



Agenda DATE 8/28/14 TIME 3:56r

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SANTA FE WATER CONSERVATION COMMITTEE MEETING
SANTA FE COMMUNITY CONVENTION CENTER - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, SEPTEMBER 9, 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 AUGUST 12, 2014 WATER CONSERVATION COMMITTEE MEETING
6. CONSENT AGENDA
 - A. DROUGHT, MONSOON AND WATER RESOURCE UPDATE (Rick Carpenter)

DISCUSSION ITEMS:

7. CLIMATE ACTION TASK FORCE (Councilor Ives, 10 minutes)
8. WCC FOLLOW UP ON SUSTAINABLE SANTA FE PROPOSAL ON WATER CONSERVATION IN CITY FACILITIES (Councilor Ives, 10 minutes)
9. RESULTS OF EPA REGION 6 GI/LID 2014 POSTER COMPETITION (Robert Wood, 10 minutes)

INFORMATIONAL ITEMS:

10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES: (Councilor Ives, 75 minutes)
 - A. GROUP #1 – WATER CONSERVATION & DROUGHT MANAGEMENT PLAN UPDATE (15 minutes)
 - B. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH (15 minutes)
 - C. GROUP #3- WATER CONSERVATION CODES, ORDINANCES & REGULATIONS (15 minutes)
 - D. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS (15 minutes)
 - E. GROUP #5- DOMESTIC WELLS WITHIN THE CITY LIMITS (15 minutes)

MATTERS FROM STAFF:

MATTERS FROM COMMITTEE:

NEXT MEETING – TUESDAY, OCTOBER 7, 2014:

CAPTIONS: SEPTEMBER 22, 2014 @ 3 pm

PACKET MATERIAL: SEPTEMBER 24, 2014 @ 3 pm

ADJOURN.

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

**WATER CONSERVATION COMMITTEE
INDEX
September 9, 2014**

Cover Page		Page 1
Call to Order and Roll Call	Councilor Peter Ives, Chair, called the Water Conservation Committee Meeting to order at 4:00 pm in the City Councilor's Conference Room, City Hall. A quorum did exist.	Page 2
Approval of Agenda	Amend agenda: Laurie Trevizo and Rick Carpenter not in attendance. Stephen Wiman to present monsoon update. <i>Ms. Randall moved to approve the agenda as amended, second by Mr. Roth, motion carried by unanimous voice vote.</i>	Page 2
Approval of Consent Agenda	<i>Ms. McDonald moved to approve the consent agenda as presented, second by Ms. Perez, motion carried by unanimous voice vote.</i>	Page 2
Approval of Minutes, August 12, 2014 Corrections: #8 Sustainable Santa Fe Proposal should say: Special Meeting of WCC Names Misspelled – Audience in Attendance Tracy Neal Jim Lodes Xubi Wilson Mark Brotton Mr. Pushard asked if there was a reason why it was called Public Hearing. The Chair said that he agreed with the description of the meeting as it did allow public input. Mr. Wiman asked if it was appropriate to publish the sign in sheet and why it was part of the public record. The question is if this is invasive to disclose everyone that was there? The Chair responded if you are coming to a public meeting, to some degree you are acknowledging that you are	<i>Mr. Pushard moved to approve the minutes of August 12, 2014 as amended, second by Mr. Wiman, motion carried by unanimous voice vote.</i>	Page 3

<p>present at the meeting, which is being held in some official capacity. We don't take roll call of the audience at the council meetings but anyone who gets up to speak of course does get noted. The Chair said he was not aware of any prohibitions and he did not think that anyone would find it intrusive.</p> <p>It was noted that there were some people at the meeting that did not sign up. Sign in sheet on record with the Water Conservation Committee office.</p>		
<p>Consent Agenda A. Drought, Monsoon and Water Resource Update</p>		Page 3
<p>Discussion Items</p> <ul style="list-style-type: none"> • Climate Action Task Force • WCC Follow Up on Sustainable Santa Fe Proposal on Water Conservation in City Facilities • Results of EPA Region 6 GLID 2014 Poster Competition 	Informational	Page 3-5
<p>Informational Items</p> <ul style="list-style-type: none"> • Group Reports (#1 thru 5) 	Informational	Page 5 - 10
Matters from Staff	Next Meeting, October 7, 2014	Page 10
Matters from Committee	Informational	Page 10 - 11
Adjournment and signature	There being no further business to come before the Water Conservation Committee, the meeting was adjourned at 6:10 pm.	Page 11

**SANTA FE WATER CONSERVATION COMMITTEE MEETING
CITY HALL - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, SEPTEMBER 9, 2014
4:00 PM TO 6:10 PM**

MINUTES

1. CALL TO ORDER

Councilor Peter Ives, Chair for the Water Conservation Committee called the meeting to order at 4:00 pm. A quorum was declared by roll call.

