors.

There is so much potential with renewable energy development, increasing infiltration, perma-culture, increase rainwater catchment. With all these systems, can we train our youth to really implement these and have innovative projects happening? One of the other things talked about was coordinating the workforce training. The other thing is working with financing structures.

The overall goals are outlined in the packet. Basically, increase the water security, improve the forest health, expand and develop that workforce, increase energy efficiency, renewable energy and establish the financing structures. Ms. Chiocchio requested from the WCC specifically the water related pieces; there are two sections on goals 1 and 2 that really look at that piece. How can we increase water conservation; she would like to learn what the WCC is doing and integrate that in to this plan.

There was a question on the financing. Ms. Chiocchio said she had a conversation with the Mayor and they talked about a concept of community banking. Keeping the money in this community and being able to take some of that money to finance certain things on longer terms.

The Chair said that conversation in city hall is on establishing renewable energy districts which was a portion of the state statutes passed about 4-5 years ago which allows for the creation of a district which would then allow certain taxing to occur on properties that opt in for purposes of trying to create a fund that could fund implementation of roof top solar and those types of things.

The Chair asked the committee to submit their comments to Esha Chiocchio via email or to set up a meeting. She would like this committee to feel good about this plan, if there are any recommended changes, she welcomes that input.

Ms. Chiocchio said ultimately she would like the Water Conservation Committee to endorse the plan and move forward to their clients and ideas on how to implement it.

Mr. Otto added that the report is on the Watershed website.

(Q&A: Inaudible, individuals did not speak loud enough to capture this session).

10. 2013 Gallons Per Capita Per Day Laurie Trevizo for Allan Hook

Mr. Hook via Mr. Carpenter provided a memorandum dated April 25, 2013 regarding the listed topic. (Exhibit B)

Ms. Trevizo reported that this is specifically related to the GPCD with the OSE calculator. The way that the calculator works is that we take the consumption of all of the active accounts which is divided by the number of occupied households x 365 days a year. His footnote, Item 1-Mr. Hook wanted to express that the City of Santa Fe's water utility customers diverted 2,989 million gallons or 9,174 ac. ft. with an additional 78.2 million gallons or 240 ac. ft. of potable water exported to Santa Fe County per the 2005 Water Resources Agreement. The total production is 9,414 ac. ft. and instead of the total

production (strike 9,654 ac. ft.). Santa Fe's total production for water utility customers was 9,174 ac. ft. Mr. Hook conveyed that this is the lowest amount of production that the City of Santa Fe Water Division has produced in the last 10 years. No GPCD calculation takes in to account any sort of precipitation or weather events that is not how these calculations work. We can see some variations and seasonality between year-to-year. One thing nice about the calculators is that it actually gives us a bar graph of what the GPCD is on a monthly basis.

Mr. Hook and Ms. Trevizo want everyone to know that we have done a remarkable job of conserving water over the past year. We are looking at 10 years of the lowest production. Mr. Hook says that the

The Chair gave heartfelt congratulations to Group #4 that was charged to re-establish the annual

last 3 years of drought we have done a remarkable job of conserving.

reductions.

Mr. Pushard stated that in 2012 we adjusted the models for multi-tenancy. In 2013 were there any adjustments to the model, either to the numerator or the nominator, for example moving customers off the city to the county?

Ms. Trevizo answered that the multi center units, all the population data comes from the US Census. The multi-family units actually give a further breakdown by county and further breakdown by housing type and other demographics. When they break it down they also break down the number of units per partial. We make the distinction that anything with 2 or less units is single-family residential, 3 or more goes up to multi family. The most recent numbers that the census has are used and we figure out multi family.

Mr. Pushard said that 2012 made a change to the model and if you go back and look at it, we could not compare 2012 to 2011 because of how we had done the numbers. If you look at the minutes from last year, you will see that 2011 was all blank because we could not do a comparison because we had actually changed the map of how we had done the calculation of 2012 and Allan had stated it would be too difficult to go back and try to show 2011 and how we had done it again 2012. In last year you supplied us with the pages out of the model for the totals. I was wondering, a) if we could get those same pages this year and would we know whether the 2012 is now comparing to the 2013 to see if there are any differences for example in the multi family, commercial and residential.

Ms. Trevizo said she did not remember the details of that conversation, that doesn't mean it didn't happen. Mr. Carpenter said that he does remember that conversation and that Mr. Hook would be best to bring this information update to the committee.

What you have for single-family use is an industry standard. Without doing a study to individually put meters past the consumption meter, we don't know. That is an industry standard and has been a part of the updates to that residential in use water study; National standards are what we will need to go by how water is used inside the home. It was reiterated that this is not estimation, it is an industry standard.

Ms. Trevizo said that they did include the irrigation as they know how much is used or they can make that assumption. Given in the summer as the calculator does give them nice bell curves and there is an understanding of indoor consumptive use. How it is used, we are not able to do that. We can give an estimate of the difference of our indoor water use given our winter average over our summer average because we get that good bell curve.

Mr. Wiman asked if Ms. Trevizo was saying that we use the same percentage.

Ms. Trevizo asked if Mr. Wiman was requesting an update on the indoor irrigation. Yes

Caryn asked if the numbers are gallons or percentages?

Mr. Wiman said they are percentages.

Caryn responded that the percentages would probably remain pretty similar because they are based on the industry standard. It is still about 37% of single-family water consumption.

Mr. Wiman said unless they hear differently they would continue to use the single-family use number updating the use by sector.

Ms. Trevizo said they would continue to look at it but she agreed with Caryn and there would probably not be a lot of change.

11. Informational Items

Water Conservation Committee Outreach Opportunities (Laurie Trevizo)

Ms. Trevizo reported that in the spring every year is a busy time of year. She recognized that the entire Water Conservation is in attendance, there are a total of 3 staff. There is an outreach sub-committee and there have always been requests as to where committee members can help. This is a way committee members can help; staff cannot attend every event. The department does have brochures and material to assist conservation committee members would assist and help, it would be greatly appreciated.

The Chair also asked conservation committee members to recognize the busy time for staff and to manage the flow of requests from staff. Ms. Trevizo is the contact for any water-based questions that come in.

Mr. Pushard said that he is on the list to do the Master Gardner's and asked if there is a table banner for the table? Ms. Trevizo said they have a tablecloth that says Water Conservation. Mr. Pushard pointed out that the Recycle Department was there and had really nice handouts. Literature racks came back empty. They really do help attract people. Mr. Pushard said it was very easy to do these events because all conservation committee members know the topic of discussion. He recommends that committee members volunteer.

Mr. Koch announced that the Green Festival would be Saturday, May 17, 2014. He welcomed committee member support. Mr. Koch will have a booth and will allow that the WCC handouts be placed.

Ms. Perez asked the status of brochures.

