



Agenda

DATE 5/5/14 TIME 2:15

PREPARED BY Caryn Grosse

RECEIVED BY [Signature]

SANTA FE WATER CONSERVATION COMMITTEE MEETING
CITY HALL - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, MAY 13, 2014
4:00 PM TO 6:00 PM

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF CONSENT AGENDA
5. APPROVAL OF MINUTES APRIL 8, 2014 WATER CONSERVATION COMMITTEE MEETING
6. APPROVAL OF MINUTES OCTOBER 8, 2013 WATER CONSERVATION COMMITTEE MEETING
7. CONSENT AGENDA
 - A. DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE (Rick Carpenter)
 - B. RESERVOIR IMPROVEMENTS UPDATE (Alan Hook)

DISCUSSION ITEMS:

8. GREEN LODGING INITIATIVE RESOLUTION (Councilor Ives, 10 minutes)
9. FOREST AND WATER CLIMATE ADAPTATION (Esha Chiocchio, SF Watershed Association, 10 minutes)
10. 2013 GALLONS PER CAPITA PER DAY (Alan Hook, 10 minutes)

INFORMATIONAL ITEMS:

11. WATER CONSERVATION COMMITTEE OUTREACH OPPORTUNITIES (Laurie Trevizo, 10 minutes)
12. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES: (Councilor Ives 60 minutes)
 - A. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS (12 minutes)
 - B. GROUP #5- DOMESTIC WELLS WITHIN THE CITY LIMITS (12 minutes)
 - C. GROUP #1 – WATER CONSERVATION & DROUGHT MANAGEMENT PLAN UPDATE (12 minutes)
 - D. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH (12 minutes)
 - E. GROUP #3- WATER CONSERVATION CODES, ORDINANCES & REGULATIONS (12 minutes)

MATTERS FROM STAFF:

MATTERS FROM COMMITTEE:

NEXT MEETING – TUESDAY, JUNE 10, 2014:

CAPTIONS: MAY 28, 2014 @3 pm

PACKET MATERIAL: MAY 30, 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.

Santa Fe Water Conservation Committee
INDEX
April 8, 2014

Cover Page		Page 1
Call to Order and Roll Call	A quorum was declared by Roll Call	Page 2
Approval of Agenda	Ms. McDonald moved to approve the agenda as presented, second by Ms. Randall, motion carried by unanimous voice vote.	Page 2
Approval of Consent Agenda	Mr. Wiman moved to approve the Consent Agenda with the amendment to move Item 5B to Discussion Items, second by Mr. Michael, motion carried by unanimous voice vote.	Page 3
Approval of Minutes	<p>March 11, 2014</p> <p>Corrections:</p> <p>Pg. 5 – 12th Paragraph: starts with: It was said that in part.....This statement was made by Melissa McDonald.</p> <p>Ms. McDonald said that she does not think that happens. Strike Sentence in its entirety.</p> <p>Index reflects that Ms. McDonald was the acting chair for the meeting of March 11, 2014. Chair Peter Ives was in attendance and was the chair of this meeting.</p> <p>Name Correction: Bill Snyder – Schneider</p> <p><i>Ms. McDonald moved to approve the minutes of March 11, 2014 as</i></p>	Page 3

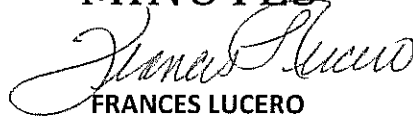
Santa Fe Water Conservation Committee
INDEX
April 8, 2014

	<i>corrected, second by Mr. Roth, motion carried by unanimous voice vote.</i>	
Consent Agenda	Item B to be heard under discussion items.	Page 3
Discussion Items Presentation of Alameda Rain Gardens – Brian Drypolcher	Visual Presentation	Page 3-6
Drought, Monsoon and Water Resource Management Update (Rick Carpenter)	Verbal Presentation	Page 6-7
Rebate Analysis – Tim Michael	Verbal Presentation/Information in Packet	Page 7
Informational Items	High Demand Season Campaign: There is a Drought On. Turn the Water Off Preparation and Protocol for WCC Presentation to City Council Group Reports: Group #5, Group #1, Group #2, Group #3, Group #4	Page 7-12
Matters from Staff	Informational	Page 13
Matters from Committee	Informational	Page 13
Next Meeting	May 13, 2014	Page 13
Adjourn	The meeting was adjourned at 6:10 pm	Page 13

CITY OF SANTA FE

SF WATER CONSERVATION COMMITTEE MEETING

MINUTES


FRANCES LUCERO

4/8/14

SANTA FE WATER CONSERVATION COMMITTEE MINUTES

**Tuesday, April 8, 2014
City Councilors' Conference Room
200 Lincoln Avenue
4:00-6:10 p.m.**

1. Call to Order

Councilor Peter Ives, Chair for the Santa Fe Water Conservation Committee at 4:00pm, called the meeting to order. Roll call reflects a quorum.

PRESENT

Councilor Peter Ives, Chair
Melissa McDonald
Nancy Avedisian
Tim Michael
Giselle Piburn
Stephen Wiman
Karyn Schmitt
Lisa Randall
Bill Roth
Grace Perez, telephonically

NOT PRESENT

Doug Pushard

STAFF PRESENT

Laurie Trevizo, Water Conservation Manager
Caryn Grosse, Water Conservation Specialist
Brian Drypolcher, City River and Watershed Coordinator, Public Works Department
Anna Serrano for Fran Lucero, Stenographer

2. Approval of Agenda

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

3. Approval of Consent Agenda

Mr. Wiman moved to approve the Consent Agenda with the amendment to move item 6B to Discussion Items, second by Mr. Michael, motion carried by unanimous voice vote.

4. Approval of Minutes

March 11, 2014

Corrections:

Pg. 5 – 12th Paragraph: starts with: It was said that in part....This statement was made by Melissa McDonald.

~~Ms. McDonald said that she does not think that happens.~~ Strike Sentence in its entirety.

Index reflects that Ms. McDonald was the acting chair for the meeting of March 11, 2014. Chair Peter Ives was in attendance and was the chair of this meeting.

Name Correction: Bill ~~Snyder~~ – Schneider

Ms. McDonald moved to approve the minutes of March 11, 2014 as corrected, second by Mr. Roth, motion carried by unanimous voice vote.

5. Consent Agenda:

- a. Water Conservation Office Upcoming Spring Events (Laurie Trevizo)
- b. Drought, Monsoon and Water Resource Management Update (Rick Carpenter)
- c. Nichols and McClure Reservoir Management Update (Rick Carpenter – Alan Hook)

6. Discussion Items

- a. Presentation of Alameda Rain Gardens – Brian Drypolcher (Exhibit A) – Alameda Rain Gardens (A program to be funded by the Santa Fe River Voluntary River Conservation Fund [the River Fund])

THE RIVER FUND

The city of Santa Fe has what they call the Santa Fe River Voluntary Conservation Fund, which was established in 2006-2007 where the water user can check off on their bill to make a contribution in to this fund. There is now over \$250,000 in this fund that was collected under the original ordinance that put that fund in place. Subsequently that ordinance has been amended. The first part of the ordinance said that those monies that go in to the River Fund shall be used to acquire water rights. Those water rights will be used to support the Santa Fe River and interestingly enough the Rio Grande according to that ordinance.

Those were very restricted funds for the acquisition of water rights only. Come to find out, several years later that it is very difficult actually almost impossible to acquire meaningful water rights for red water on the Santa Fe River. The Santa Fe River Commission reviewed and deliberated on how the funds could be spent to put water in the Santa Fe River. The terms of the fund through ordinance were amended to say:

“Money deposited in the voluntary river conservation fund shall be dedicated to projects that improve the flow of water in the Santa Fe River in ways that enhance the ecosystems of the Santa Fe River and its riparian corridor”.

Mr. Drypolcher said that what needs to happen now and he is working with people in the city finance group is as described; the River Fund on the accounting side needs to have a new fund created for the new description. Mr. Drypolcher said that they are also asking the community, and he referred to the recent mailing, asking people to consent and say; “yes I put money in the River Fund in its former life and I would like that money to be converted in to its new life.” So the new money that can behave like new money which is about \$50,000 and we would like to reach in to the old money and turn it in to new money. Accounting is working on that formality.

Chair Ives commented that when people donate funds for particular purposes there is an obligation in whoever receives those funds to spend them strictly according to the purposes for which they were intended which is why the city is reaching out to all customers who have contributed to the fund asking them to agree that the funds that they contributed can be expanded into these new purposes.

Mr. Drypolcher further added that by State Statue; unless you get a permanent consent old money stays old money. We would then continue the process of shopping for water rights on the Rio Grande.

Mr. Drypolcher reported that the River Commission discussed if they could spend the money on other activities what would be a project that would have some visibility, would be good for the river, would be good for the health of the watershed and also serve as something that could be used to market the River Fund. It would be nice to draw people’s attention back to the concept of the River Fund.

Mr. Drypolcher said they took the concept of the River Gardens to the City Council and they said yes and approved the concept for the Alameda Rain Gardens. Mr. Drypolcher made reference to the handout and spoke to that effect.

Page 2: A series of storm water management features along East and West Alameda Street from East Palace Avenue to Rincon de Torreon and the Torreon Arroyo: a three-mile stretch of Alameda running parallel to the Santa Fe River.

Estimated potential for 145,000 square feet of catchment area, about 3.3 acres of roadway surface.

Page 3: Shows storm water infiltration features that have been installed on Alameda Street. (Projects that have been done.)

Page 4: Example of one potential Rain Garden site.

Design and construct a storm water infiltration feature, with landscape improvements, east of Old Santa Fe Trail (between OSFT) and Cathedral Place). Include resetting curbstones, install infiltration features, planting, site furniture.

Mr. Drypolcher said that they will continue to get through the accounting phase, post cards continue to come in with the approval to convert the money and do a reconciliation of how much money we will have. We can then identify people to work on the project design and put it out to bid and work with the contractors.

Ms. Piburn asked what is the timeframe to return the post cards.

Mr. Drypolcher said there is not a set timeframe. He believes they will do a repeat mailing to assure attention is directed to the conversion.

Mr. Roth asked what the estimated cost of the example and how far would the money go.

Mr. Drypolcher said that it can go quite far; and depending on the detail of work done the project can go up to five figures. Depending on how the project is laid out the cost could be less. It is low cost infrastructure.

Mr. Roth asked if Youth Works would be used for any part of the project and Mr. Drypolcher said it is very possible.

The Chair asked if there are any other projects along the river covered by other funds.

Mr. Drypolcher said that the Arroyo Chamiso work is very pricy.

Ms. Schmitt referred to the infiltration; “you are collecting right here the infiltration in reservoirs, is it percolating out into that wand?” Mr. Drypolcher stated that it is passive infiltration. Mr. Drypolcher referred to a project on the Santa Fe River near Calle Don Jose and Santa Fe River Rd. where we have some steps going down and we have some lateral sub surface streams that do a better job of distribution of the water.

Ms. McDonald complimented Mr. Drypolcher on the project and is excited to see this take off. She would like to see this be a learning opportunity.

Mr. Roth said that there is a program at Santa Fe High School and he would like to ask that the Contractor who gets this contract add an educational component. Ms. McDonald echoed this sentiment.

Mr. Drypolcher offered to come back at a later date and provide an update on the project, contractor, etc.

The Chair said that his hopes are to have the Santa Fe Exploration app that people can download on their phone to pull photographs of what is being seen and send a text.

Thank you to Mr. Drypolcher.

b. Drought, Monsoon and Water Resource Management Update (Rick Carpenter) – (amended to move to 5B from Consent Agenda)

It was reported that there are some new concepts since the memo of March 24th. Since then there are updated memos from the Bureau of Reclamation (BOR) and others.

BOR has not come out with an official number yet as to what they will be delivering from the San Juan Chama project. We are expecting that very soon as it normally comes out in early April. Mr. Carpenter said if he had to project a number it would be about 80% prediction of what we would normally receive. Not 100% but not as bad as what he thought it would be. It will probably remain dry and warm even after July. We will see through the rest of the summer if we get much of the monsoon or not. The only dark spot in all of this is that it is beginning to look like the El Nino pattern setting up in the Pacific that can have a variety of impacts on us, maybe we will have good snow packs next year. Mr. Carpenter said his take away message is; “I think we are going to be fine and meeting demand this year, there is no reason to think we won’t be. The issue will be if we don’t get much monsoon moisture, if we don’t get much snow pack next year, there will be zero carryover storage in the regional reservoirs.” The next water year will be very difficult.

The Chair stated that last year at this time in the season the prediction was 80% and there were late snows that brought it up to normal. Mr. Carpenter stated that was correct; they started at 80% and ended up at 100%. If that number goes way down, say 50%, the City of Santa Fe is in a better position than a lot of other contractors up and down the river because they have stored water in Abiquiu and they could also call on some exchange water from the ISC if they had to. We will get 100% of San Juan Chama delivery one way or other, at least this year.

Mr. Wiman asked if it was still a consideration to have a presentation on native water. Mr. Carpenter said yes, they have a staff person assigned to that and it is the hopes that in a couple of months to have a presentation for this committee.

Mr. Carpenter noted that one of the problems this year was the middle Rio Grande is anticipating difficult times and they are doing everything very close to the best and doing creative thinking and cooperating with smaller entities like the city of Santa Fe.

Mr. Wiman asked how will the water flowing down the river; how quickly will you meet the commitments of a living river.

Mr. Hook said that there is a start date of April 15th, they will look at the forecast and work with Mr. Drypolcher on the hydrographs for next year. April 1st forecast determines what next year will yield.

c. Rebate Analysis - Tim Michael

Mr. Michael stated that on the last day of March they transmitted to the City what is being called the final copy of the rebate program. The Water Conservation office would like to take an additional look at it.

Ms. Perez stated that this is the type of work you would normally pay a consultant to do and the City has received a great piece of work for free, thank you to Mr. Michael and Mr. Pushard.

Ms. Trevizo echoed her thanks for the hard work put in to this document. Through the process, it helped staff to learn some of the history as staff does not have some of that institutional knowledge. This work will remain as a living document, as in the future when there are questions or requests on the rebates it can be referred back to. Clarification was offered by Ms. Trevizo; the published version will be checked for accuracy in dates and all of the numbers. It will then be published. Mr. Michael looks forward to any corrections that need to be made.

7. Informational Items

a. High Demand Season Campaign: "There is a Drought on. Turn the Water off." (Laurie Trevizo)

Ms. Trevizo stated that a resolution was passed approximately 1 year ago that stems from this committee to talk about some of the high demand watering season and the language associated with how we will water during that time. As a response to that, staff worked on a campaign and showed some images, (note that the file has size limitations and cannot be forwarded to the WCC). Ms. Trevizo said that the official hose for 2014 is a broom so that you don't wash the sidewalk you are actually sweeping it up as intended and again drought on water off. (Sample was shown visually to the WCC). The City filmed 5 PSA's on Friday and the full tag line is being used; There is a Drought On, Turn Water Off. Ms. Trevizo stated that they had a partnership with Santa Rosa, California. The Quail Landscape Professional Irrigation Curriculum came out of Santa Rosa. They have asked Ms. Trevizo to be on the Quail Board and thru that association they have shared some of their campaign information and Ms. Trevizo asked to use it. The

City of Santa Fe bought the stock photos and staff has used them. Additional description of the photos was detailed by Ms. Trevizo.

b. Preparation and Protocol for WCC Presentation to City Council. (Councilor Ives)

Chair Ives stated that he has not finalized the request with the City Clerk. For later this month WCC has the poster contest and thank you related to the Children's Water Fiesta. The plan is to receive 1 hour for the slide show presentation and discussion on the rebate analysis. The plan is to present the 2nd meeting in April. The Chair said he would like to have two people there to lead the council through the presentation. The Chair welcomes everyone's participation at that meeting and to stand and be recognized. The date is April 30th. Ms. Trevizo stated that this would take place at the beginning of the agenda at the afternoon session. Working Group #2 would make the presentation and Ms. Trevizo asked for the names of the two designated to present.

c. Group Reports from WCC Initiatives:

i. Group #5 – Domestic Wells Within the City Limits

Mr. Wiman reported that a meeting was held after the last WCC meeting and all members were there. Mr. Wiman stated he had written a draft letter and the consensus was that the letter was too aggressive and that it was singling out private well owners when we really don't have a legal opinion. Included in the packet is a second draft of the letter leaning more towards a kinder, gentler letter. (Exhibit B) The letter would be sent to a more broad population vs. singling out well owners. It is recommended to also send out the brochure.

Ms. Trevizo said that they are revising the brochure to match the campaign material discussed earlier. The graphic artist has worked on the concept and it is being refined.

The Chair stated that once the 2014 brochure is finalized it will be sent out in a billing cycle. It should be fairly easy to include the above-mentioned letter.

Ms. Trevizo stated that they have a Purchase Order in place for the inserting of the bill, she was not aware about this letter procedure. They might be charged more to include this letter and at that point in time she will need to talk with Purchasing. The Chair would like for Ms. Trevizo to check on this process to include the letter.

Ms. Trevizo said that there are other venues they write articles for; they purchase space in The Reporter, Round the Roundhouse, Greenfire Times and Santa Fe Hometown News. Ms. Trevizo said that if any of the WCC has a good relationship with any of these media sources it would be

appreciated to support the insert of this information as they make a choice as to what they will include from the Water Conservation office.