Ms. Trevizo will get the brochures re-printed and would like to get them in the bills for May.

A. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS (Materials in Packet)

B. GROUP #5 - DOMESTIC WELLS WITHIN THE CITY LIMITS (Materials in Packet)

Mr. Wiman included in the packet a draft report from the meeting with OSE. He reported that they met with John Romero, Water Rights Division Director, OSE and it was a very positive meeting, he had 4 others at the meeting. Mr. Wiman said they went through the questions and it allowed them time to ask any questions they wanted to ask. The meeting ended because our WCC members ran out of questions. OSE was very friendly and they answered the questions willingly. OSE is very relieved that they don't have to deal with private wells in the City of Santa Fe. They feel that it is in the jurisdiction of the City of Santa Fe. They made a comment that the drilling contractors know the regulations and they are the ones that should bring up the questions. If it ever arises, OSE said they would do the right thing. Andrew Erdmann also came to the meeting and in the packet you will find an overview done by Mr. Erdmann of the permitting process in the city. Group #5 will report and discuss questions with Mr. Erdmann. Mr. Wiman said that he

informed the OSE that they will be sending letters to the well owners and asked Ms. Trevizo the status of the letter.

Ms. Trevizo reported that the letter is at the City Attorney's office for review and approval. The Chair said he would follow-up with the City Attorney.

Mr. Koch asked if there was policy in place that the city code utilize to enforce or is there no regulation in the books?

The Chair said he would get that clarity from the City Attorney on what exactly in our capacity we can project, power if you will.

Mr. Wiman said that he has not heard this from the City but OSE's opinion is that the City has control of the wells and the case follow up confirms that; it would be great to hear this from the City Attorney.

C. GROUP #1 - WATER CONSERVATION & DROUGHT MANAGEMENT PLAN UPDATE

Ms. Trevizo noted that they are working to get things on board for the next FY and contracting with someone to help staff finish this plan as part of the budget projection for next year.

Ms. Perez reported that she has received from other work group's strategic topics they would like to work on. The next step is to pull this information together and create a draft list for consideration.

The Chair asked in terms of having the final plan before the WCC, originally March was the date.

Ms. Trevizo reported that originally, yes. The way it was planned without the OSE putting a monkey wrench in the things, given the template that they would like to see the formatted plans from now on. It is an edited version of the old plan. Ms. Trevizo felt that they needed to move forward with the way OSE wants to see things. Some of it doesn't apply to the city because it is a template for utilities who have never done it before and we have done it multiple times. There are some things that don't apply and there are some things that we have never included and it would be good to include it. One of them being, the AWWA which is the American Water Works Association, part of industry standards; it a professional organization that utilities follow. They put out something similar to the OSE calculator; it is a calculator type spreadsheet that gives a performance audit on our system wide leak, those kinds of things. We are going to include that and it was not an original part of the timeline either. OSE wants to see that and staff feels that it is a worthy exercise. This is an apple-to-apple comparison to other utilities and where we are in places like non-revenue water, unbilled, etc.

The Chair said there is no argument that we need to take what they have given in terms of providing and what we need to turn in to them. The curiosity is what the new timeline schedules are.

Ms. Trevizo does not feel it will take long; the information is there, it is a matter of formatting it and putting it in. She will rewrite some things that are long overdue. She will put us back on track, Ms. Trevizo is assured of that. Ms. Trevizo said that she has sent the new person all of the edits as we have made those edits, the edits for lack of a better word are superficial. The problem is not the edits that we made; the problem is the original content. That is what she is re-working, the original content. That plan was done in the late 90's early 2000's when the city took over the utility from PNM.

The Chair requested that the timeframe be brought back to the next meeting based on discussions with the new person.

D. GROUP #2 - WATER CONSERVATION EDUCATION/OUTREACH

Ms. Perez responded to last meeting questions from Ms. Trevizo on some dates. The Water Presentation will be done this summer and the city will help by advertising it. This is the presentation that was approved by the committee with some updates. The dates for consideration for the presentation are June 17th and June 19th, Tuesday and Thursday one would be held in the north end of town and the other on the south side of the city.

Ms. Perez said they have taken this a step forward and informed the committee that she had spoken to Mr. Otto from the Watershed Association and talked about the possibility of doing these or other presentations in a co-sponsored way so that we might appeal to a broader audience. When you have a co-host it tends to speak to a broader audience. Ms. Perez said they have not identified a venue and asked how this should be coordinated. Ms. Trevizo said it was her understanding the sub-group would coordinate everything and provide her with the information for the Press Release.

Mr. Pushard recommended the large meeting rooms at the Southside and Main Library. Ms. Perez will follow up with the venue.

The Chair said he would also like to get the WCC presentation on the City Council agenda at some time.

Ms. Trevizo said Ms. Grosse does a great job in coordinating with the City Clerk and she has requested time for WCC to go to City Council. The City Clerk has a big issue with a 20-minute time slot; Ms. Trevizo is proposing that other committees be looked at such as Public Utilities Committee, Public Works Committee – those are actually more relaxed committees. There is more room for dialogue and although the city councilors are not there, sometimes councilors will hear it twice as they are on both Public Works and Public Utilities, this is not a bad thing. What you are going to get at City Council is, thank you for your presentation, there are no questions. If that is the response you want than staff will pursue the city council. If you want to have a dialogue with the policy makers I would recommend that it go through the other sub-committees. It was noted that this presentation is 45 minutes in length and they don't expect that City Council will give more than 20 minutes in total. It is recommended to get this information in an alternative way to the council.

Mr. Pushard said he agrees with the recommendation when staff set it out. Having been to City Council meeting, they are not the forum for this presentation. If we could get the Finance Committee we would get the full city council and the other two committees we get at least ¾ of the city council members. WCC is in support of getting the presentation invitation to the three committees; Finance Committee, Public Works and Public Utilities. The Chair recommended asking Councilor Dominguez if he would welcome this presentation.

Ms. Trevizo was clear that she will get the dates set for this request and one of the WCC members has to take the responsibility to assure there is a presenter.

The Chair would like to film it and have it on the website.

Ms. Perez will provide information on the Green luncheon and possibility of doing the presentation.

E. GROUP #3 – WATER CONSERVATION CODES, ORDINANCES & REGULATIONS

Mr. Pushard reported that they are working on the model for indoors only and are getting close. Steve Hale from Build Green NM is also working on a model. Ours is more comprehensive than what Steve is working on; we will have a meeting and try to rationalize what they are doing with the green build and hopefully come up with one model. Mr. Pushard would like to have it on the agenda at the next meeting for a formal review.

Ms. Trevizo asked that the topic of discussion be sent to Caryn and cc to Laurie.