Ms. Schmitt asked if Ms. Trevizo has placed in the City Highlights and City Hall Live; maybe do an interview with someone on the web cam.

Ms. Trevizo clarified that she was addressing other options in lieu of a bill insert that the above publications are being picked up by choice. She stated that they could also ask reporters if they are willing to do stories on things like this.

Ms. Perez would like to see the follow through of this information in the periodicals and City Hall live as discussed.

Mr. Wiman said he would still like to see a letter go out. He also supports all the approaches.

Ms. Trevizo said that the campaign is very straightforward and the minutes last month stated that having too much information is very confusing. Ms. Trevizo would opt for a more streamlined approach and we do targeted campaigns and we target certain customers. Ms. Trevizo would support a letter to the domestic well owners and to remind them to adhere to the rules.

Ms. Schmitt said that it would make them more conscious; if they are not reporting those numbers than many times you are not recording those numbers.

Ms. Trevizo provided the example that a customer receives the letter from the city of Santa Fe that says, "I need to turn in water meter readings." That is an office of the State Engineer mandate; that is not a City of Santa Fe mandate. What have we done in that one instance, we have confused them thoroughly.

Mr. Wiman asked the WCC what their preference was; to send out a letter to private well owners or to send out an inclusive message that they are on the same mailing list as they are city customers for refuse and sewer.

Ms. McDonald commented that they send it out to the people who fall under that category.

Ms. Trevizo stated that in the seasonal brochure last year there was a bullet that said: "all these rules and regulations here also apply to domestic well owners." That is included in the brochure. The other thing is, more is not better, if they get a brochure and a letter and I saw articles, it may not get the message across. Targeting is exactly what it is and from

a budgetary standpoint more is not better. Ms. Trevizo said personally she feels that it is ok to put them on notice, it is ok that they get a letter and letting them know that the city knows they have a well.

Ms. Perez said that she feels people would read it if it wasn't multiple pieces in a bill.

Ms. Trevizo talked about the other mail inserts that are scheduled for the next few months and this particular insert would not be able to go out in the bills until August.

Mr. Wiman asked, what is the budgetary burden?

Ms. Trevizo said that the budgetary burden is working back through procurement; 2 weeks of getting a quote, 2 weeks of waiting on a PO from procurement and that is a month already. That is a budgetary burden; this process was started at the end of February/beginning of March for the May insert. The quote was around \$4000, which includes printing and inserting of the brochure.

Ms. Perez offered an alternative proposal and asked for approval to send out the letter to well owners, specifically as what was mentioned before. Ms. Perez would feel uncomfortable not having a solid plan to contact well owners. If we could all vote to say yes, we are sending letter to well owners within the next 30-days, I would be happy with that. Mr. Wiman concurred that he would agree with this action. Mr. Wiman wasn't sure if there would be legal repercussions.

The Chair clarified that if it is the consensus of the committee to ask the City to consider sending a letter to well owners; they cannot be directed to do that. It was suggested to send a letter that isn't excessive. It should go to the City Manager and the Water Division to review after the legal review is complete. It was agreed that it was the consensus of the committee to send a letter specifically to the well owners.

The Chair said the next step would be for staff liaison, Ms. Trevizo to take the letter to the City Attorney, the City Manager and the Water Company and let them know this is the recommendation from the Water Conservation Committee.

Mr. Wiman also recommended that Ms. Trevizo's approach of an article be considered. Ms. Trevizo agreed to that.

ii. Group #1 – Water Conservation and Drought Management Plan Update – No Update

iii. Group #2 – Water Conservation Education/Outreach

Ms. Perez stated that she has not attended any meetings but her group is interested in scheduling some public presentations and June is the date they are considering. Ms. Perez specifically asked Ms. Trevizo how they can basically integrate that in her Marketing Plan for June/July.

Ms. Trevizo said that she would need to know by on or before May 15th. Many publications have a deadline of the 15th and they distribute them by the 1st.

Ms. Perez will get this information to Ms. Trevizo by May 15th.

The Chair commented that when they can get the presentation in front of Council, it will be videotaped as part of the regular course of that meeting but he would like to ask the City production staff to perhaps use that as an opportunity to do more than just the regular camera's and possibly bring in a different camera to do some different shots from different areas and possibly get a nice piece to put on the website.

iv. Group #3 – Water Conservation Codes, Ordinances and Regulations

Mr. Roth said that at the last meeting they worked on the scoring matrix. They are very close to having a final draft on the interior aspects. In regards to the exterior aspects, they are open to sitting down and talking to whoever else is interested.

Ms. McDonald and Ms. Schmitt both expressed interest and would like to be included in this conversation. Mr. Roth asked them to submit some times and dates they might be available to meet.

Mr. Roth started an e-mail correspondence with Steve Hale who runs Build Green New Mexico Program that they use for tax credits. He is in the process of redrafting that to simply it and he is interested in what the WCC is doing. He wants to see if our scoring tool can align with his water-scoring tool. Mr. Hale has some ideas on how to score for the exterior that can simplify things. The next time this group meets, Mr. Roth will bring Mr. Hale's suggestions to the table.

Ms. McDonald said she was confused on the purpose.

Mr. Roth said that the idea is that this is a new home tool. Mr. Roth asked that they give this group an opportunity to complete the process and bring back the information to the WCC.

The Chair reiterated that clearly the efforts of the WCC are to promote policy that result in active water conservation. Having this system, the notion was having an additional tool available for those purposes.

Obviously whatever this committee moves forward is going to be reviewed throughout the City structure, Public Utility Committee, Finance Committee including City Council and we have yet to see what this tool will look like. That is the time when you would get input and there will be a lot of opportunities for community input as it moves through the city structure.

Mr. Roth said that to date it has taken a lot of time and this is not something that will happen overnight. There are national participants who will share their information as well. This is a tool and it should not rise up the cost of construction. Mr. Roth reiterated that Mr. Pushard wanted to extend the invitation to the committee to participate if they would like to comment. Mr. Roth suggested that the other members of the committee provide this group with what they think their metric should be.

Ms. Trevizo recommended that all groups re-visit their goals and the purposes around what each working group does. Each group has that information and if they don't, then it needs to be established and identified in the group packet. Ms. Trevizo addressed the template that has been used which details the tasks to achieve the goals. In the meeting minutes it notes that the Domestic Well group was asked to bring this forward for this particular meeting as there was a struggle in understanding which direction they were going to go in so Ms. Trevizo could help.

v. Group #4 – Re-establish Trend of Net Annual Reductions in Per Capita Water Usage and Identifying Large Water Users
(Exhibit C – Group 4)

Report is attached to the minutes for review.

Ms. McDonald reported that POSAC met with Water Conservation and Bob Woods was there. Discussion was referred to the six parks they are looking at and Mr. Wood was invited to comment on the orange level. Mr. Michael and Ms. McDonald ran the numbers and found that the parks were just a little more than average if they were in orange state. There were some questions on whether or not the square footages were ones that they should be using. They did receive the square footages from Mr. Wood and they are waiting to get the square footages that they want to use for turf mainly. An update will be provided at the next meeting. It was also expressed that there was a need for a weather station and Mr. Wood said that Water Conservation has some contacts. Ms. Trevizo said that the discussion can take place but clarified that the weather station was purchased for frozen meters. Ms. McDonald said that the main problem is that the ET that is being used is taken from the municipal airport, which we all know is not good. It was recommended that it be in a place like Ashbaugh Park where a more accurate reading could be had. It would be good if they could get an ET controller that would be more central.

8. Matters from Staff

Mayor Gonzales will participate in Mayor's Challenge – mywaterpledge.com – there will be new prizes. We took 6th place last year.

The minutes from October 13, 2013 will be presented for approval and signature at the next meeting.

**9. Matters from Committee
Informational**

10. Next Meeting – Tuesday, May 13, 2014

11. Adjourn

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

Signature Page:

Councilor Peter Ives, Chair



Fran Lucero, Stenographer

MINUTES OF THE
CITY OF SANTA FE
WATER CONSERVATION COMMITTEE MEETING
Santa Fe, New Mexico

October 8, 2013

1. CALL TO ORDER

A meeting of the City of Santa Fe Water Conservation Committee was called to order by Councilor Peter N. Ives, Chair on this date at 4:00 p.m. in the City Councilors' Conference Room, City Hall, 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
Tim Michael
Doug Pushard
Karyn Schmitt
Stephen K. Wiman
Grace Perez

Member(s) Absent:

Giselle Piburn, excused
Lisa Randall, excused
Bill Roth, excused
1 vacancy

Others Present:

Laurie Trevizo, Water Conservation Manager
Caryn Grosse, Water Conservation Specialist
Nancy Avidisian
Geno Zamora, City Attorney's office
Jo Ann G. Valdez, Stenographer

3. APPROVAL OF AGENDA

Mr. Michael moved to approve the Agenda. Ms. McDonald seconded the motion. The motion passed unanimously by voice vote.

INDEX OF
CITY OF SANTA FE
WATER CONSERVATION COMMITTEE
October 8, 2013

ITEM	ACTION	PAGE (S)
1.	CALL TO ORDER	1
2.	ROLL CALL	1
3.	APPROVAL OF AGENDA	1
4.	APPROVAL OF CONSENT AGENDA	2
5.	APPROVAL OF THE MINUTES SEPTEMBER 10, 2013 WATER CONSERVATION COMMITTEE MEETING	
	Approved [as amended]	2
6.	CONSENT AGENDA	
	a. Drought, Monsoon and Water Resource Management Update	2
	b. Water Conservation Education and Outreach: Upcoming Events	2
DISCUSSION ITEMS:		
7.	OPEN MEETINGS ACT PRESENTATION	2-5
INFORMATIONAL ITEMS:		
8.	REBATE ANALYSIS	5-7
9.	GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES:	
	A. GROUP #2 – Water Conservation Education/Outreach	7-8
	B. GROUP #3 – Promote Outdoor Water Conservation	8-9
	C. GROUP #4 – Re-establish Trend of Net Annual Reductions in per capita water usage and identifying large water users	9
	D. GROUP #5 – Domestic Wells within the City Limits	10
	E. GROUP #1 - Water Conservation and Drought Management Plan Update	10
MATTERS FROM STAFF		
10.	WATER CONSERVATION COMMITTEE PROPOSED 2014 SCHEDULE	11
	Will be voted on at next meeting	
MATTERS FROM THE COMMITTEE		
11.	2014 Legislative Recommendations	11
ITEMS FOR NEXT AGENDA – Tuesday, November 5, 2013 at 4:00 p.m.		
	Invitation to State Legislators	
	Demand Elasticity, if available	11
ADJOURNMENT		
	Adjourned at 6:15 p.m.	11

DRAFT: SUBJECT TO APPROVAL

4. **APPROVAL OF CONSENT AGENDA**

Mr. Michael moved to approve the Consent Agenda. Ms. McDonald seconded the motion. The motion passed unanimously by voice vote.

5. **APPROVAL OF MINUTES : SEPTEMBER 10, 2013 WATER CONSERVATION COMMITTEE MEETING**

The following changes were made to the Minutes of the September 10, 2013 meeting:

Stephen Wimen was changed to read: Stephen Wiman throughout the entire document.

Page 1, Bill Roth was **not present**.

Page 9, last paragraph, last sentence, Karyn Schmitt was changed to read: Karyn Grosse

Mr. Wiman moved to approve the Minutes of the September 10, 2013 meeting as amended. Mr. Michael seconded the motion. The motion passed with 1 abstention (*Ms. Schmitt was not present at the September 10, 2013 meeting*).

6. **CONSENT AGENDA**

a. **Drought, Monsoon and Water Resource Management Update**

b. **Water Conservation Education and Outreach: Upcoming Events**

DISCUSSION ITEMS:

7. **OPEN MEETINGS ACT PRESENTATION**

Mr. Geno Zamora presented a PowerPoint presentation on Ethics and Open Government. [A copy of the presentation was included in the Committee Members' packets. Please see Exhibit "7a" for the specifics of this presentation].

Mr. Zamora said one of the things he is trying to do, through the City Attorney's office, is to formulize and make presentations to the boards and committees regarding Ethics and Open Government.

Mr. Zamora reviewed four laws that are applicable to municipalities. They are:

- City of Santa Fe Ethics Ordinance, SFCC §1.7, et seq.
- New Mexico Government Conduct Act § 10.16-1, et seq.
- New Mexico Open Meetings Act (OMA), § 10.15-1, et seq.
- New Mexico Inspection of Public Records Act (IPRA), § 14-2-1, et seq.

The Committee Members had the following questions/comments:

- Mr. Michael said the presentation is specific for employees of the City of Santa

Fe and does not specifically talk about committees of the City of Santa Fe. He asked for clarification on this.

Mr. Zamora said he uses this presentation for boards and employees. He said because committee members interact with employees, it's important to know the limitations on employees. Committee members are also considered "public officials".

- Mr. Michael said the committee members do vote on rebate programs that affect himself and other people in the group because of what they do for a profession. He asked in this case, should the committee members abstain from voting when those types of matters come before the committee.

Mr. Zamora said one of the things that he highlights in his presentations is the things you are likely to see, and conflicts of interests, is certainly one of those issues and he will get to that later in the presentation. The short answer is, if there is a defined conflict of interest exists: then there is a requirement of disclosure and abstention that he will get to.

Mr. Zamora said the definition for a "Conflict of Interest" is:

- "a specific and identifiable prospect of pecuniary gain or loss (not shared with the public) from an official act of any public official or employee to:*
- *Self or Family member: family defined as household members, children, step-children, brothers, sisters, parent, step-parents, domestic partner and all persons claimed on dependents on latest tax return.*
 - *Business owned by self or household member*
 - *Employer, client or customer*
 - *Non-profit where public official employee or household member is an officer or director*
 - *Contributor to council or mayoral race in last 2 years (if over \$1,000 for council, or if over \$2,500 for Mayor)*

Disclosure

Method

- *For member of governmental body at a public meeting of that body*
- *For the City Manager, City Attorney or City Clerk to the Governing Body at a public meeting*
- *For a City employee, to the City Manager*

When there is a conflict, public official or employee shall not perform an official act of attempt to influence another person to perform an official act in a conflicted matter.

Mr. Zamora reviewed the rules about accepting gifts noting that the general rule is that committee members should not receive gifts from people who come before this Committee, however, there are some exceptions, such as gifts that are less than \$50, for example, a water bottle.

Mr. Zamora noted there are specific codes of ethics with regard to political activity. Improper political campaigning includes:

- *Public Official or employee shall not knowingly request or authorize another to request a subordinate to make a campaign contribution or provide services to a campaign*
- *All public employees are subordinates of the Governing Body*
- *Public officials or employees shall not engage in political campaigning while on duty*
- *No use of City resources for campaigns (funds, equipment, vehicles, etc.)*
- *No promise of an appointment to any City position as a reward for political activity or contribution.*

Mr. Zamora reviewed the Code of Ethics for Honoraria noting that public officials shall not request or receive an honorarium for a speech or service rendered in the performance of his or official duties. Reasonable reimbursement for meals, lodging or travel expenses is permissible. Reimbursements shall be reported within 10 days. He said this form is available through the City Clerks because the public has the right to know where the governing bodies are and what conference they are attending, for example.

- Ms. Perez said a couple of the Water Conservation Committee Members attended a conference but this did not happen.
- Mr. Zamora said if you paid the costs for everything, you do not have to report this; however, if the conference paid your costs, the disclosure form should be submitted to the City Clerk's office, because again the public has the right to know.
- Ms. McDonald said the conference paid for their hotel fees. She asked if it would be best to go back and report this.
- Mr. Zamora said it would be best for them to submit a disclosure form.
- Ms. Trevizo mentioned that she just returned from a conference on Friday where she received a scholarship for the registration fee. She noted that the City paid for the hotel and travel expenses.

Mr. Zamora said it would be best for her to report this also.

Mr. Zamora reviewed the Annual Disclosure requirement noting that upon election or appointment, public officials and department heads should disclose their name, address, phone number, employer (if other than the City), professional, occupational or business licenses; for-profit and non-profit Board memberships and businesses owned. This is maintained for public record for the public to see whether or not the members have any conflict of interests.

Mr. Zamora reviewed the Open Meetings Act noting that meeting notices have to be published 74 hours in advance and no amendments to agendas should be done within 72 hours.

- Ms. Perez asked what should be done if a Committee Member has some new information that they want to share with the Committee and it's not on the agenda.

Mr. Zamora said now we're getting into the "artificial" aspect and, keep in mind, transparency. He said if you have a quorum of the governing body, you are holding a meeting and would be violating the Open Meetings Act by not advertising it, or not giving the public the opportunity to participate. He said this could include e-mails.

Staff is the one who needs to communicate information to the Committee, such as meeting dates, agendas, etc. He said the best thing to do is to communicate with staff or the Chair on items for the agenda also. Staff will distribute the information.

- Mr. Michael said there could be water events around the City that the Committee Members or a quorum of the Committee is likely to attend. He asked if this is ok.

Mr. Zamora said the safest way is to advertise the event and be sure not to conduct business.

Ms. Schmitt asked if this is the something that working groups should avoid as well.

Mr. Zamora said the subcommittee process is OK under certain guidelines: 1) there can't be a quorum of the Committee and 2) if there is a full quorum present, advertise the meeting.

Executive Sessions are not recommended; and if the committees feel that there is a need for an executive session, they need to be approved by the City Manager.

Mr. Zamora concluded his presentation noting that his office is always open to anybody who may have a question. He asked that committee members go through staff to contact him.

INFORMATIONAL ITEMS:

8. REBATE ANALYSIS

Tim Michael and Doug Pushard prepared a handout that was distributed in the Committee Members' packets entitled "*A Review of City of Santa Fe Water Conservation Rebate Programs*". Please see Exhibit "8" for the specifics of this presentation.

Chair Ives said the information on how our programs work is very valuable in assessing their effectiveness and to determine logically where we want to go in the future. He asked what the intent or objective was in undertaking this particular issue.

Mr. Pushard said the objective is to get Committee Members involved in the process; to see if we are on the right track and give the Committee Members information that may be missing. Their original thought, was to look at how the City is promoting the various rebates.

Mr. Pushard said it turns out that there is not a lot of data to answer this question, and then he started to realize that there are other questions like how effective has the Rebate Program been to the city and the users (has it reduced their water rates). The purpose of the review is to understand the effectiveness of the City's rebate programs in order to identify the programs that have been most effective and those that have the potential to provide the largest water savings.

Mr. Pushard said a question that he asked in a meeting in the past was whether a rebate analysis was done before and the answer is no. He said this got him thinking- has any city done a rebate analysis and in just doing a superficial search, he couldn't find any city that has done one. He said we are fortunate in that the City has published a ton of data and they could come up with some best practices that the Committee, the working group and the City could use in going forward.

Chair Ives suggested the working group try to engage the Water Company a little more directly by talking to senior staff and letting them know about the analysis that is being done to give them feedback.

Mr. Pushard said he appreciated the suggestion because they did not think of that. He said the next step is to get with staff in about two weeks to review the information, and they should have a final conclusion done for the next meeting.

Ms. Perez referred to page 1 of the Rebate Analysis, one of the foot notes states "*Connections estimate at 0.79 times population*". She asked where this came from.

Mr. Pushard said this was based on 2012 data.

Ms. Perez said she thinks is fantastic and she thanked Mr. Pushard and Mr. Michael for doing this. She said she was really surprised that there have been no rebates; no moisture sensors, ET controllers; pressure-reducing valves and other outdoor devices at all. She asked if these are the programs that Laurie's office is re-evaluating.

Ms. Trevizo said yes.

Ms. Perez asked if it would be appropriate for her to ask why the numbers are zeroed.

Ms. Trevizo said you have to have a staff evaluation prior to the application, and they conducted some audits in the past and found that the bottom line was that the landscape professionals were uncomfortable with ET controllers, moisture sensors, rain sensors, any of these new technologies. Therefore, she pulled everything back because the landscape professionals need to be trained on these technologies.

Mr. Pushard said they found out that the programs were not well communicated.

Ms. McDonald said from a documentation standpoint and the City's standpoint, this makes sense but from the homeowner and the landscaper's perspective, it doesn't make sense in the workflow of the individual. She said while she thinks that the intention is very good, she thinks we should look at how it's being implemented and does it make sense in the workflow of the individual.

Ms. Perez referred to page 9, Table 10 – *Residential Rebate Calculated Water Savings*. She said out of all the toilets that were retrofitted in the City since the Retrofit Program came to being only 0.0053 acre feet of water was saved. She asked if this is correct.

Mr. Pushard said from the Rebate Program, not the Retrofit Program. He said another thing to be done is to look at the Retrofit Program because these numbers are only for the Rebate Program.

Ms. Grosse said that these look like the water factors that they use.

Mr. Pushard said they have not done all of the calculations, year-to-date.

Ms. Perez referred to Table 8, page 10, and said it would be helpful to have the total dollars per acre-foot that is saved. It would also be interesting to know how much money is spent on a project.

Ms. Trevizo mentioned that the Rebates are totally funded by the Levy Fund that goes on the water bills around April.

Chair Ives requested that the working group look at the leveraging effect with having the state in parallel.

Mr. Michael said this is only a draft report and they would like to have a final review for the Committee to review at the next meeting.

9. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES:

A. GROUP #2 – Water Conservation Education/Outreach

Ms. Perez said Group #2 updated the date in the presentation and copies of the

updated presentation are included in the Committee Members' packets. Please see Exhibit "9a" for the specifics of this presentation.

Ms. Perez said they are still welcoming comments and Tim Michael has done a great job in making it more readable. She noted that they added a slide on how the water is used and how we stack up when compared to other cities. They also added a slide, in response to Ms. McDonald's comments at the last meeting on getting feedback.

Ms. McDonald said she appreciated the inclusion of parks.

Mr. Pushard referred to page 14 and noted that the City no longer offers irrigation audits. Also on page 15, rebates for irrigation efficiency has to be taken off.

Chair Ives referred to page 19 under Community Involvement and questions. He said it would be helpful to include the website addresses where follow up questions could be made. He suggested that they change the question to "What would like to see done?" Chair Ives would like to have a website that is specifically used to aggregate the feedback, etc.

The presentation will be an action item for the next meeting for approval by the Committee.

Ms. Trevizo requested that an outline on the fiscal impacts be done, as far as what they are expecting for budget items, as well as anything in advance; any expectations from other committee members who will be presenting, etc. for planning purposes. She would also like to see a calendar on where the presentations are going to be at because much of the print media requires month's notice.

B. GROUP #3 – Promote Outdoor Water Conservation

Mr. Pushard said one of the questions that Chair Ives asked at the last meeting, and one of the things that the Group worked on, was the creation of an equivalent of the HERS rating – creating a WERS rating (Water Efficiency Rating System). He said as an industry, as a whole, there is no WERS rating system.

Mr. Pushard distributed a handout on what the HERS Index is. The Home Energy Rating System (HERS) index is the industry standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting and calculating a home's energy performance.

Mr. Pushard said they met with Stephen Hayes who is the President of the Homebuilders Association for the State of New Mexico and he was independently thinking about the same idea and has provided some input. He said the next step would be to try and have a combined document and come up with the components that would be within a rating system. He asked people who may have some ideas to send it to him or Laurie Trevizo. He offered to have a draft by the next meeting.

Ms. Trevizo mentioned that she attended the annual meeting of the Alliance for

Water Research and their research committee is actually looking at something very similar to this, on a federal level. She said this could be something that the working group might want to consider rolling in.

Mr. Pushard noted that they have two presentations scheduled with the Architects and the Association of Realtors. This will be brain-storm sessions to get their feedback and ideas. The Association of Realtors is scheduled for November 6, 2013 and the Architects is scheduled for January 9, 2014. He will send out the location information to Laurie Trevizo if anyone is interested in attending the sessions.

C. GROUP #4 – Re-establish Trend of Net Annual Reductions in per capita water usage and identifying large water users

Ms. Schmitt said Group #4 is looking at three to four potentially large water users. She explained that they are interested at looking at handheld devices to identify large water users.

She said the next thing is lodging. She noted that she was recently at the Inn of Anasazi Hotel and when you check in, they have you sign a document about whether or not you want to choose the option to conserve water because water is a limited precious natural resource. She feels that this is a good process to get people familiar with water and they could encourage all the hotels to do this.

She noted that staff met with the Watershed Association and the hotels on October 3rd and they would like to hear about that meeting.

Ms. Grosse said it was a status update from the representatives who are heading up the Green Lodging Initiative. They spoke about the steps they have made so far and it appears that 11 of the hotels have largely completed their steps and are going through the process. They expect to host a forum in March or April where other hotels will be invited.

Ms. Schmitt said they would like to communicate with them at one point. She asked if there was any way to acknowledge or reward the hotels.

Ms. Grosse said the Green Concierge program works with some of the online booking agencies to give them green ratings based on the particular categories that they opted to participate in and excel in.

With regards to Parks, Ms. Schmitt noted that Ms. McDonald presented a draft recommendation to POSAC asking them how they would like to proceed, and a Water Conservation Subcommittee has been created within the POSAC. Once they have established the subcommittee, the working group will liaison with them to see what can be done with them, and what they can work on with them in terms of water efficiency in parks. She said they also have some numbers on water use in the parks, and they also have a map of the maps, and they will be working on correlating that information. She said they also want to liaison with Lisa Randall from the public schools to see what they are doing and see if she wants any assistance from them.

D. GROUP #5 – Domestic Wells within the City Limits

A written report from Group #5 was distributed. Please see Exhibit “9d” for the specifics of this presentation.

Mr. Wiman reported that they had a committee meeting and the Working Group is interested in determining the impact of private wells within the City with respect, in particular, to 1) the drawdown of the Tesuque Formation aquifer, 2) the impact on the pumping of private wells on water flow on the City in reaches of the Santa Fe River, 3) the impact of private wells on effluent arriving at the water treatment plant and 4) the net impact of gains and depletion of the lower Santa Fe River below the plant.

Mr. Wiman said the number and usage of private wells in the city remains unknown. The range estimates are between 600 to 3,000 wells and 200 to 3,000 acre-feet per well per year. In order to determine the impact of the pumping of an unknown number of private wells, and before any other additional work such as physically inventorying wells is conducted, it is proposed by Working Group #5 that quantitative hydrologic modeling be conducted to determine the range of the possible impact of wells. It is anticipated that this modeling could be properly conducted by a qualified geotechnical firm already under contract by the City.

Chair Ives suggested that this be run by the legal department.

Ms. McDonald said there are a lot of wells that have replacement wells and the City has data on those that have been put in place. She said as part of the fiscal impact that will happen further down the line, on requiring metering, she would like to see some kind of provision or discussion for those who cannot afford the additional cost of a meter. What kind of program is going to allow them to get a meter?

Ms. Perez asked if they should set up a meeting with the legal department.

Chair Ives said yes, he thinks this would be prudent to do.

Ms. Perez noted that the hydrologist has a lot of on-the- ground experience dealing with some of the legal issues.

Ms. McDonald noted that she and her husband and several other people are working on a Water Harvesting Bill. They are meeting with some of the representatives tonight and she will give an update on this later.

E. GROUP #1 - Water Conservation and Drought Management Plan Update

Ms. Perez reported that they have started developing guiding principles.

MATTERS FROM STAFF

10. WATER CONSERVATION COMMITTEE PROPOSED 2014 SCHEDULE

Copies of the proposed 2014 Committee schedule were distributed in the Committee Members' packets. The Committee will vote on this at the next meeting.

MATTERS FROM THE COMMITTEE:

11. 2014 Legislative Recommendations

Chair Ives said he hopes to have recommendations to look at for the next meeting.

ITEMS FOR NEXT AGENDA – Tuesday, November 5, 2013

Ms. Gross noted that the next meeting was scheduled for November 5, 2013 due to the Thanksgiving holiday.

- Invitation to State Legislators
- Demand Elasticity, if available
- *Captions:* October 18, 2013 @ 3 p.m.
- Packet Material: October 23, 2013 @ 3 p.m.

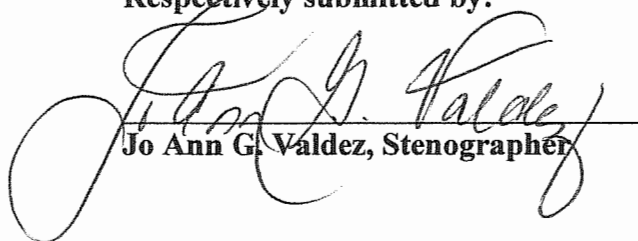
ADJOURNMENT

There being no further business to come before the Committee, the Chair called for adjournment at 6:15 p.m.

Approved by:

Councilor Peter N. Ives, Chair

Respectively submitted by:



Jo Ann G. Valdez, 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 *RC*

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

DATE: April 22, 2014

SUBJECT: 32nd 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 indicate 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 (snow) and above average temperatures, therefore, overall drought conditions will likely still persist at least through July. 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. Runoff into regional river basins and reservoirs is expected to be slightly below normal to significantly below normal. However, some computer models are starting to suggest the possibility that “El Nino” conditions may be setting up in the Pacific Ocean. This could signal the possibility of increased regional precipitation in late summer and heading into Fall/Winter.

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 29% of capacity. However, early runoff forecasts from the San Juan watershed seem to indicate substantial accumulation into Heron from this year’s snow pack.

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 high-demand season.

LOCAL CONDITIONS

Source of Supply Utilization Summary

February 2014

City Wells	6.38mg	19.59af
Buckman Wells	0.00mg	0.00af
CRWTP	44.08mg	135.29af
BRWTP	157.58mg	483.59af
<i>Other Wells (Osage, MRC, etc)</i>	<i>0.04mg</i>	<i>0.13af</i>

Upper Santa Fe River/CRWTP

	Total Combined Reservoir Level	Santa Fe Snow Gage	Reservoir Inflow
March 24, 2014	43.1%	30.0 inches	3.81 MGD
5-Year Average for This Date (2009 – 2013)	56.95 %	36.0 inches	9.97 MGD

Heading into September, water resource managers for the City were expecting the Canyon Road Water Treatment Plant to experience significant supply shortfalls later this year and into next year – due in part to severely reduced inflows resulting from the drought, but also due to the planned construction projects inside of the reservoir footprints. However, as of April 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 43.1% (or about 1,700 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 very low and raw water quality is good. Demand in the system has been low to moderate, requiring only 4 to 6 mgd from the BDD Project.

REGIONAL CONDITIONS

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. The September rains helped river flows and regional reservoirs are receiving needed inflow, but the basin did not receive a good snow pack through the winter and spring. Reservoir levels will still be critically low heading into irrigation season. 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 historic low level of 23% 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 100% 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. The Bureau of Reclamation will provide an update (quantified percentage) in late April with regard to the projected runoff available to San Juan-Chama contractors this coming year.

McClure Reservoir Restoration Project Updates

- The original plan was to have the reservoir water elevation to be at 49% of the total storage capacity at McClure Reservoir by April 30th.
- On April 29th the storage elevation at McClure Reservoir was 45% of the total storage capacity.
- Currently, 13.1 Million Gallons per Day (MGD) is being released from McClure Reservoir. Previously, flow from McClure Reservoir was 10 MGD until April 23rd when reservoir releases increased to the present outflow of 13.1 MGD.
- As of April 29th, 4.2 MGD (6.5 cubic feet per second) of inflow from the Santa Fe River is entering McClure Reservoir.
- 6.2 MGD is being treated by Canyon Road Water Treatment Plant.
- 3.0 MGD is being diverted to Acequia Madre and other irrigation systems beginning on May 2nd.
- The Public Utilities Department recommends that plans for an Annual Fish Derby be set for Saturday, June 14, 2014.
- Nichols Reservoir will begin to fill on May 15th after the “stop log” is placed into the reservoir drain outlet pipe.

Where can I find more information?

The City provides daily information on water production, reservoir capacity, total system storage at http://www.santafenm.gov/daily_water_production_reports.

For drought management information and water conservation, please visit www.savewatersantafe.com

McClure & Nichols Reservoirs Improvements, CIP Project #3038
Project Status - April 29, 2014

Work on the Nichols Dam intake structure is nearing completion. The final concrete pour was made today. Piping and valving has been installed with electrical work underway. Nichols Dam and Reservoir is scheduled for filling in mid-May.



Final concrete pour at Nichols Dam (WCM photo)



Piping inside Nichols Dam intake structure (WCM photo)

Flows into Nichols Reservoir from McClure Reservoir are scheduled to be cut off beginning on May 9, 2014 in order to complete final work at Nichols Dam and set the stop log. Filling of Nichols will be done at a controlled rate to slowly load the dam embankment. Water releases from Nichols Dam to feed the Santa Fe River and the Canyon Road Water Treatment Plant will be suspended for approximately 16 days from May 9th thru May 25th.



McClure Reservoir water level (WCM Photo)

Work at McClure is scheduled to begin September 1, 2014.

City of Santa Fe, New Mexico

LEGISLATIVE SUMMARY

Resolution No. 2014-____ Green Lodging Initiative

SPONSOR(S): Councilor Ives

SUMMARY: 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.