Mr. Pushard noted that he is on the Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) through the International Code Council and Canadian Standards Association. (Exhibit included)

Information on the first meeting was included and the second meeting will be in June 2014. This will be codifying the rainwater standards normally used in the southern part of the state and also used in commercial buildings. The intent is to try to have code to vote on by March 2015. Code is on the ICC website of CSA's website.

The Chair asked if there is code that they would like to see adopted by the city?

Mr. Pushard said yes, there is code they would like to see adopted and this is one of them as well as a green code they would like to see adopted.

MATTERS FROM STAFF

Ms. Treviso stated that with packet materials or any captions, please copy Caryn so she is in the loop on the WCC matters

MATTERS FROM COMMITTEE

- Mr. Pushard announced that he has been working with the SFCC and the American Rainwater Association and they will be doing a press release very soon. The SFCC will be the first community college in the United States that will be able to take the rainwater harvesting class and get certified directly by ARCSA and become accredited rainwater professionals. It will result in jobs by having that accreditation. Thanks to Laurie she helped push to the County the ability for AP's to be designers of systems. The program is 16 weeks, 3 credit hours. The Chair said this would be something that they should be able to link through the Water Conservation website. Ms. Trevizo has been very helpful and commented that this class is very hard.
- Rebate Analysis we will have a sub-set of that article in the June Water Efficiency magazine; the article will be highlighting Santa Fe water. It will give Santa Fe good national exposure. The numbers are being corrected together with Ms. Trevizo's review.
- Mr. Pushard proposed to the committee that with Group #5 getting to roll out, he would like to put as a
 discussion item setting up a group initiative on grey water and the impact it will have on water
 conservation. Mr. Pushard would like to have input from the complete committee. If this could be placed
 under group 6 as grey water/black water.
- Ms. Perez asked if there was a way to get draft minutes sooner after each meeting. The chair noted that it
 might be challenging there are 60-70 meetings and there are 4 stenographers. Ms. Trevizo has asked and
 they are receiving them at the 11th hour and the timeline is creeping back to back. These ladies do a great
 job.
- Mr. Wiman said he would like to discuss a city water budget for all sources.
- Recommended that Rick Carpenters report should be a standard report ON each month agenda. Chair Ives asked that it be taken off the consent agenda and be a regular discussion item.

NEXT MEETING - TUESDAY, JUNE 10, 2014:

CAPTIONS: MAY 28, 2014 @3 pm

PACKET MATERIAL: MAY 30, 2014 @3 pm

ADJOURN.

There being no further business to come before the Water Conservation Committee, the meeting adjourned at 6:10 pm.

Signature Page:

Councilor Peter Ives, Chair

Fran Lucero, Stenographer

City of Santa Fe, New Mexico

memo

Date:

May 27, 2014

To:

Public Utilities Committee

Via:

Nick Schiavo, Public Utilities Dept. and Water Division Director

From:

Alex Puglisi, Source of Supply Manager

Robert Jorgensen, P.E., Water Division Engineer

Subject:

McClure & Nichols Reservoir Improvements, CIP Project #3038

Project Status as of May 27, 2014

- Work on the Nichols Dam intake structure is substantially completed.
- Commissioning of the intake structure is underway and will be completed by June 6, 2014.
- Nichols Reservoir initial filling up to the emergency drain piping has taken place and releases to feed the Santa Fe River, acequias, and Canyon Road Water Treatment Plant resumed on May 22, 2014.
- The CRWTP will resume drinking water delivery on May 27, 2014.
- Nichols Reservoir filling to 80% of capacity will take approximately 40 days and will be completed by July 12, 2014.
- Work at McClure is scheduled to begin no later than September 1, 2014.





Elliott & Gretchen Schwartz Upper Canyon Road Santa Fe, NM 87501



Potential Leak Detected¹ 68 Gallons Per Day

You might have a water leak. Visit myaccount.santafenm.gov for information on leak detections and repairs.



Your household used

12% more water per day
than similar households
in Santa Fe.

How Does Your Home Compare?

Here's how your average daily water usage stacked up against households like yours in the past month.

You 401 Gallons

Similar Households² 358 Gallons

Take Action!

Follow these steps, and you'll be on your way to using water more efficiently.



Install aerators.

When you screw an aerator onto a faucet, you add air to the water. You'll use 30% less water anytime the faucet's on (And you'll hardly notice the difference).



Take shorter showers.

A typical shower uses 5 gallons of water per minute. Reducing your shower by 1 minute per day can save 150 gallons per month.



Stop that leaky toilet.

Even a small leak can waste 30 gallons per day. That's over 10,000 gallons per year. Yikes.

Rebate Offer: High-Efficiency Toilets

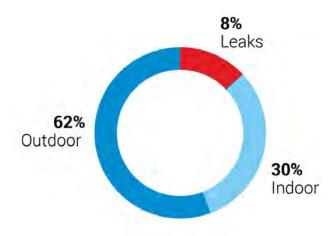
Save up to \$125 on a high-efficiency toilet (HET).

Visit rebates.waterprograms.com to learn about and redeem rebates on eligible devices.

City of Santa Fe customers are eligible for a rebate of up to \$125 per toilet for replacing old, high water-use toilets that use 3.5 gallons per flush or more with a new HET from the approved list of qualifying models.

Water usage breakdown last month

Here's where your water went this past month.





A Message From the City of Santa Fe

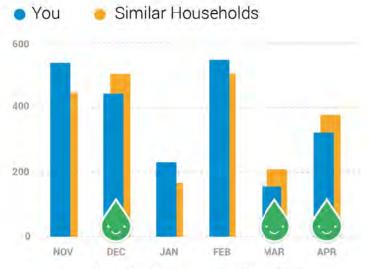
Save more than 3,000 gallons a week and up to \$50 a month by installing a smart irrigation controller.

Use 10 fewer gallons every time you turn on the hot water. How? By installing a demand-driven recirculation pump that delivers hot water instantly.

Save at least 20 gallons a day when you install a highefficiency toilet. Take advantage of our rebate program.

Water Usage Over Time3

Your water usage compared to similar households in Santa Fe.



Average Daily Water Usage Per Month in Gallons

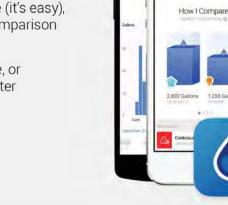
Personalize Your Household Profile

If you personalize your household profile (it's easy), we can improve the accuracy of your comparison to similar households.

Scan the QR code with your smartphone, or visit **myaccount.santafenm.gov** and enter this access code.

Access Code: 7859





Get the EyeOnWater App

Download the EyeOnWater App to keep an eye on your water usage, track historical trends, monitor your home for leaks, and more. It's free.





¹A potential leak is detected when a continuous flow of more than 1 gallon is measured for 24 consecutive hours. A leak of fewer than 50 gallons per day might be a dripping faucet or a leaky toilet. Larger leaks are likely to be a cracked or broken pipe.