PREPARED BY: Rebecca Seligman, Legislative Liaison Assistant

FISCAL IMPACT: Yes

DATE: April 25, 2014

ATTACHMENTS: Resolution
Draft FIR

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

INTRODUCED BY:

A RESOLUTION

WHEREAS, fourteen bed and breakfasts, hotels, inns, motels and resorts, representing a cross section of lodging facilities in Santa Fe have participated in the Green Concierge Certificate program; and

WHEREAS, the Green Concierge Certificate program, known locally as the Green Lodging Initiative, promotes Santa Fe as an environmentally conscious and climate smart city, both nationally and internationally; and

WHEREAS, the participating lodging facilities include La Fonda on the Plaza, La Posada de

Santa Fe Resort and Spa, Old Santa Fe Inn, Inn on the Alameda, Silver Saddle Motel, Eldorado Hotel and Spa, Santa Fe Sage Inn, Hotel Santa Fe, Inn of the Governors, Ten Thousand Waves, Inn at Santa Fe, Inn of the Five Graces, Fort Marcy Suites and Casa Cuma Bed and Breakfast; and

WHEREAS, such facilities have realized significant energy savings and water savings, which benefit the community of Santa Fe; and

WHEREAS, the training that was provided to the staff of the lodging facilities included no less than 12 hours of training for some 90 persons working the facilities; and

WHEREAS, the program included an on-site third party assessment of the impact of the program on the participating facilities; and

WHEREAS, the assessment included evaluations of each facilities' policies, including, personnel practices; contractual obligations; waste/recycling; universal waste handling; purchasing/source reduction; pollution prevention; water/energy usage/maintenance practices and chemical management and disposal practices; and

WHEREAS, the lodging industry is a mainstay of the Santa Fe economy, resulting in Santa Fe collecting in excess of \$8,000,000 in taxes from Santa Fe lodging facilities; and

WHEREAS, the Green Lodging Initiative has fostered Santa Fe lodging facilities to participate with local green product vendors in ways that benefit both the lodging facilities and vendors; and

WHEREAS, the Green Lodging Initiative stimulates participation in energy efficiency programs offered by Public Service Company of New Mexico in positive ways; and

WHEREAS, the following significant results¹ have been achieved through the Green Lodging Initiative:

ENERGY SAVINGS

kWh	MMBTU's	Metric Tons CO2*
1.2 million per year	1,761,739	356
* EPA Calculator		

WATER SAVED (Annual):

Water Source	Gallons	Volume Weight of Plastic (lbs)	Metric Tons CO2*
Bottled Water	79,594	5094	5807
Laundry System Change Outs (based on first 2 months)	702,000		
Toilets + Showerheads (partial calculation)	772,000		
Total Water Saved (final figures t.b.d.)	1,553,594		
* U.S. EPA, 2006. Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks			

GREEN CLEANING REDUCTIONS FROM CHEMICAL CHANGE OUTS:

Toxic Waste (lbs)	Plastic Solid Waste (tons)	Water Saved (gallons)
2000 per year	0.8	208
* AHLA Green Cleaning Calculator		

RECYCLING AND SOLID WASTE (does not include reuse quantifications at this time)

Solid Waste (tons)	Recycling (tons)	Recycling*
1700 per year	300	20%
* EPA WARM Model		

WHEREAS, continuation of the Green Lodging Initiative will allow for Santa Fe's lodging facilities to receive further training for greater incorporation of the Green Meeting Standards in order to meet the new requirements of International Green Meeting Standards to further the Santa Fe brand; and

1 **WHEREAS**, the continuation of the Green Lodging Initiative will allow Santa Fe's lodging
2 industry and the City of Santa Fe to promote Santa Fe as an environmentally conscious and climate
3 smart City; and

4 **WHEREAS**, the City of Santa Fe can and should be a national leader in the green economy,
5 which will help to attract a greater number of the ever expanding pool of organizations looking to
6 hold meetings in only those cities that are environmentally conscious and green.

7 **NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE**
8 **CITY OF SANTA FE THAT** the Governing Body hereby authorizes City funding in the amount of
9 \$50,000 be made available to further the Green Lodging Initiative in the city of Santa Fe and
10 promote the goal that the remaining 64% of the lodging facilities, by room capacity, become Green
11 Concierge Certificate holders.

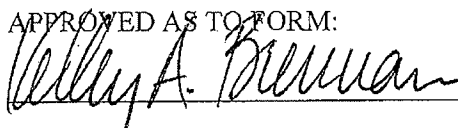
12 PASSED, APPROVED, and ADOPTED this ____ day of _____, 2014.

13
14
15 ATTEST:

JAVIER M. GONZALES, MAYOR

16
17 YOLANDA Y. VIGIL, CITY CLERK

18 APPROVED AS TO FORM:

19 
20 KELLEY A. BRENNAN, INTERIM CITY ATTORNEY

21
22 M/Melissa/Resolutions 2014/ Green Lodging Incentive

¹ There are not final determinations but are verified as of 4/10/14. More data needs to be entered and confirmed. The figures represent resource reductions achieved by the properties during the project year 2013. Waste and Recycling are actual tonnages of materials disposed of in 2013 calendar year

**City of Santa Fe
Fiscal Impact Report (FIR)**

This Fiscal Impact Report (FIR) shall be completed for each proposed bill or resolution as to its direct impact upon the City's operating budget and is intended for use by any of the standing committees of and the Governing Body of the City of Santa Fe. Bills or resolutions with no fiscal impact still require a completed FIR. Bills or resolutions with a fiscal impact must be reviewed by the Finance Committee. Bills or resolutions without a fiscal impact generally do not require review by the Finance Committee unless the subject of the bill or resolution is financial in nature.

Section A. General Information

(Check) Bill: _____ Resolution: X

(A single FIR may be used for related bills and/or resolutions)

Short Title(s): **A RESOLUTION ENDORSING THE GREEN LODGING INITIATIVE; AND DIRECTING STAFF TO EXPLORE WAYS TO CONTINUE, FUND AND EXTEND THE GREEN LODGING INITIATIVE TO ALL LODGING FACILITIES IN THE CITY OF SANTA FE.**

Sponsor(s): Councilor Ives

Reviewing Department(s): City Attorney's Office

Persons Completing FIR: Rebecca Seligman Date: 04/25/13 Phone: 955-6501

Reviewed by City Attorney: _____ Date: _____
(Signature)

Reviewed by Finance Director: _____ Date: _____
(Signature)

Section B. Summary

Briefly explain the purpose and major provisions of the bill/resolution:

The purpose of the resolution is to direct staff to explore ways to continue, fund and extend the green lodging incentive to all lodging facilities in the

Section C. Fiscal Impact

Note: Financial information on this FIR does not directly translate into a City of Santa Fe budget increase. For a budget increase, the following are required:

- a. The item must be on the agenda at the Finance Committee and City Council as a "Request for Approval of a City of Santa Fe Budget Increase" with a definitive funding source (could be same item and same time as bill/resolution)
- b. Detailed budget information must be attached as to fund, business units, and line item, amounts, and explanations (similar to annual requests for budget)
- c. Detailed personnel forms must be attached as to range, salary, and benefit allocation and signed by Human Resource Department for each new position(s) requested (prorated for period to be employed by fiscal year)*

1. Projected Expenditures:

- a. Indicate Fiscal Year(s) affected – usually current fiscal year and following fiscal year (i.e., FY 03/04 and FY 04/05)
- b. Indicate: "A" if current budget and level of staffing will absorb the costs
"N" if new, additional, or increased budget or staffing will be required
- c. Indicate: "R" – if recurring annual costs
"NR" if one-time, non-recurring costs, such as start-up, contract or equipment costs
- d. Attach additional projection schedules if two years does not adequately project revenue and cost patterns
- e. Costs may be netted or shown as an offset if some cost savings are projected (explain in Section 3 Narrative)

Finance Director: _____

X Check here if no fiscal impact

Column #:	1	2	3	4	5	6	7	8
	Expenditure Classification	FY			FY			Fund Affected

Personnel*	\$			\$			
Fringe**	\$			\$			
Capital Outlay	\$			\$			
Land/ Building	\$			\$			
Professional Services	\$			\$			
All Other Operating Costs	\$50,000			\$			
Total:	\$50,000			\$			

* Any indication that additional staffing would be required must be reviewed and approved in advance by the City Manager by attached memo before release of FIR to committees. **For fringe benefits contact the Finance Dept.

2. Revenue Sources:

a. To indicate new revenues and/or

b. Required for costs for which new expenditure budget is proposed above in item 1.

Column #:	1	2	3	4	5	6
	Type of Revenue	FY		FY		

	\$		\$		
	\$		\$		
	\$		\$		
Total:	\$		\$		

3. Expenditure/Revenue Narrative:

Explain revenue source(s). Include revenue calculations, grant(s) available, anticipated date of receipt of revenues/grants, etc. Explain expenditures, grant match(s), justify personnel increase(s), detail capital and operating uses, etc. (Attach supplemental page, if necessary.)

None that staff is aware of

Section D. General Narrative

1. Conflicts: Does this proposed bill/resolution duplicate/conflict with/companion to/relate to any City code, approved ordinance or resolution, other adopted policies or proposed legislation? Include details of city adopted laws/ordinance/resolutions and dates. Summarize the relationships, conflicts or overlaps.

None that staff is aware of.

2. Consequences of Not Enacting This Bill/Resolution:

Are there consequences of not enacting this bill/resolution? If so, describe.

The City Santa Fe would not be seen a leader in the green economy, which could hinder the attraction of a greater number of organizations looking to hold meetings in only those cities that are environmentally conscious and green.

3. Technical Issues:

Are there incorrect citations of law, drafting errors or other problems? Are there any amendments that should be considered? Are there any other alternatives which should be considered? If so, describe.

None that staff is aware of

4. Community Impact:

Briefly describe the major positive or negative effects the Bill/Resolution might have on the community including, but not limited to, businesses, neighborhoods, families, children and youth, social service providers and other institutions such as schools, churches, etc.

The continuation of the Green Lodging Initiative would allow our lodging industry and Santa Fe to promote our City as an environmentally conscious and climate smart City and have the potential to generate more visitors to our city.

Form adopted: 01/12/05; revised 8/24/05; revised 4/17/08

FOREST AND WATER CLIMATE ADAPTATION: A PLAN FOR THE SANTA FE WATERSHED

Santa Fe Watershed Association

City of Santa Fe

Model Forest Policy Program

Cumberland River Compact

December 30, 2013

Revised, April 7, 2014

Author:

Esha Chiocchio

Editors:

Gwen Griffith, Toby Thaler, Todd Crossett, Alyx Perry, and Ray Rasker

EXECUTIVE SUMMARY

Long periods of drought, unprecedented storm events, warmer average temperatures, rising seas, unpredictable weather patterns - we are already seeing the impacts of a changing climate. Whether we like it or not, we are entering a period of warming on a global scale that is shifting weather patterns everywhere.

Here in the southwestern United States, these changes are being expressed through reduced snow pack, shifting precipitation patterns, decreased water supplies, and increased temperatures. As a result, we have already experienced catastrophic wildfires, flooding and reduced agricultural yields. Trends we expect to continue.

Fortunately, there is something we can do about it. Seeing these patterns taking hold, The Santa Fe Watershed Association (SFWA) contracted with the Model Forest Policy Program (MFPP) to develop a climate adaptation plan through their Climate Solutions University (CSU) planning process. A team of experts from the greater Santa Fe community worked with CSU to develop this plan from a holistic perspective to identify the most pressing vulnerabilities and create an action plan to add long-term resilience to the Watershed and Santa Fe community.

Over the course of several months, the planning team studied the predicted climate shifts as well as the forest, water and economic vulnerabilities of the area. From this information, they used a prioritization system to analyze the climate risks and determine the areas of highest priority. Perhaps not surprisingly, the resulting priorities include: reduced water supplies; increased risk of wildfire and forest degradation; flooding; and a dearth of job opportunities to retain and attract working families. Taking into consideration the pillars of sustainability, (environmental stewardship, economic health and social justice) the planning team developed five goals that

GOAL 1: Increase the water security and ecological integrity of the Santa Fe Watershed through conservation, infiltration, groundwater recharge, and reuse.

GOAL 2: Improve forest and ecosystem health for resilience in the face of climate change.

GOAL 3: Expand and develop the workforce-training programs needed to implement this plan.

GOAL 4: Increase energy efficiency and renewable energy (EERE) to reduce the use of fossil fuel-derived and water consumptive energy sources.

GOAL 5: Establish financing systems that facilitate investments, emergency funds, and cash flow availability to fund climate adaptation and innovation initiatives.

address these issues and have the greatest chance of long-term success.

The implementation of these goals will take time and resources. However, it is imperative that we continue to tackle the vulnerabilities we know exist on multiple levels. History tells us that when communities are faced with changes such as these, there are three potential strategies and outcomes: 1) they do nothing and are subject to the environmental impacts that ultimately destroy their cities, 2) they migrate from the area, or 3) they proactively work to adapt to the changes and ultimately thrive. What do we want for Santa Fe?

Through climate adaptation planning we can increase the resilience of our landscapes while improving our economy and creating new job opportunities. Specific strategies are available to safeguard water resources and reduce hazards from storms, fires and floods. These strategies include increasing rainwater infiltration, developing water reuse systems, expanding forest thinning treatments, improving the functionality of our rivers and arroyos and developing long-term financing structures that enable all of this work to be implemented.

As this plan is put into practice, its progress should be continually monitored and evaluated to determine if benchmarks are being met and changes should be made. This is a living document that provides suggestions to strengthen our resilience given the information that we have today. With time, conditions and resources may change, requiring a nimble approach to the implementation of the action steps.

Our overarching goal is to ensure that Santa Fe thrives for centuries to come. What will be your role in shaping Santa Fe's future?

ANTICIPATED OUTCOMES

As the strategies for this plan are implemented, we hope to decrease our vulnerabilities from the identified risks associated with climate change. The five stated goals address areas of high impact that reflect the greatest possibilities for tangible results. Accordingly, our anticipated outcomes correspond to each goal as outlined below:

GOAL 1: Increase the water security and ecological integrity of the Santa Fe watershed through water conservation, infiltration, groundwater recharge and reuse.

The future of human habitation in Santa Fe depends upon an adequate water supply. In this high desert environment, the projections indicate decreased precipitation, increased groundwater dependence, hotter temperatures, and an increase in severity of storm events. Therefore, the outcomes we anticipate from this goal are:

- a) Increased groundwater recharge and storage
- b) Increased capacity for stormwater capture and infiltration
- c) Increased coordination among water planning entities
- d) Increased productivity of existing wastewater supplies
- e) More reliable water supply for the agricultural communities in the lower watershed
- f) Capacity for population and economic growth in the watershed with available water supply without compromising ecological health

GOAL 2: Improve forest and ecosystem health for resilience in the face of climate change.

Our forests and water supplies are intimately linked. Without healthy, functioning forests, our water supplies would be significantly compromised. In addition to their contribution to the water cycle, the Santa Fe forests provide habitat, beauty and recreation opportunities and are an essential grounding element for the region. Through the implementation of this goal, we expect the following outcomes:

- a) Increased percentages of treated forest areas to reduce the risk of catastrophic wildfire and pest infestation
- b) Expanded management of invasive tree species
- c) Increased resilience of the urban forest
- d) Increased soil health
- e) Mutually beneficial collaborations between the city, USFS, and SFWA that support financial resources, on-the-ground projects, and monitoring for forest health
- f) Sustainable healthy headwater streams in the upstream national forest lands
- g) Forest ecosystems that flourish long term without damage from catastrophic wildfire

GOAL 3: Expand and develop the workforce-training programs needed to implement this plan.

In order to implement the goals identified in this plan, as well as expand the diversity of job opportunities in the area to both retain and attract working families, the development and coordination of workforce training will be necessary. Through this effort we expect:

- a) Increased diversity of job training and opportunities
- b) Local workers will increase their economic status with greater job skills and income levels
- c) Successful restoration projects to result in a healthy watershed and attract more economic development to the region
- d) Investments in local restoration projects to generate a positive return on investment for the entire community resulting in greater revenues from recreation and tourism and increases in property values and tax revenue

GOAL 4: Increase energy efficiency and renewable energy (EERE) to reduce the use of fossil fuel-derived and water consumptive energy sources.

As the combination of drought and higher temperatures reduce water supplies, it is increasingly necessary to conserve water across all sectors. Many energy production technologies use and pollute significant quantities of water. By increasing efficiency to reduce energy demand and integrating non-polluting, water thrifty renewable energy into the State's energy portfolio, we can increase water availability. By carrying out the objectives of this goal, we hope to:

- a) Shift regulatory structures to expedite integration of EERE
- b) Decrease water use for energy production
- c) Decrease the carbon footprint from energy production
- d) Increase energy efficiency and renewable energy use
- e) Merit recognition for climate leadership in both mitigation and adaptation initiatives
- f) Ensure that long term energy sources will not be subject to rising prices for either fossil fuels or declining water sources
- g) Support abundant sustainable energy sources to drive economic growth in the region
- h) Ensure that Santa Fe and Northern New Mexico are more able to meet water demands for cities and nature far into the future
- i) Reduce the magnitude of climate impacts by reducing greenhouse gas emissions

GOAL 5: Establish financing systems that facilitate investments, emergency funds and cash flow availability to fund climate adaptation and innovation initiatives.

In order to achieve any of the goals in this plan, funding will be necessary. By developing new financing structures that enable long-term and emergency fund availability, the community will be more able to invest in climate adaptation strategies and weather the storms ahead. The benefits of this goal include:

- a) Newly developed financing structures create accessible capital for climate adaptation initiatives
- b) The development of a virtuous cycle where restoration investments bring positive economic returns through the increase of jobs, property values, and sustainable ecosystem services
- c) Natural disaster costs will be reduced and insurance rates can remain reasonable

IMPLEMENTATION OF THE PLAN

Implementation of the plan will be conducted through the actions of several key organizations involved in the stakeholder planning team:

The Santa Fe Watershed Association will help coordinate ongoing team interactions and will focus their activities around energy and water conservation initiatives, with a particular focus on education and community outreach.

The U.S. Forest Service will integrate recommendations, where appropriate, into their forest management plans and track their results through the national forest climate scorecard process. The national forest short term priorities will center on continuation of prescribed burns, community education and outreach, integrating climate projections in all planning processes, and securing financing and garnering support for expanded treatment areas.

The City of Santa Fe Water Utility will focus on implementing the Reclaimed Water Use Plan. The City's Water Conservation Program will incorporate this Climate Adaptation plan into their 2014 planning activities. The City of Santa Fe's River and Watershed Coordinator will incorporate these goals into the 2014 work plan with an emphasis on rainwater harvesting and infiltration.