In this comparison, "similar households" are determined by the average water usage of all single family homes in your city. To increase the accuracy of this data, update your household profile at myaccount santafeningov.

³ Monthly values are calculated based on your billing records



Elliott & Gretchen Schwartz Upper Canyon Road Santa Fe, NM 87501



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Your household used 12% less water per day than similar households in Santa Fe.

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358 Gallons

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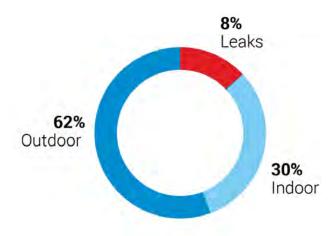
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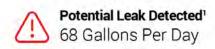
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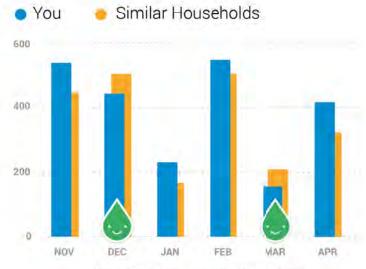
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³ Monthly values are calculated based on your billing records

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:

May 22, 2014

SUBJECT: 33d Monthly Update on Drought and Water Resource Management

CURRENT UPDATE - GENERAL WATER RESOURCE MANGEMENT

As the Committee/Board is aware, our region is still suffering through a severe drought. Our region has gone through three consecutive years of record drought and heat. It is now apparent that we are in a fourth consecutive year of severe drought and abnormal heat which will present significant challenges to all water purveyors, utilities, and irrigators going forward into the rest of this year. Weather prediction models had indicated that, at least through the early part of this summer, if not longer, drought conditions in the southwest (especially Arizona and New Mexico) should be neutral to below average precipitation and above average temperatures. However, many models are now predicting the likelihood of a return of an El Nino weather pattern (75% chance). This could mean increased precipitation for the coming months. Fire season is also expected to be very challenging which could have significant water quality implications for the BDD water treatment plant and/or Canyon Road water treatment plant.

This current drought is extreme, but what sets it apart from previous extreme droughts is that, the region will enter into summer without very much carry-over water from the previous year in regional reservoirs – they are at low levels (except for the local McClure reservoir in Santa Fe). For example, Heron reservoir (San Juan-Chama Project water) is currently at about 31% of capacity. However, runoff forecasts from the San Juan watershed seem to indicate substantial accumulation into Heron from this year's snow pack. BoR is predicting that SJCP contractors should receive about 85% of normal deliveries.

It is worth noting, 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. Supply from these groundwater and surface water sources are expected to be adequate in meeting local demands through the coming highdemand season.

LOCAL CONDITIONS

Source of Supply Utilization Summary

February 2014

City Wells	0.00mg/m	0.00af/m
Buckman Wells	0.00mg/m	0.00af/m
CRWTP	146.01mg/m	448.09af/m
BRWTP	97.44mg/m	299.03af/m
Other Wells(Osage, MRC, etc)	0.04mg/m	0.13af/m

Upper Santa Fe River/CRWTP

	Total Combined	Santa Fe Snow Gage	Reservoir Inflow
	Reservoir Level		
March 24, 2014	32.10%	17.0 inches	5.88 MGD
5-Year Average for This Date (2009 – 2013)	46.95 %	22.0 inches	8.75 MGD

As of May 21st, and due to the heavy rains in mid-September and some minor winter snow storms, total combined storage in Nichols and McClure reservoirs is up to 32.1% (or about 1,280 acre-feet of storage). Flows are being by-passed due to construction on the new intake facilities. Inflows are expected to continue for the near future and so the reservoirs have been releasing water to allow for water treatment plant production, active construction, and draining/drying.

Buckman Regional Water Treatment Plant

Flows in the Rio Grande are relatively low but the BDD Project is able to divert water. Turbidity and suspended solids are relatively low and raw water quality is good. Flows in the Rio Grande were temporarily increase over the second and third week of May to mimic snow melt runoff in order to create advantageous conditions for silvery minnow spawning. As of the date of this memo, Wild Earth Guardians has not filed any legal suites pursuant to their recently filed notices of intent to sue.

REGIONAL CONDITIONS

Rio Grande Basin

Surface flows in the Rio Grande and its tributaries have been well below normal, (except for temporary releases for the silvery minnow spawn), storage levels in regional reservoirs are very low currently. Native flows in the Rio Grande will likely be low to very low through the spring and summer.

San Juan Basin

It should be stressed that, 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 and other reservoirs in the system. Heron Reservoir is currently at a very low level of 31% of capacity for this time of year. It is still too early in the year to quantify with a lot of confidence, but the Bureau of Reclamation has recently indicated that it is very likely that SJCP deliveries this year will be at or near 85% due to good snow pack in the San Juan watershed, high soil moisture, and the storage that was already in Heron at the beginning of the snow melt season.

City of Santa Fe, New Mexico Mexico

Date: June 04, 2014

To: Water Conservation Committee

From: Robert Wood, Water Conservation Specialist

Via: Laurie Trevizo, Water Conservation Manager (Conservation Manager Rick Carpenter, Water Resources and Conservation Manager

Nick Schiavo, Public Utilities Department and Water Division Director

RE: QWEL training and accomplishments

QWEL (Qualified Water Efficient Landscaper) was conceptualized as an addition to the Water Conservation Office in 2011.

Brief History: QWEL is the second approved US EPA WaterSense Irrigation Auditor certification programs in the nation and was developed in cooperation with the California Landscape Contractors Association, Sonoma County Water Agency, City of Santa Rosa, Marin Municipal Water District and the colleges of Santa Rosa and Marin. At the present time, 11 additional Western states are offering or may soon offer the QWEL program to assist landscape professionals improve the water efficiency of landscapes and to provide a pool of qualified individuals that the public can hire with confidence. QWEL certified individuals may include landscape technicians, landscape designers, landscape maintenance workers and landscape installation contractors. QWEL provides approximately 20 hours of education focused on water efficient principles. In the course, landscape professionals learn how to reduce landscape water use by becoming efficient and effective water managers. Training covers irrigation systems and efficient irrigation, soils and plants, water management and budgeting, irrigation controllers and new, 'smart' technology, and much more. City of Santa Fe Water Conservation Office has complied with the terms/conditions to be considered a professional certifying organization though the EPA. Meaning the City of Santa Fe can offer the QWEL program and the graduates will be eligible to become Watersense partners, with a listing on the Watersense website, and gain access to the partner tools available through the EPA Watersense program.

March 2013

The first QWEL training was held in March of 2013. The weeklong training included three days
of classroom presentations, a half-day each of fieldwork and exam preparation, and the exam
on the final day.