The Santa Fe County Water Policy Advisory Committee will research and review the concept of regional water authorities and will make recommendations to the board of County Commissioners. They will also research and evaluate possibilities for Aquifer Storage and Recovery within the County and present them to the County Commissioners.

The short-term implementation priorities for 2014 include the following activities:

- The planning team will meet on a quarterly basis to monitor progress and ensure that the goals of this plan are being carried forward. These meetings will be facilitated by the Santa Fe Watershed Association and the Jemez y Sangre Regional Water Planning Council.

Near term windows of opportunity that can work in synergy with the plan include:

- Development and implementation of the Santa Fe 75-year urban forestry plan
- The recent passage of updated county building codes that will increase water and energy efficiency in all new construction.
- Potential adoption of recommendations in the *Santa Fe municipal watershed Pecos Wilderness prescribed burn project – final environmental assessment* that would permit the treatment of wilderness areas in the Santa Fe Watershed to reduce the risk of wildfire.
- The Interstate Stream Commission recently updated their guidebook in which they call for an update to the Jemez y Sangre Regional Water Plan. This new update will incorporate the goals of this Climate Adaptation plan thereby integrating our action steps into their larger regional plan.
- River Source will be installing water harvesting earth works into several Santa Fe locations, thereby increasing infiltration and reducing runoff.
- The Sustainable Santa Fe Commission Energy Committee will pursue the development of

- community solar and will work with solar installation companies, financial institutions and citizens to encourage investments in rooftop solar.
- The City of Santa Fe will restore ten arroyo segments as funded through the GO Bond.

The longer-term implementation of adaptation strategies will proceed as funding, resources, and organizational capacity allows. Each party will support ongoing tracking of progress and monitoring of conditions according to agreed-upon cooperative efforts.

As implementation proceeds, progress will be assessed and the adaptation plan will be modified as needed to stay on track with progress toward climate resilience and economic stability.

Climate Adaptation Plan Table

In the following section, we have listed each of these goals with the objectives, strategies and actions we feel will be necessary to achieve the identified goals. Monitoring will be necessary to provide feedback and help those implementing the goals to refine their strategies over time.

GOAL 1: Increase the water security and ecological integrity of the Santa Fe Watershed through water conservation, infiltration, groundwater recharge, and reuse.					
OBJECTIVE 1- 1: Increase Aquifer Storage and Recovery (ASR).					
Strategy 1-1a: Work with the City and County of Santa Fe to secure funding for analysis, feasibility and implementation of Aquifer Storage and Recovery (ASR).					
Measure: Funding secured.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Review funding sources and seek partnerships for ASR.	TBD	M (1-2 yrs.)	Hire an intern to research funding opportunities.	Funding secured.	See Goal 5 for funding possibilities.
Strategy 1-1b: Conduct an analysis of the Watershed's soil and hydrological modeling to determine the best areas for water infiltration.					
Measure: Watershed map is available to define best areas for water infiltration.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Compile and review the existing hydrological and soil studies.	Contract Scientists TBD.	M	Review existing studies.	Inventory of studies.	Possibilities: Peggy Johnson, Neil Williams, Paige Grant.
2. Map watershed according to potential for water infiltration and groundwater recharge.	Contract Scientists TBD.	M-L	GPS mapping.	Complete site map.	Possibilities: Peggy Johnson, Neil Williams, Paige Grant.
Strategy 1-1c: Conduct a feasibility study to determine the possibilities and priorities for ASR.					
Measure: Feasibility study is complete and identifies a plan of action for implementation.					
1. Engineering firm conducts feasibility study.	TBD	L 3-5 years	City and County send out RFP for study.	Complete feasibility study.	

Strategy 1-1d: Implement ASR projects.					
Measure: ASR projects implemented					
1. Utilize information in preceding action steps to implement project.	TBD	L			Dependent upon success of previous steps.
OBJECTIVE 1-2: Optimize water infiltration from the full range of precipitation events, up to and including runoff from a 500-year storm event.					
Strategy 1-2a: Develop joint City/County codes involving City/County Public Works, City/County Planning, and other relevant local government resources to increase water infiltration from runoff from buildings, roads, and parking lots.					
Measure: New codes are in place and being implemented.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Establish a joint City/County working group to review existing codes and suggest amendments to improve water infiltration from runoff from buildings, roads, and parking lots.	TBD	Spring 2014	Draft new codes and requirements.	New building and road drainage plan.	Review existing County Sustainable Land Use code.
2. Ensure that code amendments are adopted by City/County local governments.	Working group	Winter 2014	City/County Agenda.	New codes for building and roads.	
Strategy 1-2b: Incorporate new codes into the City/County Capital Improvement Plan (CIP) projects to increase infiltration of runoff from buildings, roads, parkings lots, etc.					
Measure: Number of green infrastructure (GI) projects that have been implemented.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Coordinate with City/County Public Works Departments to integrate new codes into CIP projects.	TBD	S-M	Set initial meeting to develop initiative.	Comprehensive list of CIP projects.	Dependent upon review from 1-2a.
2. Improve public awareness of City/County initiatives to increase water infiltration by publishing information on CIP projects.	TBD	S-M	News Media Release.	News articles published.	

Strategy 1-2c: Develop City/County guidelines for remodeling, repair, and maintenance projects to optimize the number of projects that incorporate green infrastructure (GI).					
Measure: Published guidelines for integration of GI for remodeling, repair, and maintenance projects.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Establish a joint City/County Working Group to integrate GI for remodeling, repair, and maintenance projects within the watershed.	City/County Public Works	S	Coordinate initial joint meeting.	Draft guidelines for integration of GI.	
2. City and County Public Works Departments adopt final guidelines.	City/County Public Works	S	City/County Public Works Approval.	Final guidelines for integration of GI.	
Strategy 1-2d: Design and construct GI into the prioritized reaches of the ten major arroyo systems of the Santa Fe Watershed.					
Measure: Identified arroyo GI projects are implemented.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Monitor the GO Bond funded arroyo restoration pilot projects for success and lessons learned to use for subsequent arroyo GI.	Arroyo Working Group	M	Establish monitoring benchmarks and monitor progress.	Identified best management practices	This project is funded and RFP will be released imminently.
2. Integrate the lessons learned in 1-2d-1 for future arroyo restoration projects.	Arroyo Working Group	M-L	TBD	TBD	

OBJECTIVE 1-3: Promote the creation of a Regional Authority to focus water planning and management on a Santa Fe basin-wide scale to maximize efficiency (eg. Water, Waste Water, Storm Water, and Energy).					
Strategy 1-3a: Work with City/County/State governments to create a Regional Authority for the Santa Fe Basin by December 1, 2015.					
Measure: Regional Water Authority is in place by December 1, 2015.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Create a Working Group to develop draft legislation to create the statute for the development of Regional Water Authorities and provide educational support materials & events.	TBD	Fall 2013	Establish initial City/County meeting.	Draft legislation.	Nylander, Leigland
2. Identify New Mexico Legislative sponsor for introduction of legislation in the 2014 session.	TBD	Fall 2013	Contact potential legislative sponsor.	Legislative sponsor.	Sen. Wirth?
3. Ensure that Regional Authority legislation is passed in the 2014 session.	TBD	Winter 2014	Lobby legislators to garner support.	Bill passed.	Nylander, Leigland
OBJECTIVE 1-4: Work with the City and County of Santa Fe to increase the use of reclaimed waste water.					
Strategy 1-4a: Increase the use of reclaimed waste water for non-potable uses.					
Measure: Acres of land that are being irrigated by reclaimed waste water above 2013 levels.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Refer to "Implementing Actions" in the Reclaimed Wastewater Resource Plan http://www.santafenm.gov/index.aspx?NID=2576 .					Borchert, April 2013

Strategy 1-4b: Increase the use of reclaimed waste water for potable uses.

Measure: Please refer to the Borchert April 2013 report. Note that this is beyond to scope of this plan but we would like to recognize that this is within the foreseeable 20-year future of the desert southwest.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Refer to "Implementing Actions" in the Reclaimed Wastewater Resource Plan.					Borchert, April 2013

Objective 1-5: Safeguard the groundwater supply in the La Cienega, La Cieneguilla and La Bajada communities.

Strategy 1-5a: Convert residential well-users to Santa Fe County water supply.

Measure: One-third of identified residents are connected to County water supplies by 2016 with another third connected by 2019.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Finalize negotiations with the county public utilities.	La Cienega Valley Association	Ongoing	Organizing community meetings with County.	Homeowner and County agreement.	
2. Secure financing to build the infrastructure necessary to connect homeowners to County water supplies.	Santa Fe County	M	Apply for federal funding.	Funding secured.	BOR WaterSmart grant
3. Build infrastructure and connect area residents.	Santa Fe County Public Works Dept.	L	Planning, design and construction.	Infrastructure complete	

GOAL 2: Improve forest and ecosystem health for resilience in the face of climate change.

OBJECTIVE 2-1: Reduce the risk of catastrophic wildfire.

Strategy 2-1a: Promote understanding of methods and benefits of forest thinning and prescribed burning.

Measure: number of talks, PSAs, letters, blogs posts, etc.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Meet with various community, political and business groups, to inform the public about forestry practices as tied to the water cycle.	USFS, SFWA, TNC, etc.	Ongoing	Contacting groups and presenting material.	Presentations	
2. Media outreach: PSAs (radio, TV, newspapers, movie theaters, etc.), letters to the editor, blogs, public presentations, etc.	USFS, SFWA, TNC, etc.	Ongoing	Creating media outreach products.	Media products	

Strategy 2-1b: Encourage forest treatment projects for the areas bordering the Santa Fe Watershed (Pecos Wilderness, the greater Tesuque drainage area and Glorieta/Thompson Ridge areas).

Measure: Forest treatments are implemented in adjacent forests.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Explore funding opportunities (grants, NMED, insurance companies, cooperative funds for landowners, etc.).	Community organizations, non-profits, USF, NRCS, etc.	Ongoing	Research.	Data base/list of available funds.	See goal 6 for funding strategies.
2. Establish a volunteer cadre to help citizens to treat private forested land.	USFS, City of SF and private citizens	M	Community volunteer contact person.	Volunteer cadre trained and organized.	
3. Encourage land/homeowners in the WUI to put land into conservation easement and to use funds to leverage grant opportunities to thin and treat private lands.	Land owners, Conservation Trust, Quivera Coalition	Ongoing	Contact potential land owners.	Number of acres placed in conservation.	

OBJECTIVE 2- 2: Reduce the risk of disease and pest infestation.					
Strategy 2-2a: Encourage proper forestry practices on private lands to ensure healthy tree spacing, adequate irrigation, and treatment/removal of pest infested trees.					
Measure:					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Gather public education materials and disseminate to owners of forested land.	State and Federal forestry departments.	Ongoing	Compile materials and make availability known through libraries, websites, PSAs, etc.	Materials compiled and disseminated.	
OBJECTIVE 2-3: Reduce invasive tree species and replace with natives and non-invasive ornamentals.					
Strategy 2-3a: Pass an ordinance to ban the selling and planting of invasive tree species (Russian olive, Siberian Elm, Ailanthus (Tree of Heaven), Salt Cedar, etc.)					
Measure: Ordinance is in place and enforced.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Propose ordinance to City Council.	Bob Wood	S	Presentation to City Council.	Ordinance passed.	Ask Bob if in place.
Strategy 2-3b: Remove non-native invasive tree species from City and County property, where appropriate.					
Measure: Removal of non-native invasive tree species.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Earmark funding to be spent annually for a 3-5 year period to remove invasive tree within the City and County.	Bob Wood, County counterpart	S-M	Work with City Council and County Commissioners to secure funding.	Funding mechanism established	
2. Coordinate and implement invasive tree removal program.	Bob Wood, County Counterpart	M-L	Tree removal.	Map of treated areas	Dependent upon financing.

OBJECTIVE 2-4: Develop a healthy urban forest.					
Strategy 2-4a: Support the development and implementation of the 75-year urban forest plan.					
Measure: 75-year urban forest plan is written and being implemented.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Encourage City support of financing and implementation of the 75-year urban forest plan.					Bob Wood is leading this effort.
Strategy 2-4b: Educate homeowners and landscapers about appropriate plantings and landscape design techniques to maximize urban forest health.					
Measure: Landowners and landscapers are implementing updated techniques.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Ensure QWEL, Master Gardener, and other information sources provide information appropriate to changing climate limitations for successful urban forest health.	Melissa McDonald, Master Gardener Program Lead, Nurseries	S-M	Integrate climate prediction information into training seminars.	Lectures and published materials.	
2. Develop a landscaping guide to be distributed to homebuyers through the SF Realtor Assn.	County Ag Extension Service, Master Gardener Program, SFCC, etc.	M	Develop landscaping guide.	Landscaping guides distributed to homebuyers.	
OBJECTIVE 2-4: Increase soil health in public and private land and urban forest cover to improve the water absorption capacity of soils and support the flora of the area.					
Strategy 2-4a: Develop and expand composting programs throughout the City and County.					
Measure: Composting programs in place and compost is spread on public lands to improve soil health.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Work with hotels, restaurants, grocery stores, schools, etc. to collect food waste for composting.	City Solid Waste Management	M-L	Work with Solid Waste Management Department.	Composting program established.	

2. Develop public education campaign to encourage residential composting and mulching.	SFCC, Farmer's Market Institute, Carbon Economy Series	Ongoing	Coordination among various entities, development of programs.	Public Education campaign developed.	Master Gardener Program, SF Women's Club.
3. Establish an annual residential chipping service to shred yard waste in the fall and create mulch for residential gardens and landscapes.	City Solid Waste Department	M-L	Trucks, equipment, personnel, advertising.	Program established.	Reduces risks and impacts of flooding.
4. Work with Parks department to utilize compost on public lands.	City Parks, Solid Waste Dept.	L	Trucks.	Compost being utilized.	

GOAL 3: Expand and develop the workforce-training programs needed to implement this plan.

OBJECTIVE 1: Efficiently develop training capacity across the range of sectors identified in this plan.

Strategy 1: Provide workforce training for the jobs needed to implement this Plan.

Measure: Number of participants in selected and developed training programs.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Convene a gathering of City and County Economic Development leaders and Institutions of Higher Education to identify training needs to both prepare for the jobs needed to implement the plan (skills needed to improve forest health and provide water and energy security) and to meet the goals of diversifying the economy.	Plan Implementer (yet to be identified or funded)	S	Pre-meetings with City and County Economic Development staff, Event organization.	Training and education plan designed to meet the needs of the jobs identified, including a funding strategy.	
2. Implement training and education plan developed in Action Step 1.	Local institution of higher education and possibly some non-profits, depending on plan	M	Submit grant applications and other instruments to obtain necessary funding/and tuition assistance.	New and updated training programs developed that meet training needs identified.	
3. Conduct a periodic review of the programs and evolving training needs and make appropriate adjustments to the training programs.	To be assigned in the Training and Education Plan.	L	Annual assessment and possible convening of partners.	Recommendations for program adjustments.	SFCC, NNMC, Highlands, UNM, St. Johns, Center for Higher Education, Youth Works

GOAL 4: Increase energy efficiency and renewable energy (EERE) to reduce the use of fossil fuel-derived and water consumptive energy sources.

OBJECTIVE 1: Participate in the Georgetown University Energy Prize (GUEP) (<http://www.guep.org/>) to develop and implement a comprehensive EERE program.

Strategy 1a: Work with the GUEP advisor to refine the goals, objectives, strategies and actions steps listed below to achieve maximum EERE by 2016.

Measure: Full action plan is developed and being implemented.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Submit letter of intent to GUEP to participate in their 2 year program.	John Alejandro	S: Dec. 2013	Draft letter.	Letter of intent.	
2. Work with assigned advisor and participating parties to create a full action plan.	SFCEA, Got Sol, SSFC, SFGCC, County	S: Winter 2014	Draft action plan.	Action Plan, buy-in from participating entities.	NEE, SFCC, GCC, SC, SSFC, PNM, Legis., City, County, etc.

OPTION 4-1: Establish a City/County municipal electric utility, called Santa Fe Public Power (SFPP).

OBJECTIVE 4-1-1: Conduct preliminary assessments and engage in community outreach.

Strategy 4-1-1a: Develop a working group to carry out the steps necessary to shift from PNM to Santa Fe Public Power.

Measure: Working group in place and carrying out the steps necessary to make the transition to a municipal electric utility.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Consult with those currently working on this effort to establish a working group.	Mariel Nanasi, Paul Campos	S: Winter 2014	Contact necessary parties and set up meeting.	Commitment of participants.	

Strategy 4-1-1b: Launch an educational campaign to inform the public about the pros and cons of a municipal electric utility.

Measure: Number of attendees, number of articles in papers, public opinion assessment results, etc.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Establish a working group to design and produce an educational campaign.	Mariel Nanasi, Paul Campos	Already in place?		Action Plan	
2. Public Education Forum.	New Energy Economy	9/18/13 Forum, more?	Venue, speakers, etc.	# of attendees?	
3. Conduct a public opinion assessment to gage the level to which the public understands the issues and to what extent they support the project.	Municipal utility working group	M	Create poll, distribute to City/County residents.	Polling results	

Strategy 4-1-1c: Conduct a technical-level engineering analysis of PNM's load profile in the County, the location, age and condition of PNM's distribution system and the extent to which SFPP could acquire and pay for a sustainable power supply sourced entirely from natural gas, solar and wind.