- Twenty one participants gained knowledge in water efficient and sustainable landscape practices, including design, maintenance, and operation of "smart" irrigation systems.
- All 21 participants successfully completed the training and are eligible to be EPA WaterSense Irrigation Partners.
- Graduation rate of 100%

November 2013

- A QWEL class was offered in Silver City, New Mexico in November of 2013.
- Three students registered for the class two passed the final exam.
- Graduation rate of 66.6%
- QWEL was held in November of 2013.
- Training was the same as previous except training was broken into a two week schedule instead of one week to give contractors more opportunity to attend.
- 22 registered students 16 were successful in passing the final test.
- A no charge, one day refresher and re-test were offered; 2 students participated and 1 did pass the final test.
- Graduation rate of 72.7%

March 2014

- QWEL scheduled for March 2014 occurred in April 2014.
- Training was the same format as previous however practice questions at the end of each chapter were introduced.
- The drip portion of the presentation was expanded. Of the 11 students attending the classes 10 successfully completed the final exam.
- Graduation rate of 90.9%

Overall the program has had great success. There are currently 49 QWEL certified persons within the state of New Mexico, 24 persons are certified as "For Hire" within the City of Santa Fe.

Future plans include enhancing the drip component further and offering irrigation rebates.

The City of Santa Fe Water Conservation Office will continue to offer QWEL as a professional development course for the foreseeable future.

City of Santa Fe, New Mexico Mexico

Date: June 04, 2014

To: Water Conservation Committee

From: Robert Wood, Water Conservation Specialist

Via: Laurie Trevizo, Water Conservation Manager

Rick Carpenter, Water Resources and Conservation Manager

Nick Schiavo, Public Utilities Department and Water Division Director

RE: Irrigation Rebate Process:

Rebates for irrigation efficiency are being offered as a trial program May 1st. 2014 to October 31st, 2014. The Water Conservation Office is piloting this rebate for 2014, if successful rebate will continue in the future.

Two separate rebates that can be combined;

- 1. Irrigation Efficiency Evaluation Rebate;
 - Residential (min. 1,000 sf irrigated area) \$50.00
 - o Commercial (min. 2,500 sf irrigated area) \$25.00
- 2. Irrigation Equipment Rebate;
 - o Irrigation Efficiency Evaluation must be completed and repairs made.

o WS labeled Rain Sensor (add on) \$40.00 o Soil Moisture Sensor (add on) \$75.00

Weather-based (Smart/ET) Controller; (Equipment must be WaterSense Approved)

1-6 Zone/Stations \$300.00
 7-9 Zone/Stations \$375.00
 10-12 Zone/Stations \$450.00
 13-18 Zone/Stations \$575.00
 19-34 Zone/Stations \$750.00

A qualified QWEL (irrigation auditor that has completed training and has the QWEL contractors' agreement on file performs a site visit and evaluates irrigation system by way of the Irrigation Audit.

Irrigation Evaluation Terms and Conditions

- 1. Applicant must be a City of Santa Fe water utility customer with an account in their name at the service address where the irrigation system is installed.
- 2. The irrigation system is existing and not a new installation.
- 3. The irrigation system must be permanent, with proper backflow prevention per city code 14.8-4.
- 4. The applicant must participate in an irrigation system evaluation conducted by a QWEL certified landscaper.
- 5. The applicant must provide original receipts (not photocopies) for the cost of the evaluation, as well as a complete copy of the evaluation provided by a Qualified Water Efficient Landscaper (QWEL) certified landscape professional.
- 6. The completed application must be received no more than 90 days after purchase date and before the program end date. Applications received after October 31, 2014, will not be processed.

Irrigation Equipment Rebate Terms and Conditions

- 1. Applicant must be a City of Santa Fe water utility customer with an account in their name at the service address where the irrigation system is installed.
- 2. The irrigation system is existing and not a new installation.
- 3. The irrigation system must be permanent, with proper backflow prevention per city code 14.8-4.
- 4. The applicant must participate in an irrigation system evaluation conducted by a QWEL certified landscaper.
- 5. The applicant must make all recommended repairs, and purchase and install any eligible hardware within 90 days of the evaluation to qualify for the irrigation equipment rebate. Only EPA WaterSense labeled irrigation controllers will be eligible for the Weather-based (Smart/ET) Controller rebate. Use the Irrigation Controllers product category at http://www.epa.gov/WaterSense/product_search.html to search for eligible controllers
- 6. The applicant must provide original receipts (not photocopies) for the purchase of the equipment for which the rebate is being applied.
- 7. The completed application must be received no more than 90 days after purchase date and before the program end date. Applications received after October 31, 2014, will not be processed.

When forms and copies of audit are received verification of required information, original receipts, and signatures will be performed. If all paperwork is in order a Rebate will be approved and entered into the database and a credit issued onto the customer's account.

Forms and full rebate instructions can be found on our websites.

http://savewatersantafe.com/ http://www.santafenm.gov/water_conservation

City of Santa Fe, New Mexico

memo

Date: May 29, 2014

To: Water Conservation Committee

From: Caryn Grosse, Water Conservation Specialist

Via: Laurie Trevizo, Water Conservation Manager

Rick Carpenter, Water Resources and Conservation Manager

Nick Schiavo, Public Utilities Department and Water Division Director/V.

RE: Update on Spring 2014 Outreach & Education Activities

The City of Santa Fe Water Conservation Office participated in a number of events this spring that provided education and outreach opportunities to a variety of audiences.

Wyland Foundation Mayor's Challenge for Water Conservation April 1-30, 2014

My Water Pledge is a friendly competition between cities to see who can be the most "water-wise," sponsored by the Wyland Foundation. Mayors challenge their residents to conserve water, energy and other natural resources on behalf of their city. This was our 3rd year for participating in the Mayor's Challenge. This year, we ranked at #8 by population (30,000-99,999).

12th Annual Children's Water Fiesta April 16-17, 2014

A favorite activity with Santa Fe Public Schools 4th graders! This year, the two-day Fiesta was attended by 597 students from 28 classes at 11 different schools. High school students from Monte Del Sol Charter School Environmental Science Class and Santa Fe High School Key Club acted as guides for the 4th grade classes.

<u>City of Santa Fe Proclamation for the Wyland Mayor's Challenge for Water Conservation</u> April 17, 2014

Councilor Peter Ives read the proclamation signed by Mayor Javier Gonzales in support of the Wyland Foundation Mayor's Challenge for Water Conservation during the Children's Water Fiesta.

QWEL (Qualified Water Efficient Landscaper) Training: April 23-May 1, 2014

The Qualified Water Efficient Landscaper (QWEL) training, co-sponsored by the Water Conservation Office and the New Mexico Water Conservation Alliance, had 11 registrants that completed the course and took the exam. Another training session will be offered in November 2014.

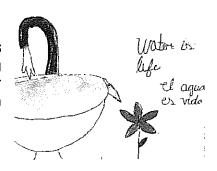
11th Annual Poster Contest

Theme: Saving Water is Always in Season! Submittal Deadline: December 13, 2013

Judging: January 24, 2014

Awards Presentation: April 30, 2014

The annual poster calendar is a favorite in the Santa Fe community! Winners of the poster contest receive a prize package that includes conservation kits for saving water at home. The grand prize winning poster is displayed for a year on the back of a city bus, on the calendar cover, as well as being used for the Water Fiesta t-shirts. First through third place winners will be featured in the 2015 calendar. The grand prize winner was Molly Murphey, a 4th grader from La Mariposa Montessori.



State of New Mexico Proclamation of Water Quality and Conservation Awareness Week May 4-10, 2014

Lisa Randall, SFPS, and Elena Kayak, RRPS, invited input and partnership from the Water Conservation Office for the annual NM Water Quality and Conservation Awareness Week proclamation signed by Governor Martinez.

Community Outreach Booths:

- Railyard Stewards Workshop Series, April 19, May 3, June 7, WC Office personnel
- Santa Fe Master Gardeners Spring Garden Fair, May 3, table staffed by WCC members
- CommUNITY Day, May 10, 2014, booth staffed by WC Office and BDD personnel
- Green Chamber, May 17, 2014, booth staffed by WCC members

Muchas Gracias Presentations

May 14, 2014 City Council Meeting

Many of the presenters and other volunteers who participate in the Children's Water Fiesta have been doing so for years. WC Office staff compiled a list of nine people who had participated for five years or more in the Fiesta, and created certificates thanking them for their steadfast contributions. Councilor Ives graciously consented to present the certificates at the City Council meeting.

OWEL Recognition of City Parks Employees

May 14, 2014 City Council Meeting

Five City Parks employees have completed QWEL training and passed the exam to become QWEL certified landscape professionals. The WC Office wanted to recognize their efforts and participate with certificates of recognition at the Council meeting. Councilor Trujillo made the presentations on behalf of the WC Office.

Project WET Workshop

The WC Office is planning to hold a Project WET Workshop during the week of June 16th to help Water Fiesta presenters and other educators become more familiar with the Project WET curriculum.



Bando Oficial de la Villa Real de Santa Fé de San Francisco de Asís Nuevo México

WHEREAS, water is Santa Fe's most valuable natural resource, a safe, reliable water supply is critical to the success of our community; and

WHEREAS, small changes in our daily practices can reduce our water usage thereby reducing our impact on this crucial resource; and

WHEREAS, the City of Santa Fe calls upon every resident to conserve water, help protect our source waters from pollution, and become involved in local water issues. It is the responsibility of each and every citizen to practice water conservation and protect water quality to secure our water resources and endure prolonged drought; and

WHEREAS, the City of Santa Fe, New Mexico, continues to explore ways to manage residential consumption of water and power, and to encourage employees, residents and visitors to care for our natural resources. Cities can engage in efforts to inspire their own communities, as well as their neighboring cities, to become better environmental stewards; and

WHEREAS, the third annual National Mayor's Challenge for Water Conservation presented by the Wyland Foundation is a healthy, non-profit competition for cleaner communities and a water use and pollution reduction competition between our cities; and

WHEREAS, with the encouragement of their Mayor, residents may register online their participation in their city's Challenge, by making simple pledges to decrease their water use and to reduce pollution for the period of one year, thereby assisting their cities to apply State and Federal water conservation strategies and to target mandated reductions; and

WHEREAS, from April 1-30, 2014, the City of Santa Fe wishes to inspire its residents and its neighboring communities to take the "Wyland National Mayor's Challenge for Water Conservation" by making a series of online pledges at mywaterpledge.com to reduce their impact on the environment and to see immediate savings in their water, trash, and electricity bills.

NOW, THEREFORE, I, JAVIER M. GONZALES, THE MAYOR OF THE CITY OF SANTA FE, NEW MEXICO, DO HEREBY PROCLAIM THE MONTH OF APRIL, 2014 AS

"WYLAND MAYOR'S CHALLENGE FOR WATER CONSERVATION"	
Promulgada en el ayuntamiento, el	141
dia Cliecisie Hde Abril, del año 2014.	
Done at the City Hall, this 1744 day	519/2 N G
of April , 2014. // 286/1889	(多数多数人)
Certificado por:	数多值到多
Witness my hand:	////////////////////////////////////
// Alcalde/Mayor	意识的工
Official Proclamation of the	
City of Santa Fe, New Mexico	
* * * * * *	¥



STATE OF NEW MEXICO EXECUTIVE OFFICE SANTA FE, NEW MEXICO

Proclamation

WHEREAS, WATER IS NEW MEXICO'S MOST VALUABLE AND VULNERABLE NATURAL RESOURCE; AND

WHEREAS, THE PRUDENT USE OF WATER IS THE RESPONSIBILITY OF INDIVIDUALS, SCHOOLS, ORGANIZATIONS, BUSINESSES, AND GOVERNMENTS; AND

WHEREAS, A SAFE, RELIABLE WATER SUPPLY IS CRITICAL TO THE SUCCESS OF ANY COMMUNITY AND IT CREATES JOBS, ATTRACTS INDUSTRY AND INVESTMENT, PROMOTES TOURISM, PROVIDES FOR THE HEALTH AND WELFARE OF CITIZENS, AND HEALTHY WATERSHEDS LEAD TO HEALTHY COMMUNITIES; AND

WHEREAS, OUR SCHOOLS, MUNICIPAL, COUNTY AND STATE GOVERNMENTS HAVE THE UNIQUE OPPORTUNITY TO TEACH AND ENCOURAGE STUDENTS, EMPLOYEES, AND THEIR FAMILIES ABOUT THE MANY WATER CONSERVATION STRATEGIES THAT HELP CITIZENS SAVE AND PROTECT THIS VALUABLE RESOURCE; AND

WHEREAS, SMALL ADJUSTMENTS IN OUR DAILY PRACTICES CAN REDUCE WATER USAGE, SAVE A CRUCIAL NATURAL RESOURCE, LOWER OUR WATER BILLS, AND SAVE TAXPAYER DOLLARS; AND

WHEREAS, THE START OF 2014 WAS THE DRIEST ON RECORD FOR THE STATE OF NEW MEXICO. REGARDLESS OF THE COMPLEXITY OF DROUGHT CONDITIONS, IT IS THE RESPONSIBILITY OF EACH NEW MEXICO RESIDENT, OF EVERY AGE, TO PRACTICE WATER CONSERVATION AND PROTECT WATER QUALITY IN ORDER TO ENDURE PROLONGED DROUGHT AND SECURE OUR WATER RESOURCES; AND