Measure: Analysis results indicate whether or not this is a feasible endeavor.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Designate funds to pay for a full feasibility analysis.	Municipal utility working group	M: 2014	Approval by City Council/ County Commissioners	Funding secured.	
2. Contract with a firm to conduct a full analysis of the feasibility of a shift to a municipal utility.	Municipal utility working group	M: 2014	Need all technical data from PNM.	Full engineering analysis report.	

Strategy 4-1-1d: Conduct an analysis of the wholesale energy markets for near-term availability of natural gas-derived electricity and renewables and the constraints of the regional transmission system.

Measure: Analysis results indicate the possibilities and constraints of purchasing wholesale energy on the open market.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Consult with turnkey developers on the availability of long-term supply contracts for Santa Fe in the range of 100 MW of daily capacity.	Municipal utility working group	M-L	Research and contact potential developers.	Developers contacted and data compiled.	

Strategy 4-1-1e: If the results of the technical analysis are favorable, secure funding to transition to a municipal utility.

Measure: Funding proposal chosen and supported.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Establish a working group to evaluate funding possibilities (bonds, tax levees, lease agreement with PNM, etc.).	Municipal utility working group	M	Evaluation of funding possibilities.	Analysis of funding options.	
2. Work with community to support the suggested funding proposal.	Municipal utility working group	M-L	Public education and outreach.	Funding supported and secured.	

Strategy 4-1-1f: Transition to SFPP from PNM.

Measure: Full transition is complete.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Purchase electrical infrastructure from PNM.	City/County	L	Financing	Transaction complete.	
2. Contract with RE developers to provide electricity to SFPP.	City/County	L	Negotiate with independent utility scale developers.	RE contracts.	
3. Establish aggressive energy conservation incentive program.	City/County	L	Plan development and implementation.	Plan and outreach efforts.	
4. Begin construction on SFPP gas fired power plant.	City/County	L	Financing.	Plant complete.	

5. Install solar panels at all municipal facilities.	City/County	Ongoing	Financing, City/ County approval.	Installations complete.	
6. Encourage the installation of solar panels at homes/businesses through financing incentives.	City/County, Home Wise	Ongoing	Public education and outreach.		
OPTION 4-2: Within the PNM (electric) and NM Gas Co. (natural gas) statutory/regulatory structure, encourage a transition to increased energy efficiency and renewable energy (EERE).					
OBJECTIVE 4-2-1: Make regulatory and legislative changes to state energy policies and requirements to encourage the development of EERE.					
Strategy 4-2-1b: Implement decoupling legislation to increase utilities' incentives to improve EERE for electricity, natural gas, and other non-renewable, water intensive energy forms.					
Measure: Decoupling legislation is in place.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Develop a public education campaign to help citizens and legislators understand decoupling and the need for this legislation.	SSFC Energy Committee and affiliates	S	Funds for PSAs, letters to editor, radio interviews, etc.	Public education campaign in place.	Review examples from other states (CA, AZ, VT, etc.).
2. Work with legislators to draft decoupling legislation.	SSFC Energy Committee and affiliates	M	Meet with legislators and write legislation.	Drafted and submitted legislation.	Egolf, Soules, Wirth?
2. Ensure passage of decoupling legislation in 2015 legislative session (Jan-March).	SSFC Energy Committee and affiliates	M: 2015 session	Lobbying, public outreach.	Legislation passed.	PRC, PNM, Legis., Gov. lobbying efforts.
Strategy 4-2-1a: Revise the NM Efficient Use of Energy Act and the Renewable Energy Act to increase the EERE targets.					
Measure: EERE targets are revised and implemented.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Draft and pass legislation to increase the RPS to 30% renewables by 2020 and 40% by 2030; and replace the "Reasonable Cost Threshold" provision with "Reasonable Market Price" provision.	TBD	M-L	Draft and pass legislation.	Renewable Energy Act revised.	

2. Draft and pass legislation to increase requirements in the Efficient Use of Energy Act to 20% by 2020.	TBD	M-L	Draft and pass legislation.	Efficient Use of Energy Act revised.	
OBJECTIVE 4-2-2: Enhance renewable energy education and outreach efforts.					
Strategy 4-2-2a: Establish an education and outreach campaign to inform public of the benefits of renewable energy and the options available for financing their RE projects.					
Measure: Number of people who switch to RE and who take advantage of the financing options.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Create an education and outreach plan.	City, County, Home Wise, PNM	Spring 2014	Plan, outreach materials.	Plan developed and financing secured.	
2. Host community meetings, create PSAs, distribute information, etc.	City, County, Home Wise, PNM	Fall 2014	Distribute info., host community meetings, etc.	Documentation of efforts.	
OBJECTIVE 4-2-3: Increase energy efficiency for residential, business and municipal buildings.					
Strategy 4-2-3a: Launch aggressive energy efficiency incentive programs for residential and business customers.					
Measure: Percentage of reduction in overall energy load.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Procure financing to expand the energy efficiency incentive programs as stated in updated Efficient Use of Energy Act.	City, County, Home Wise, PNM	M-L	Financing, program development.	Program developed and implemented.	To be done after the EUE Act is revised.
2. Promote and implement incentive program	City, County, Home Wise, PNM	L	Public education and outreach.	Measurable decreases in energy use.	

OBJECTIVE 4-2-4: Increase financing options for energy-related projects.

Strategy 4-2-4a: Expand and promote financing options for residential and commercial customers to increase energy efficiency and shift to renewable energy.

Measure: Number of customers utilizing the proposed financing options.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Promote Home Wise's home improvement financing offers for those with household incomes under \$103,050.	Home Wise, City, County	Ongoing	Public education and outreach.	Increase in Home Wise participants.	
2. Develop low-interest, long-term (15-20 years) on-bill financing option through the City of Santa Fe Water Department for solar installations and energy efficiency projects.	Sangre de Cristo Water Division	M	Development of program, dedicated financing.	Program established and in place.	
3. Develop low-interest financing options for solar installations and energy efficiency projects through local financing institutions.	City, County, Local Financial Institutions	M-L	Negotiations with financing institutions.	Financing options developed and offered.	Credit unions, LANB, other banks? See Goal 5 for more financing options.

OBJECTIVE 4-2-5: Encourage third-party solar development.

Strategy 4-2-5a: Encourage the establishment of LLCs to lease solar arrays to homeowners through Power Purchase Agreements (PPA).

Measure: LLCs established and PPAs in place.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Encourage private sector investment in LLCs through information dissemination.	Dan Baker, Private sector enterprise	S-M	Compilation of financial data.	Establishment of PPAs to develop rooftop PV.	This is becoming less feasible as the REC payments decrease.

Strategy 4-2-5b: Encourage the establishment of a 2-5 MW community solar (CS) array in Santa Fe County.

Measure: Size of array and number of customers who have purchased panels.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Work with PNM to design CS agreement and send out an RFP (Request for Proposal).	SSFC Energy Committee	S-M	Negotiations with PNM.	CS approved and RFP released.	PNM is negotiating with SF team.
2. Work with PRC to change current rules so that CS is permissible.	SSFC Energy Committee	S-M	Negotiations with PRC, Public outreach.	CS development approved.	
3. Third party installer installs CS system.	County, City, project developer, insatallation company	M	Determination of site, financial specifics.	Installation of CS.	Project developer and installation company will be determined through RFP process.
4. Launch education/outreach campaign to encourage business owners, renters and homeowners to purchase CS panels.	SSFC, City, County, Green Chamber of Com.	M-L	Program specifics, development of campaign.	Education/ outreach campaign in place.	

OBJECTIVE 4-2-6: Increase energy efficiency and renewable energy utilization at local government facilities.

Strategy 4-2-6a: Shift >50% of the entire municipal energy load to renewable sources by 2025 (fire stations, schools, administrative buildings, etc.).

Measure: Percentage of energy produced by renewable energy exceeds 50% of the total energy load.

Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Work with City Council to earmark 3% of all City tax revenues for renewable energy projects.	SSFC, Green Chamber	S-M	Develop proposal, public outreach, petitions, etc.	Financing established.	Albuquerque has adopted this with great success.
2. Install solar panels on all City and County buildings/parking lots.	City, County	Ongoing	Funding, political will.		Dependent upon financing.
3. Evaluate the use of biomass to heat municipal buildings	City, County	S-M			Conduct feasibility assessment.

4. Identify sources of waste-derived bio-CNG to be used in CNG fleet vehicles.	City, County	M-L			Conduct feasibility assessment.
OBJECTIVE 4-2-7: Adopt and meet the requirements of the 2030 Challenge.					
Strategy 4-2-7a: City and County adopt ever-increasing water and energy requirements for new buildings.					
Measure: Codes updated and on track to meet the 2030 Challenge.					
Action Step	Responsible Party	Timing (SML)	Requirements	Deliverables	Notes
1. Increase energy efficiency requirements for the City incrementally according to the City Building Codes and the 2030 Challenge.	K. Mortimer (City), K. Shanahan (SFAHBA)	M	Update the City Codes to adhere to the 2030 Challenge.	Codes updated and implemented.	Strict energy and water building codes are already in place in the City and are scheduled to be updated according to the 2030 Challenge.
2. Update County building codes to mirror those of the City.	County	S	Update County Codes to City code standards.	Codes updated and implemented.	Passed on 12/10/13.

GOAL 5: Establish financing systems that facilitate investments, emergency funds, and cash flow availability to fund climate adaptation and innovation initiatives.

OBJECTIVE 5-1: Establish a financial institution (or financial institutions) specializing in (1) holding and distributing funds for ecosystem conservation and restoration programs (e.g., similar to already existing eco-finance banking institutions in some parts of the country); (2) holding revolving loan funds and distributing low/no-interest loans to members for cash flow purposes related to ecosystem restoration and conservation initiatives that require upfront cash outlays before being eligible for reimbursement by government programs or other funding sources; and (3) acquiring and distributing equity investment funds for economic and ecological innovation and stimulus initiatives and for accumulating and distributing disaster relief funds and emergency financing in case of catastrophic events.

Strategy 5-1a: Identify additional financing systems and programs available through Federal, State, and local governments, and seek to adapt and list them in a directory to support the financing needs for programs identified in the Climate Adaptation Plan for the Santa Fe Watershed area (see for example: <http://www.ca-ilg.org/document/financing-local-sustainability-efforts>).

Measure: Number of government financing systems/program found that can be listed in a directory for our local area

Action Step	Responsible Party	Due Date	Requirements	Deliverables
1 Research, identify, and describe existing governmental financing programs	TBD	mid 2014	funds to pay researchers	report
2 List and describe them in a directory for the area	TBD	late 2014	funds to establish directory	directory (web-driven)

Strategy 5-1b: Research and use (link to) sources of information and examples to establish local and state-wide financing mechanisms, based on a variety of sources of information already identified

Measure: Realization of each phase (of a series of phases for the realization of the above listed financing systems/programs for Objective 5.1.

Action Step	Responsible Party	Due Date	Requirements	Deliverables
1 Establish a phased process plan for establishment of financing systems/institutions, and the necessary resources and information (sources) needed to realize the plan	TBD	TBD: mid 2014	Funding to compensate the initiator's work	Report/Plan (Prospectus)
2 Begin working through each step (phase) of the process plan	TBD	late 2014	Funding to compensate the initiator's work	Reports on each phase

OBJECTIVE 5- 2: Establish financing programs tailored to soil conservation and soil improvement, local food production, water management, stream and wetland (i.e., water source) restoration, forest management and restoration, and local/community-driven economic development

Strategy 5-2a: Start at the smallest feasible scale and follow the most desirable up-scaling scenarios through adaptive management, collaboration, and marketing

Measure: One program established (number of programs established; one by one)

Action Step	Responsible Party	Due Date	Requirements	Deliverables
1 As in 5-1				
2 As in 5-1				

OBJECTIVE 5-3: Educate target groups (i.e., the community and environmental and community development/innovation organizations) about the availability of the funds, investment options, and fund utilization opportunities and conditions. Grow membership in case of member-driven financing programs.

Strategy 5-3a: TBD ; e.g., publication of funding directory; offering presentations; launching pilot projects

Measure: TBD: e.g., number of information/education sources and events launched

Action Step	Responsible Party	Due Date	Requirements	Deliverables
1 TBD				
2 TBD				

City of Santa Fe, New Mexico

memo

DATE: April 25, 2013

TO: Public Utilities Committee

VIA: Rick Carpenter, Water Resources and Conservation Section Manager
Nick Schiavo, Acting Public Utilities & Water Division Director

FROM: Alan G. Hook, Water Resources Analyst
Laurie Trevizo, Water Conservation Program Manager

RE: The 2013 gallons per capita per day of 101 utilizing the NM Office of the State Engineer methodology.

Introduction: Since 2011, Santa Fe and other parts of New Mexico have experienced persistent drought conditions, despite exceptional precipitation in the fall of 2013, resulting in higher customer peak daily demands. Despite these challenges, the 2013 City of Santa Fe Water Division's (City) water production for the service area customers remained under 10,000¹ acre-feet (af), due to water conservation efforts practiced by the community. Another measurement of water conservation success is the use of the gallons per capita per day (gpcd) calculation. Staff has completed the annual gpcd report of 2013 data, using the New Mexico Office of the State Engineer (OSE) methodology referenced below. The new gpcd calculation for 2013 data resulted in 101 gallons per capita per day. As part of the City's Permit SP 4842 Condition No. 10 for the Buckman Direct Diversion Project, the City must annually submit an annual gpcd calculation to the NM Office of the State Engineer. Though this region of New Mexico has experienced climatic and seasonal challenges, the calculated gpcd of 101 is a result of progressive on-going water conservation efforts by the City's water customers.

New Mexico Office of the State Engineer GPCD Calculator Methodology:

To better regulate municipal water use, the NM Office of the State Engineer (OSE) began to condition municipal water-rights permits with the gpcd measurement and began a program to standardize the gpcd methodology (Vogel, et al. 2009, Southwest Hydrology, see attachment 1). On March 16, 2009, the OSE released the standardized gpcd methodology using the OSE gpcd calculator, 2.04 Beta Version. 2010 was the first year the OSE tool was required.

¹ The City of Santa Fe's production for water utility customers was 9,414 af with an additional 240 af of potable water exported to Santa Fe County, per the 2005 Water Resources Agreement, for a total production of 9,654 af in 2013.

Results of the 2012 NM OSE GPCD Calculator:

The NM OSE gpcd for 2013 is 101 gallons per capita per day for the City of Santa Fe. The previous year, the NM OSE gpcd for 2012 was 106 gallons per capita per day. In comparison to other western cities, the City's gpcd is one of the lowest and continues to remain low.

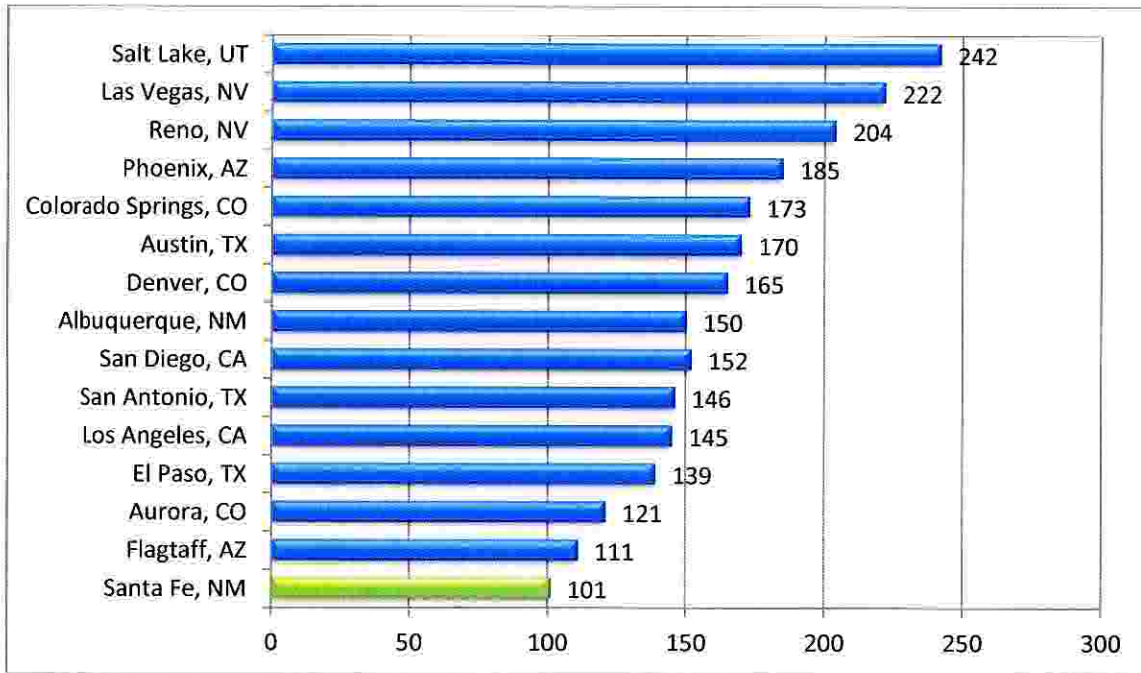


Figure 1. Comparison of the gallons per capita per day of 15 western cities from 2008 to 2013 data

In conclusion:

The City has achieved lower consumption through public outreach, ordinances requiring customers to comply with water conservation conditions and utilizing incentives. The City's single-family residential customer uses approximately 52 gallons per day or an average of 1,582 gallons per month. Several residential water conservation outreach tips to reduce water usage during these drought conditions are as follows:

- Average household leaks waste 11,000 gallons of water, equal to 270 + loads of laundry.
- High-efficiency washing machines use less than 27 gallons per load compared to 50 gallons used by traditional models. Wash laundry using only full loads. Small laundry loads use twice as much water per pound of laundry compared to full loads. On average, each person does 3 loads of laundry per week.
- Turning off the tap while brushing your teeth or shaving can save more than 200 gallons per month. A family of four would save 1600 gallons per month.