WHEREAS, OUR AGRICULTURAL COMMUNITY IS DEPENDENT ON A RELIABLE WATER SUPPLY TO MAINTAIN OUR LOCAL FOOD SOURCES, AND WITHOUT CLEAN WATER, AND CONSERVATION AWARENESS, THIS COMMUNITY IS AT HIGH RISK OF NOT BEING ABLE TO SUSTAIN THEIR LIVELIHOODS IN NEW MEXICO, WHERE THEY HAVE BEEN FOR HUNDREDS OF YEARS; AND

WHEREAS, WE CALL UPON EACH CITIZEN TO CONSERVE WATER, HELP PROTECT OUR SOURCE WATERS FROM POLLUTION, AND BECOME INVOLVED IN LOCAL WATER ISSUES;

NOW, THEREFORE I, SUSANA MARTINEZ, GOVERNOR OF THE STATE OF NEW MEXICO, DO HEREBY PROCLAIM THE $4^{\rm TH}$ THROUGHT THE $10^{\rm TH}$ OF MAY, 2014 AS

"WATER QUALITY & CONSERVATION AWARENESS WEEK"

THROUGHOUT THE STATE OF NEW MEXICO.

SIGNED AT THE EXECUTIVE OFFICE THIS 25TH DAY OF APRIL 2014.

WITNESS MY HAND AND THE GREAT SEAL OF THE STATE OF NEW MEXICO.

SUSANA MARTINEZ GOVERNOR ATTEST:

DIANNA J. DURAN SECRETARY OF STATE

City of Santa Fe, New Mexico

memo

Date: May 29, 2014

To: Water Conservation Committee

From: Caryn Grosse, Water Conservation Specialist

Via: Laurie Trevizo, Water Conservation Manager

Rick Carpenter, Water Resources and Conservation Manager

Nick Schiavo, Public Utilities Department and Water Division Director

RE: Rebate Analysis Findings and Recommendations

Background:

In writing "A Review of the City of Santa Fe Water Conservation Rebate Program" Doug Pushard and Tim Michael have undertaken a daunting task to try to understand how effective the various rebates have been that the City of Santa Fe has utilized over the last 10 years. The Water Conservation Office appreciates their efforts and anticipates using the information in this document to strengthen the Rebates and Incentives Program in the future.

At the April 2014 WCC meeting, it was stated that the report would be considered final, pending verification of the data by Water Conservation Office staff.

In checking the facts and figures in this document against the data sources maintained by the Water Conservation Office, as well as comparing the numbers used within the document itself, there are several errors which will need to be corrected before the document is finalized and available for publication.

Findings:

As much of the data used in the review is derived from Appendix V, Number of Rebates by Device and Year, corrections to this chart should take priority (see attached spreadsheet.) The changes to this chart will likely impact every table and calculation in the document.

Page 6: Through the end of 2013, the City of Santa Fe had given a total of 8,864 rebates however, the distribution of those rebates by year in Table 1 is incorrect. (Please note that none of the tables or text in the entire document reference the \$25 low-flow pre-rinse sprayer rebates which were offered in 2006 (4) and 2007 (26), which contribute to the total). For residential rebates the numbers should be 6,558 to the end of 2012, and 7,101 to the end of 2013, and commercial should be 1,401 and 1,763, respectively.

Page 7: the numbers of residential rebates given from 2004 to 2009 should be 2,462 high-efficiency clothes washers, 1,711 rain barrels and 265 hot water recirculators. These numbers need to be changed in both the table and the text. In addition, in Table 2, the number of rain sensors is incorrect; only 1 was given, not 2. These changes to Table 2 will also impact the text on pages 8 and 9. The

aggregation of similar rebate types, such as clothes washers and rain barrels, into single categories in Table 2 make this information difficult to compare against the information in Table 3 on page 8.

Please note that the rebate amount offered for Air-Cooled Ice Machines was \$400, not \$200 as noted. This will impact Tables 3, 8, 11, 13, 17, and 18 directly, as well as indirectly affecting the calculations throughout the text. Also, the \$0.25 rebate amount shown for cisterns in Table 3 should be footnoted to indicate that this amount is per gallon of capacity, and that the number of cistern rebates provided in Table 2 does not provide capacity data for the cistern rebates.

Page 11: regarding Table 4, it was not possible to verify the dollar amounts using the data provided within the document. Given that the types and quantities in Appendix V are incorrect, as well as some of the dollar amounts for certain device types, it is likely that the expenditure amounts may also be incorrect, and will need to be verified.

Page 13: In several parts of the document, numbers have been rounded, such as the City cost to produce an acre-foot of water, which given as \$1,700 here, whereas on page 16 it is \$1,670. Likewise, the total expenditure amount has been rounded down to \$1,685,000 for the purposes of the calculations on page 16. While rounding these numbers makes the calculations easier, the effect to the accuracy may be substantial.

Page 15: Table 7 will likely change, as a result of the numbers and types of devices changing in Appendix V, which may impact a number of the calculations throughout the text which utilize 128 acrefeet per year of water saved.

Page 18: in Table 9 the median price indicated for Commercial tank type toilets, particularly for Hotel/Motel applications seems high. Most of the recent applications for Hotel/Motel toilet rebates have utilized models that cost less than \$200. A similar note should be made regarding the low and median prices for rain barrel 50-99 gallons. Most applications for this rebate type are using models in the \$70-80 range. Changes to this table will likely impact Tables 11 and 13 as well.

Page 19: Please note that the irrigation season typically runs from May 1st to October 31st, and that the water rate tiers adjust up to 10,000 gallons in May (through August), and back down to 7,000 gallons in September (through April). Please make sure that the correct information is provided for each reference.

Page 20: Table 1 payback will need to be adjusted due to median prices and rebate amounts previously mentioned.

Page 21: Appendix VI is listed as Appendix 6. Please check all references in document to appendices to make sure that they are consistently called out. Also update Table 12 payback based on previous comments. These changes may also affect the text on page 22.

Page 26: Table 13 should be updated to reflect previous comments regarding median prices. Also, the correction to the rebate amount for air-cooled ice machines will likely affect the payback calculations in this table. Also note that hot water recirculators are paybacks listed in the table are not consistent with the text below it.

Page 27: regarding Table 15, a quick google search turned up the result that air-cooled ice machines and hot water recirculators were promoted via at least two vehicles (i.e., 2. City Website, and 14. Media Coverage.) A more in-depth search may turn up additional vehicles for promoting those device types, as well as results for the commercial dishwasher rebate. As the rebates for the air-cooled ice machines were given in both 2006 and 2007, it is likely that those rebates were promoted during both

years, which will also impact Table 16 on page 28. These changes will also impact the data in Table 20 on page 33.