Attachments:

1. Vogel and Longworth, *Apples to Apples: A Standardization Measure for Municipal Water*, Southwest Hydrology. November/ December 2009.

Spring 2014 Upcoming Events

[illegible]

Working Group 4

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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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 (POSAC--Melissa 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	<ul style="list-style-type: none">• 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 Chiochio (DRAFT)
Fiscal Impact	To be determined

Update:

Parks: POSAC's subcommittee on water conservation asked to Tim develop memo to POSAC on analysis of parks water use looking at six parks. Based on this information, Melissa is working with POSAC to develop preliminary draft report for POSAC/Water Conservation.

QWEL: Melissa and Doug attended QWEL kick-off meeting. Water Conservation staff did a good job explaining how the program will work for the pilot project. WC staff went over forms (available May 1st). There were questions around training schedule, agreement language and what type of drip irrigation audits would be accepted. Also, there was mention of including passive water harvesting techniques into the QWEL curriculum.

Sustainable Santa Fe: Reviewed document and gave feedback to author Esha Chiochio from Sustainable Santa Fe Commission (esha@santafewatershed.org) . Western Adaptation Alliance is scheduled to hold next training in Santa Fe in May. Topic sustainable agriculture as it relates to water resources. Representatives from the Sustainable Santa Fe Commission, Water Division and POSAC will participate.

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

WG#5 MEETING ON 5/5/2014 WITH OSE STAFF

At WG#5 member Peter Balleau's suggestion, I organized the meeting with John T. Romero, PE, Director, Water Rights Division, Office of the State Engineer (OSE). Other attendees from OSE included Julie Valdez & Molly Magnuson from Water Use and Conservation, and Christina Noftsker and Kerri Roybal from the District 6 Water Rights Office. John had selected these staff members in anticipation of the questions we might ask. I found it to be a cordial meeting and everyone was very helpful and attentive.

Bob Kreger was there from WG#5 and Andrew Erdmann, from City of Santa Fe (CSF) Water Resources was present. Andrew actually worked for John Romero when he was at OSE. Andrew reviewed these meeting notes.

I introduced myself and gave an overview of the Water Conservation Committee and how we are now organized into working groups and that most of our work is done between the regularly scheduled monthly meeting of WCC. I also explained that we are trying to reach out to private well owners and inform them that the CSF regulations apply to private wells and do so in an "inclusive" manner with respect to conserving water in our common aquifer. I also mentioned the recently released GPCD calculations. I had sent in advance a list of questions, which were not addressed (but not necessarily in this order, during the meeting).

Does the City have the legal right to regulate all wells within the City limits as per its 1999 ordinance? (Case law from Smith vs. City of Santa Fe, 2006 and Stennis vs. City of Santa Fe, 2008)

There was no discussion of the specific cases and I think that there is no question that the CSF has jurisdiction over these wells and the City may impose restrictions if they are more stringent than OSE requirements.

The OSE does not have jurisdiction over pre-basin wells and the OSE would not enforce CSF ordinances; but the OSE would get involved if there were a flagrant violation concerning a permitted well.

What % of the private wells in the City of Santa Fe have meters?

The first number we heard was 50%, but then the consensus seem to drop to 25% (or even less). OSE staff seemed reluctant to answer this

question without distinguishing between the pre-basin wells (pre-1956), of which there are an unknown number, and the post-basin wells, which are permitted and therefore quantifiable.

If metered, does anyone submit usage numbers to the OSE for wells within the City?

The OSE requires meter readings of shared wells. If there is "good reason" to require private wells to install meters, the OSE can issue a meter order; but the OSE does not intend to issue meter orders within the city. The only time the issuance of meter orders would be expected is when well repairs are required or if the work is required to be advertised. The OSE assumes that no such work will be done in the city without a CSF permit and it seems to count on the City to monitor such work and enforce State and City regulations. No one seemed to know if the CSF turns in its meter readings to the OSE. Andrew will seek an answer to this question and whether there is any enforcement of the requirement of CSF-permitted wells (which also by definition have OSE permits prior to applying to the City) to submit meter readings to the City. In general and state-wide, meter readings which are turned in to the OSE are recorded in the OSE data base.

Are there any requirements for existing well users to install meters?

No. And it seems unlikely that the OSE will make such a requirement. It seemed implicit, however, that the CSF could do so for wells in its jurisdiction and that CSF could impose limitations on water quantity as long as they were more stringent than those imposed by the OSE. When the CSF issues its permit, it is stated that the newly permitted well is limited to 1AFY.

Does the City have any responsibility to remind owners of metering requirements?

No. There really are no requirements except for shared wells and wells permitted by the CSF.

OTHER DISCUSSIONS

Does the City have any responsibility to remind owners of plugging requirements?

No. Licensed well drillers should be aware of these requirements. There is no specific enforcement for wellhead protection. The regulations are in place but not enforced. The OSE depends on the CSF to see that old wells within the City are properly plugged in the case of a replacement well. The unplugged wells that are likely in existence are probably wells that owners simply stopped using – whether due to poor production, mechanical failure, or if they started sharing a well informally with a neighbor or connected to City water. There is no funding or program in place to identify and plug these wells.

Wells drilled before 1956 did not need to be permitted. It is presumed that those wells would be allowed 3AFY.

Wells permitted under 72-12-1 (after 2004) by OSE are allowed 1AFY. (We are checking this date.) Peter: Do you know?

In discussions with Andrew after the meeting, we agreed to work cooperatively to put together a white paper to summarize the private well issue and Working Group #5 will present the report to the Water Conservation Committee. I will take the lead for the WG and address comments by WG members. I will incorporate most of the work we have already done. Andrew noted that he will have to work on our project as his schedule allows.

Respectfully submitted,

Stephen Wiman

On behalf of Water Conservation Committee Working Group #5

To: Water Conservation Committee

From: Andrew Erdmann, Water Resources Coordinator, City of Santa Fe Water Division

Re: Domestic Wells Within the City of Santa Fe

The purpose of this memo is to summarize the Domestic Well permitting process at the City of Santa Fe for the Water Conservation Committee. There are two halves of this summary – a summary of the permitting process itself including the administration of the permits subsequent to issuance, and a summary of the domestic wells in the City both under City permit and those believed to exist based on New Mexico Office of the State Engineer (OSE) records.

The Permitting Process:

In order to drill a well within the City of Santa Fe limits, two permits are required. The first of these is an OSE domestic well permit (72-12-1 permit). Santa Fe falls within the OSE's District VI office which is located in Santa Fe, so these permits are relatively easy to get through the office located in the Bataan Building near the State Capital. In order to receive such a permit in New Mexico, the permittee must submit proof of ownership of the property – a deed with a good property description or a plat if the deed is inadequate – and a \$125 filing fee. In the event that the well is existing, located on the property of another owner, intended to be used for multiple households, or intended to be used for multiple purposes, additional steps are required of the owners. A copy of this application is included at the back of this memo.

Additionally, because wells within the City of Santa Fe are regulated in some ways by the City, the OSE requires a letter from the City of Santa Fe validating that the subject property meets the City's criteria for a domestic well before they will issue a permit.

The City Ordinance governing the permitting of Domestic Wells by the City of Santa Fe is 25-1.10 SFCC, first passed in 1999 and revised in 2004. The ordinance prohibits the drilling of wells within City limits without a City-issued permit which is only issued subsequent to the issuance of a domestic well permit by the OSE. The permit shall be issued only if the applicant meets one of the following conditions: 1) the nearest property boundary is greater than 300' of a water distribution line or, 2) the total cost of connecting to the City water system is greater than the cost of drilling a new domestic well.

The ordinance further specifies 7 conditions of approval to be attached to City-issued domestic well permits, some of which are identical to conditions imposed by the OSE. The conditions of approval, as listed in the ordinance, are as follows:

1. The well shall be metered to City specifications and monthly usage shall be recorded and reported annually to the City Water Division.
2. In certain parts of the City, as delineated by the City water division, the well shall be drilled a minimum of fifty feet (50') into the Tesuque formation and a seal constructed to prevent the mixing of water between the Tesuque and Ancha formations.
3. The well shall be constructed to standards established by the City of Santa Fe and shall be drilled by a licensed well driller.

4. The well owner shall agree to dedicate a ten to twenty foot (10' - 20') wide easement along the necessary property lines for the installation of future infrastructure, as delineated by the City Water Division.
5. The well owner shall be subject to all City ordinances and penalties governing the amount and usage of water extracted from domestic water wells as set forth in this chapter.
6. The well owner shall be subject to subsection 14-8.12(F)(3) SFCC 1987, requiring the well owner to demonstrate that the water demand created by the use of the structures for which the domestic water well is sought will be entirely offset in accordance with the annual water budget procedures and subsection 14-8.13(F) prior to use of the well.
7. The City may impose further conditions as necessary to implement the City's ordinances, to prevent waste and conserve the supply of water and for the public health, safety and general welfare of its citizens.

By the time the applicant reaches the water office with a Domestic well permit from the OSE, the City water division will have already evaluated the property in terms of meeting the requirements set forth in the Domestic Well Ordinance, so issuing the permit should not be a lengthy process.

Existing Domestic Wells in Santa Fe:

There is no comprehensive list of all of the domestic wells in Santa Fe. The best existing source for this data comes from the OSE's WATER's database, but because of the age of the City in relationship with the relatively recent requirements to file for a Domestic Well Permit with the State, there are likely many wells which are not in the State's records and some of these may still be in use.

There are 753 domestic wells located within the City of Santa Fe's current boundaries based on the 2011 (most current) OSE well location database. The bulk of these are clustered in and around Santa Fe's east side, likely the result of this area having been the first to develop.

Permitted well owners with City permits, a group that should include all well owners since at least 2004, are required to submit meter readings but this does not appear to be either an established or an enforced practice. In addition, the conditions of approval listed in the ordinance do not address the quantity of water to which well owners are entitled – meaning that the 1-3 afy limit (1 afy for wells permitted since 2005; 3 afy for wells permitted between the declaration of the basin in 1956 and the change in policy in 2004) imposed by the OSE is the only restriction to use – and many of the tools described in the ordinance (a delineation of the Tesuque / Ancha formation, specifications for well construction) have not been developed at this time.

The present regulations are permissible because they are not in conflict with State law. However, if the City were to attempt to regulate beyond what it currently does, we would have to evaluate whether we would be prohibiting an action that the State permits:

The 1999 Ordinance is neither inconsistent with nor antagonistic to Section 3–53–1.1 because it restricts the same activities as Section 3–53–1.1 but does so in a less restrictive manner. *See McCall*, 58 N.M. at 538, 273 P.2d at 644 (concluding that an ordinance, which was less restrictive than the corresponding State statute, “merely complement[ed] the statute and [was] nowhere antagonistic therewith”). The Legislature likely had the 1999 Ordinance in mind when it enacted Section 3–53–1.1 because Section 3–53–1.1 is more restrictive than the 1999 Ordinance: the 1999 Ordinance prohibited drilling within two hundred feet of a water distribution line, while

Section 3–53–1.1 prohibits domestic wells within three hundred feet. Because the 1999 Ordinance was less restrictive than Section 3–53–1.1 and was not in conflict with it, we hold that the 1999 Ordinance was still effective after the enactment of Section 3–53–1.1.

Stennis v. City of Santa Fe, 2008-NMSC-008, ¶ 22, 143 N.M. 320.



NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, OR 72-12-1.3 NEW MEXICO STATUTES



For fees, see State Engineer website: <http://www.ose.state.nm.us/>

1. APPLICANT(S)

Name:	Name:
Contact or Agent: <input type="checkbox"/> check here if Agent	Contact or Agent: <input type="checkbox"/> check here if Agent
Mailing Address:	Mailing Address:
City:	City:
State: Zip Code:	State: Zip Code:
Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional):	E-mail (optional):

2. WELL LOCATION **Required: Coordinate location must be New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.**

NM State Plane (NAD83) - In feet	NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	X (in feet): Y (in feet):
UTM (NAD83) - In meters	UTM Zone 13N <input type="checkbox"/> UTM Zone 12N <input type="checkbox"/>	Easting (in meters): Northing (in meters):
Lat/Long (WGS84) - To 1/10 th of second	Latitude: deg min sec Longitude: deg min sec	
Other Location Information (complete the below, if applicable):		
PLSS Quarters or Halves:	Section:	Township: Range:
County:		
Land Grant Name (if applicable):		
Lot No:	Block No:	Unit/Tract: Subdivision:
Hydrographic Survey:	Map:	Tract:
Other description relating point of diversion to common landmarks, streets, or other:		
Point of Diversion is on Land Owned by (Required):		

FOR OSE INTERNAL USE

Application for Permit, Form wr-01, Rev 6/14/12

File No.:	Trn No.:	Receipt No.:
Sub-basin:	POD No.:	Log Due Date:

3. PURPOSE OF USE

<input type="checkbox"/> Domestic use for one household
<input type="checkbox"/> Livestock watering
<input type="checkbox"/> Domestic use for more than one household. Number of households _____
<input type="checkbox"/> Drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility
<input type="checkbox"/> Prospecting, mining or drilling operations to discover or develop natural resources
<input type="checkbox"/> Construction of public works, highways and roads
<input type="checkbox"/> Domestic use for one household and livestock watering
<input type="checkbox"/> Domestic use for multiple households and livestock watering
<input type="checkbox"/> Domestic well to accompany a house or other dwelling unit constructed for sale

4. WELL INFORMATION

File Information: (If existing well, provide OSE no. & indicate below if well is to be replacement, repaired or deepened, or supplemental. If new well, leave blank, as OSE must assign no.)		
OSE Well No.(If Existing)		New Well No. (provided by OSE)
Driller Name:		Driller License Number:
Approximate Depth of Well (feet):		Outside Diameter of Well Casing (inches):
<input type="checkbox"/> Replacement well (List all existing wells if more than one):	<input type="checkbox"/> Repair or Deepen: <input type="checkbox"/> Clean out well to original depth <input type="checkbox"/> Deepen well from _____ to _____ ft. <input type="checkbox"/> Other (Explain):	<input type="checkbox"/> Supplemental well (List OSE No. for all wells this will supplement):

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

ACKNOWLEDGEMENT

I, We (name of applicant(s)), _____
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER (FOR OSE USE ONLY)

This application is approved subject to the attached general and specific conditions of approval.

Witness my hand and seal this _____ day of _____ 20 _____, for the State Engineer,

By: _____
Signature Print

FOR OSE INTERNAL USE

Application for Permit, Form wr-01, Rev 6/14/12

File No.:	Trn No.:	Receipt No.:
Sub-basin:	POD No.:	Log Due Date:

**NEW MEXICO OFFICE OF THE STATE ENGINEER
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, AND 72-12-1.3 NEW MEXICO STATUTES**

INSTRUCTIONS

1. The application shall be made in the name of the actual user of the well for the purpose specified in the application (if the agent is submitting the application, check the agent box).
2. The application shall be filed with the appropriate filing fee.
3. A separate application must be filed for each well to be drilled or used.
4. If well to be used is an existing well, an explanation (and the file number, if possible) should be given under Remarks (Item 5).
5. If well is to be used for livestock watering on state or federal land, proof of the following must be included as part of the application; (a) applicant is legally entitled to place his or her livestock on the land where the water is to be used, (b) applicant has been granted access to the drilling site and has permission to occupy the portion of the land as is necessary to drill and operate the well.
6. An application to drill a well on land owned by another person, the state of New Mexico, the federal government, or another entity shall be accompanied by written consent of the landowner.
7. For an application for drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility, the applicant shall demonstrate that no alternative water supply is reasonably accessible or available.
8. An application for a 72-12-1.1 domestic well to serve multiple households shall be filed with documentation listing the number of households to be served by the well, the owner's contact information for each household to be served, and a description of the legal lot of record for each household to be served. A copy of a well share agreement may be filed to support the claim that the 72-12-1.1 domestic well will serve more than one household.
9. The Office of the State Engineer may require an application to be filed with a deed or purchase contract and plat of survey on file with the appropriate county.
10. See General Conditions of Approval for more information.

FEE SCHEDULE FOR APPLICATIONS

**72-12-1.1 (domestic) = \$125.00
72-12-1.2 (livestock) = \$5.00
72-12-1.3 (temporary) = \$5.00
Replacement well = \$ 75.00
Supplemental well= \$125.00
Repair or Deepen = \$ 75.00
Amend Domestic Use = \$ 75.00**

Application for permit, well records and requests for information in the following basins should be addressed to the Office of the State Engineer at:

Bluewater, Estancia, Gallup, Middle Rio Grande, Northern Tularosa, and Sandia Basins

District No. 1. 5550 San Antonio Dr. NE , Albuquerque, NM 87109 Phone # 505-383-4000

Capitan, Carlsbad, Casey Lingo, Curry County, Fort Sumner, Hagerman Canal, Hondo, Jal, Lea County, Peñasco, Roswell-Artesian, and Portales Basins

District No. 2. 1900 West Second St., Roswell, NM 88201 Phone # 575-622-6521

Animas, Cloverdale, Gila-San Francisco, Hachita, Lordsburg Valley, Mimbres, Mount Riley, Nutt-Hockett, Playas, San Simon, Virden Valley, and Yaqui Basins

District No. 3. P.O. Box 844, Deming, NM 88031 Phone # 575-546-2851

Lower Rio Grande, Southern Tularosa, Hueco, Las Animas Creek, Salt, and Hot Springs Basins

District No. 4. 1680 Hickory Loop, Suite J, Las Cruces, NM 88005. Phone # 575-524-6161

San Juan Basin

District No. 5. 100 Gossett Drive, Suite A, Aztec, NM 87410 Phone # 505-334-4571

Northern Rio Grande and Upper Pecos Basins

District No. 6. P.O. Box 25102, Santa Fe, NM 87504-5102 Phone # 505-827-6120

Canadian River, Clayton, and Tucumcari Basins

District No. 7. P.O. Box 481, 301 East 9th Street, Cimarron, NM 87714 Phone # 575-376-2918

**NEW MEXICO OFFICE OF THE STATE ENGINEER
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, or 72-12-1.3 NEW MEXICO STATUTES**

GENERAL CONDITIONS OF APPROVAL

- 06A The maximum amount of water that may be appropriated under this permit is acre-feet in any year.
- 06B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 72-12-12).
- 06C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request, or may be printed from the OSE website at www.ose.state.nm.us, under applications & forms.
- 06D The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- 06E To request a change to the use of water authorized under this permit, the permittee shall file an application with the State Engineer.
- 06F An application for a new 72-12-1.1 domestic well permit where the proposed point of diversion is to be located on the same legal lot of record as an operational 72-12-1.1 domestic well shall be treated as an application for a supplemental well.
- 06G If artesian water is encountered, all rules and regulations pertaining to the drilling and casing of artesian wells shall be complied with.
- 06H The drilling of the well and amount and uses of water permitted are subject to such limitations as may be imposed by a court or by lawful municipal or county ordinance which are more restrictive than the conditions of this permit and applicable State Engineer regulations.
- 06I The permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 06J The well shall be set back a minimum of 50 feet from an existing well of other ownership unless a variance has been granted by the State Engineer. The State Engineer may grant a variance for a replacement well or to allow for maximum spacing of the well from a source of groundwater contamination. The well shall be set back from potential sources of contamination in accordance with rules and regulations of the New Mexico Environment Department.
- 06K Pursuant to Section 72-8-1 NMSA, the permittee shall allow the State Engineer and his representatives entry upon private property for the performance of their respective duties, including access to the well for meter reading and water level measurement.
- 06L The permit is subject to cancellation for non-compliance with the conditions of approval or if otherwise not exercised in accordance with the terms of the permit.
- 06M The right to divert water under this permit is subject to curtailment by priority administration as implemented by the State Engineer or a court.
- 06N In the event of any change of ownership to this permit the new owner shall file a change of ownership form with the State Engineer in accordance with Section 72-1-2.1 NMSA.
- 06O This well permit shall automatically expire unless the well is completed and the well record is filed with the State Engineer within one year of the date of issuance of the permit. It is the responsibility of the permit holder to ensure that the well record has been properly filed with the State Engineer.



City Permit No. _____

(Assigned by City)

City Of Santa Fe Water Division

APPLICATION FOR DOMESTIC WATER WELL PERMIT WITHIN THE CITY LIMITS UNDER CITY OF SANTA FE ORDINANCE No. 25-1.10 SFCC 1987

1. **Applicant Information:**

Name: _____

Address: _____

Phone Numbers: (h) _____ (w) _____ (m) _____

Email: _____

2. **Land Owner Information (if different from applicant):**

Name: _____

Address: _____

Phone Numbers: (h) _____ (w) _____ (m) _____

Email: _____

3. **Information to be provided by Applicant:**

- ☐ Copy of current recorded plat map of property on which well is to be drilled
- ☐ Proposed well location clearly indicated on plat map. If replacement or supplemental well, location of existing well indicated on plat map.
- ☐ Santa Fe County Assessor Office's Parcel Number _____;
- ☐ Office of the State Engineer §72-12-1.1 well drilling permit (OSE permit alone does not grant applicant permission to drill a domestic well. Applicant needs a City permit in accordance to City Ordinance SFCC 25-1.10 and associated regulations).

or

Office of the State Engineer existing well permit, well record, and OSE permit to drill a supplemental or replacement well

4. **Applicability**

A. Is this well application for the replacement of an existing well? Yes_____ No_____

B. Is this well application for a supplemental well for an existing well? Yes_____ No_____

C. Do you currently have City water service to your lot? Yes_____ No_____

D. Are you applying for a domestic well based on a claim that your lot property line is more than 300 feet from an existing water line? Yes_____ No_____

If yes, please submit with this application all evidence showing that the nearest property line for which you are applying for a domestic well permit is more than 300 feet from a City water distribution line.

E. Are you applying for a domestic well based on a claim that it will be less expensive to drill a domestic well than to connect to the City water system? Yes_____ No_____

If yes, please submit with this application two written quotes by well drillers licensed by the State of New Mexico for a well completed in a manner consistent with the conditions outlined in Section 4. The quotes need to specify that all the items identified in Section 4, as well as a water line stub out are all included in the price.

5. Conditions of Approval

The well shall be constructed in accordance with standards established by the Office of the State Engineer (OSE) reference including being drilled by a well driller licensed in the State of New Mexico. (See <http://www.ose.state.nm.us/doing-business/WellDrillerRegs/WellDrillerRulesRegs-2005-08-31.pdf>)

In addition, the following City's Conditions of Approval shall apply:

- (1) Consistent with 19.27.5.9(D)(1) NMRA, the quantity of water available to divert from the well will be limited to 1.0 acre-feet per year.
- (2) The permittee will notify the Water Division at 505-955-4203 at least 48 hours before drilling is to begin and allow City staff access to site during well drilling.
- (3) The well shall follow the regulations prescribed by OSE Rules and Regulations (NMCA 19.27.4.29), including providing access to the well for water level monitoring via a ½-inch entry point and a well identification tag.
- (4) In certain parts of the city, as delineated by the city water division, the well shall be drilled a minimum of fifty feet (50') into the Tesuque formation and a seal constructed to prevent the mixing of water between the Tesuque and Ancha formations.
- (5) The permittee shall install an appropriately-sized, totalizing meter, accessible from the exterior, to measure all of the water produced from the well. Monthly meter readings shall be taken by the well owner and be submitted to the Water Division Director by February 1 of each year.
- (6) In accordance with OSE Rules and Regulations 19.27.4.30 (C), any replaced well shall be plugged within 10 days of completing the replacement well. The permittee is advised to review the plugging process outlined in OSE Rules and Regulations 19.27.4.30 (C). The permittee shall provide the Water Division Director with a copy of the plan for plugging filed with the OSE and shall provide the Water Division Director with proof of plugging within 10 days.
- (7) Within 30 days of completing the well, the well owner shall provide to the Water Division Director: a) all the information as specified by NMCA 19.27.4.29 (K) (e.g. well log); and b) as-built coordinates for the well. Coordinates shall be either in latitude/longitude or in units of feet using the NAD83 New Mexico State Plane Coordinate System, Central Zone. Coordinates shall have an accuracy of ±3 feet. Upon payment of a \$25.00 fee administrative fee, the Water Division will survey the well for necessary GPS coordinates. (To request well coordinates, contact the GIS Analyst with the Water Division Engineering Section at 505-955-4264).
- (8) The applicant agrees to permit Water Division staff access to install an automatic meter reader on the well meter, if or when the City decides to do so.
- (9) The applicant agrees to permit Water Division staff access to the well and the meter for reading the meter, sampling water quality and measuring the depth to water, provided that Water Division staff gives the well owner 48-hour advance notice.
- (10) Upon completion of any well drilled under this new domestic well permit exemption, the applicant shall not use any water from the well before a sworn affidavit by the well driller is submitted to, and accepted by, the city showing the actual costs of drilling the well. If the actual cost of drilling the well exceeds the total cost of connection to the city water system, the well shall be capped and the city shall provide water service to the property. All applicable fees and costs of connection shall be paid by the applicant.
- (11) The well must be drilled within 90 days of permit issuance. A 90-day extension may be granted when a written request is submitted prior to the expiration date. This City well permit shall expire if and when the OSE permit expires
- (12) Other Conditions:

6. Applicant Agreement

Pursuant to City of Santa Fe Ordinance No. 25-1.10, the undersigned hereby applies for a permit to drill a new domestic water well within the City limits, recognizing the conditions upon the well set forth in Section 5 above, and by the City's Ordinance 25-1.10(E) and by the State of New Mexico statute NMSA 1978, Chapter 3, Article 53 and 72-12-1.1. Obtaining the permit does not relieve the undersigned from the responsibility of obtaining any other permits required under State, County, or City, regulations or ordinances or other requirements of State and Federal law.

To the best of my knowledge, the information provided within this application is true and correct.
By signing this agreement, I, the applicant, understand that I must comply with all the conditions and requirements of this permit

Applicant Signature_____
Date**7. Sangre de Cristo Water Division Action (To be completed by City)**

Your application for a new domestic water well has been reviewed, and:

- 2.) _____ Pursuant to 25-1.10 A, SFCC 1987, the request to proceed with drilling a new domestic water well within the municipal limits of the City of Santa Fe is hereby denied. The property owner is directed to request water service from the Water Division for domestic water uses.
- 3.) _____ Pursuant to 25-1.10 B, SFCC 1987, the request to proceed with drilling a new domestic water well is hereby granted for the use indicated under the conditions stipulated below.

This application shall become a permit to drill upon acceptance by the Sangre De Cristo Water Division ("Water Division"). The granting of this permit does not supercede any restrictions of record concerning the use of water on this property. Domestic water wells within the municipal boundaries of the City are also subject to all ordinances governing water use within the City of Santa Fe, including water conservation requirements and emergency regulations and drought management stages.

Engineer Supervisor

Dated: _____

Director, Sangre De Cristo Water Division
City of Santa Fe, New Mexico

Dated: _____



City Permit No. _____

(Assigned by City)

City Of Santa Fe Water Division

APPLICATION FOR DOMESTIC WATER WELL PERMIT WITHIN THE CITY LIMITS UNDER CITY OF SANTA FE ORDINANCE No. 25-1.10 SFCC 1987

1. **Applicant Information:**

Name: _____

Address: _____

Phone Numbers: (h) _____ (w) _____ (m) _____

Email: _____

2. **Land Owner Information (if different from applicant):**

Name: _____

Address: _____

Phone Numbers: (h) _____ (w) _____ (m) _____

Email: _____

3. **Information to be provided by Applicant:**

- ☐ Copy of current recorded plat map of property on which well is to be drilled.
- ☐ Proposed well coordinates including the coordinate system and x & y locations.
- ☐ Santa Fe County Assessor Office's Parcel Number _____.
- ☐ Office of the State Engineer §72-12-1.1 well drilling permit.

or

Office of the State Engineer existing well permit, well record, and OSE permit to drill a supplemental or replacement well

4. **Applicability**

A. Is this well application for the replacement of an existing well? Yes_____ No_____

B. Is this well application for a supplemental well for an existing well? Yes_____ No_____

C. Do you currently have City water service to your lot? Yes_____ No_____

D. Are you applying for a domestic well based on a claim that your lot property line is more than 300 feet from an existing water line? Yes_____ No_____

If yes, please submit with this application all evidence showing that the nearest property line for which you are applying for a domestic well permit is more than 300 feet from a City water distribution line.

E. Are you applying for a domestic well based on a claim that it will be less expensive to drill a domestic well than to connect to the City water system? Yes_____ No_____

If yes, please submit with this application two written quotes by well drillers licensed by the State of New Mexico for a well completed in a manner consistent with the conditions outlined in Section 4. The quotes need to specify that all the items identified in Section 4, as well as a water line stub out are all included in the price.

5. **Conditions of Approval**

The well shall be constructed in accordance with standards established by the Office of the State Engineer (OSE) reference including being drilled by a well driller licensed in the State of New Mexico. (See <http://www.ose.state.nm.us/doing-business/WellDrillerRegs/WellDrillerRulesRegs-2005-08-31.pdf>)

In addition, the following City's Conditions of Approval shall apply:

- (1) The permittee will notify the Water Division at 505-955-4203 at least 48 hours before drilling is to begin and allow City staff access to site during well drilling.
- (2) The permittee shall install an appropriately-sized, totalizing meter, accessible from the exterior, to measure all of the water produced from the well. Monthly meter readings shall be taken by the well owner and be submitted to the Water Division Director by February 1 of each year.
- (3) Within 30 days of completing the well, the well owner shall provide to the Water Division Director: a) all the information as specified by NMAC 19.27.4.29 (K) (e.g. well record); and b) as-built coordinates for the well including the coordinate system and x & y locations
- (4) The applicant agrees to permit Water Division staff access to install an automatic meter reader on the well meter, if or when the City decides to do so.
- (5) The applicant agrees to permit Water Division staff access to the well and the meter for reading the meter, sampling water quality and measuring the depth to water, provided that Water Division staff gives the well owner 48-hour advance notice.
- (6) This City well permit shall expire if and when the OSE permit expires
- (7) Other Conditions:

6. **Applicant Agreement**

Pursuant to City of Santa Fe Ordinance No. 25-1.10, the undersigned hereby applies for a permit to drill a new domestic water well within the City limits, recognizing the conditions upon the well set forth in Section 5 above, and by the City's Ordinance 25-1.10(E) and by the State of New Mexico statute NMSA 1978, Chapter 3, Article 53 and 72-12-1.1. Obtaining the permit does not relieve the undersigned from the responsibility of obtaining any other permits required under State, County, or City, regulations or ordinances or other requirements of State and Federal law.

To the best of my knowledge, the information provided within this application is true and correct. By signing this agreement, I, the applicant, understand that I must comply with all the conditions and requirements of this permit

Applicant Signature

Date

7. **Sangre de Cristo Water Division Action** (To be completed by City)

Your application for a new domestic water well has been reviewed, and:

- 2.) _____ Pursuant to 25-1.10 A, SFCC 1987, the request to proceed with drilling a new domestic water well within the municipal limits of the City of Santa Fe is hereby denied. The property owner is directed to request water service from the Water Division for domestic water uses.

City Permit No. _____

(Assigned by City)

- 3.) _____ Pursuant to 25-1.10 B, SFCC 1987, the request to proceed with drilling a new domestic water well is hereby granted for the use indicated under the conditions stipulated below.

This application shall become a permit to drill upon acceptance by the Sangre De Cristo Water Division ("Water Division"). The granting of this permit does not supercede any restrictions of record concerning the use of water on this property. Domestic water wells within the municipal boundaries of the City are also subject to all ordinances governing water use within the City of Santa Fe, including water conservation requirements and emergency regulations and drought management stages.

Engineer Supervisor

Dated: _____

Director, Sangre De Cristo Water Division
City of Santa Fe, New Mexico

Dated: _____



International Code Council and Canadian Standards Association

JOINT CONSENSUS COMMITTEE ON RAINWATER COLLECTION SYSTEM DESIGN AND INSTALLATION (IS-RCSDI)

*BSR/CSA/ICC 805-201x, Standard for Rainwater
Collection System Design and Installation*

TENTATIVE MEETING AGENDA – MEETING #1

Date

April 9, 2014 - 8:00 AM to 5:00 PM CDT &
April 10, 2014 – 8:00 AM to 2:00 PM CDT

Location

Hyatt Regency O'Hare, 9300 Bryn Mawr
Avenue, Rosemont, IL 60018 USA

Secretariats

[Shawn Martin](#), ICC
[Paul Gulletson](#), CSA Group

Teleconference

800-910-8278 or 231-929-8278
Conference Code 7896875

WebMeeting

<http://iccsafe.adobeconnect.com/rcsdi/>
(Click the link & login as Guest)

Project Website

www.iccsafe.org/is-rcsdi

Agenda

1. Call to Order (Martin, Gulletson)
 - a. Committee Member and Guest Self-Introductions
 - b. Approval of Agenda
2. Introductory Comments and Background (Martin, Gulletson)
 - a. ICC's ANSI PINS – review (Martin)
 - b. CSA Terms of Reference – review and approval (Gulletson)
 - c. Review Procedures for Joint ICC/CSA Standard Development
3. General Discussion
 - a. Standard Scope and Table of Contents
 - i. Overview of ICC Resource Document (Martin)
 - ii. Overview of Alberta Rainwater Harvesting Guidelines (Durnie)
 - b. Standard Use and Application
4. Selection of Committee Co-Chairs
 - a. Call for nominations and discussion
 - b. Vote for co-chairs
5. Task Groups
 - a. Review of Task Groups Roles and Approach
 - b. Establishment of Task Groups
 - c. Scope of work and leaders
6. Discussion of Date & Location of Next Meeting
7. Adjourn