Pages 29-36: Please make sure all numbers in the text are updated to reflect the previously noted comments. The Table 21 on page 35 will also change due to the previously noted comments.

Appendix I, page 40, please change as noted: "Pressure reducing valves – These are plumbing and irrigation valves designed to reduce incoming water pressure. Reducing incoming pressure saves water by reducing flow rate through the irrigation water lines. Generally eity domestic water pressure will should be 60 – 90 80 PSI, where irrigation lines typically need no more than 20 – 30 PSI."

Appendix II, page 42, please add: "2013 Rebates for the same products and at the same values as 2011 were continued in 2013, resulting in 6.6061 acre-feet of conservation credits delivered to the Water Bank."

Appendix III, page 43, is not a comprehensive listing of Water Conservation Ordinances and Resolutions. You may wish to add a note to that effect.

As previously noted, the corrections for Appendix V are attached.

Appendix VI will also need to be updated per previous comments.

Conclusion:

In undertaking "A Review of the City of Santa Fe Water Conservation Rebate Program" Doug Pushard and Tim Michael took on a herculean task, and the information resulting from their work will likely inform decisions about the rebate program for the next several years.

The Water Conservation Office does not currently have sufficient staff to prepare this sort of document in house, nor the budget to hire a consultant to perform this type of analysis. The cost savings provided may have been a few thousand dollars saved, however, regardless as to whether this work was performed by contract or non-contract employees the thorough review of this nature to check for accuracy would have been conducted.

The Water Conservation Office greatly appreciates the time, effort and thoughtfulness which have gone into the creation of this document, and thanks Mr Pushard and Mr Michael for their hard work.

Attachments:

Appendix V: Number of Rebates by Device and Year

Appendix V: Number of Rebates by Device and Year-corrections in Bold

Rebate Year →	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commercial HE Toilet, Flushometer	NA	NA	NA	NA	NA	NA	197	2	0	0	199
Commercial HE Toilet, Tank Type not in Hotel/Motel	NA	NA	NA	NA	NA	NA	192	13	6	1	212
Commercial HE Toilet, Tank Type in Hotel/Motel	NA	NA	NA	NA	NA	NA	459	461	0	361	1281
Water-Free Urinal	NA	NA	NA	NA	NA	NA	24	5	0	0	29
Commercial HE Clothes Washer, Top Loader replacement	NA	NA	NA	NA	NA	NA	2	0	0	0	2
Commercial HE Clothes Washer, Front Loader exchange	NA	NA	NA	NA	NA	NA	2	0	0	0	2
Air-Cooled Ice Machine	0	0	1	5	NA	NA	0	0	0	0	6
Commercial Dishwasher	0	0	1	0	NA	NA	0	0	0	0	1
Commercial Process Efficiency	NA	NA	NA	NA	NA	NA	1	0	0	0	1
Pre-Rinse Sprayer			4	26							30
Hot Water Recirculator	60	46	33	49	34	43	NA	NA	NA	NA	265
Residential HE Toilet	NA	NA	NA	NA	NA	NA	236	174	254	267	931
Residential Clothes Washer, Unspecified	217	339	434	456	556	460	NA	NA	NA	NA	2462
Residential HE Clothes Washer, Top Loader replacement	NA	NA	NA	NA	NA	NA	782	266	228	172	1448
Residential HE Clothes Washer, Front Loader exchange	NA	NA	NA	NA	NA	NA	35	35	41	30	141
Rain Barrel, Unspecified	541	286	403	368	113	0	NA	NA	NA	NA	1711
Rain Barrel, 50-99 gallon	NA	NA	NA	NA	NA	NA	15	4	12	67	98
Rain Barrel, 100-199 gallon	NA	NA	NA	NA	NA	NA	5	2	3	2	12
Rain Barrel, 200-299 gallon	NA	NA	NA	NA	NA	NA	19	2	1	2	24
Water Harvesting (Cistern)	NA	NA	NA	NA	NA	NA	2	2	1	3	8
Rain Sensor	NA	NA	NA	NA	NA	NA	0	0	1	NA	1
Moisture Sensor	NA	NA	NA	NA	NA	NA	0	0	0	NA	0
Evapotranspiration Controller	NA	NA	NA	NA	NA	NA	0	0	0	NA	0
Press Reducing Valve	NA	NA	NA	NA	NA	NA	0	0	0	NA	0
Other Outdoor Devices	NA	NA	NA	NA	NA	NA	0	0	0	NA	0
Commercial Total	0	0	6	31	0	0	877	481	6	362	1763
Residential Total	818	671	870	873	703	503	1094	485	541	543	7101
Annual Total	818	671	876	904	703	503	1971	966	547	905	8864

Number of Rebates by Device and Year

^{*}NA indicates that rebates were not available

Issue: Promoting Conservation Strategies of 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	 Identify large water users Promote the installation of electronic transmitting water meters 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, and encourage water conservation by 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 Training & Code Modifications Expand relationships with the Santa Fe community by creating liaison to better understand issues and solutions
Members	Karyn Schmitt, Melissa McDonald, Tim Michael
Notes	 Research on Smart Controllers for rebates/park installations Exploring with WCC on ways to localizing —adding passive water harvesting info to the curriculum perhaps through the QWEL program Liaison with Parks and Open Space (POSACMelissa McDonald & Tim Michael) Support AMI efforts for better meter reading and better software packages that help consumers track individual daily water use as a tool for increased efficiency and conservation Review Green Building Code amendments chapter 8 Smart Tech/Soil metering update coming Support recognition of successful partners and program
Reference Material	 Water Use in Santa Fe, Borchert et al., July 2009 QWEL Guide and website/WaterSense US Dept. of Energy, Federal Energy Management Program, Guidelines for Estimating Unmetered Landscaping Water Use City of Santa Fe Green Building Code & administrative guidelines EPA WaterSense Documents SF Watershed Forest & Water Climate Adaptation Plan by Esha Chiocchio Parks & Recreation, national database report 2014, National Recreation and Parks Association
Fiscal Impact	To be determined

Update:

Parks: Parks division director, Ben Gurule, has retired. The search for a new division director is starting. In addition, the city is looking into combining Parks with Recreation into on department. We are continuing to work on our water conservation report but feel it is important to have buy in from the new division director and possibly the new department head. POSAC is also requesting community garden majordomos to report water usage monthly for the community vegetable plots as a way to educate and keep track of water used. Bette Booth will give a report on the WAA meeting to POSAC at the June meeting.

Legislative Update: SB16 Rainwater Harvesting rebate-we are working with supporters to follow-up with Senator Peter Wirth on the next steps which may include making it part of the sustainable building tax credit in 2015 session.

Updates: Working Group #4 would like to get updates from WC staff on AMI metering /billing status, QWEL training, green lodging initiative