2. ROLL CALL

Present:

Councilor Peter Ives, Chair
Melissa McDonald, Acting Chair
Doug Pushard
Giselle Piburn
Bill Roth
Stephen Wiman
Lisa Randall
Grace Perez
Nancy Avedisian

Not Present

Tim Michael, Excused
Karyn Schmidt, Excused

Others Present:

Bob Kreger, Design/Builder, Audience
Andy Otto, Santa Fe Watershed Association
Mary Schruben, Neighborhood Association
Jeff Green, Audience
Bill Liberman, Audience
Caryn Grosse, Water Conservation Specialist
Fran Lucero, Stenographer

3. APPROVAL OF AGENDA

Amend agenda: Laurie Trevizo and Rick Carpenter not in attendance. Stephen Wiman to present monsoon update.

Ms. Randall moved to approve the agenda as amended, second by Mr. Roth, motion carried by unanimous voice vote.

4. APPROVAL OF CONSENT AGENDA

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

**5. APPROVAL OF MINUTES AUGUST 12, 2014
WATER CONSERVATION COMMITTEE MEETING**

Corrections:

#8 Sustainable Santa Fe Proposal should say: Special Meeting of WCC

Names Misspelled – Audience in Attendance

Tracy Neal

Jim Lodes

Xubi Wilson

Mark Brotton

Mr. Pushard asked if there was a reason why it was called Public Hearing. The Chair said that he agreed with the description of the meeting as it did allow public input.

Mr. Wiman asked if it was appropriate to publish the sign in sheet and why it was part of the public record. The question is if this is invasive to disclose everyone that was there?

The Chair responded if you are coming to a public meeting, to some degree you are acknowledging that you are present at the meeting which is being held in some official capacity. We don't take roll call of the audience at the council meetings but anyone who gets up to speak of course does get noted. The Chair said he was not aware of any prohibitions and he did not think that anyone would find it intrusive.

It was noted that there were some people at the meeting that did not sign up. Sign in sheet on record with the Water Conservation Committee office.

Mr. Pushard moved to approve the minutes of August 12, 2014 as amended, second by Mr. Wiman, motion carried by unanimous voice vote.

6. CONSENT AGENDA

A. DROUGHT MONSOON AND WATER RESOURCE UPDATE (Rick Carpenter)
(Not in attendance)

DISCUSSION ITEMS:

7. Climate Action Task Force (Councilor Ives)

The Chair noted that this is one of the three new task forces that the Mayor has convened in different topic areas. The first meeting will be held on Thursday, September 11th at the Convention Center from 4 pm to 6 pm. The main focus will be looking for action items in response climate impacts and the anticipated effects of our changing Santa Fe. The Chair stated that from his perspective the City of Santa Fe's long term sustainability and resiliency as a community is the main topic. Other topics of discussion in different working groups would be, Energy Conservation dealing with retrofitting buildings, researching funding opportunities for programs and hopes to benefit from the significant dollars that PNM offers to engage in those types of activities. Another one on energy supply issues looking at promoting solar and potentially using wind, trying to encourage PNM to look down that path as opposed to replacing coal with coal. Transportation will be looked at on a broad spectrum, everything from electric vehicles to changing the whole nature of how the city does its' own fleet management. There will be a Youth Group, some of the kids from global warming who have expressed interest. There is also a young lady, Senior at Prep who is outfitting a number of residences with energy monitoring devices similar to the meters that have been put on water meters that will allow residences to

assess and evaluate their own energy use to become more energy efficient. The education component, food security is on that list; looking at urgent gardens, re-modernized victory gardens and a host of issues deal with production of food and its distribution around the city.

There will also be a whole working group on financing mechanisms, looking to everything from public banking to impact, to the use of potential bond funds for these types of programs and projects. The water component functionally rests with the Water Conservation Committee. The good work of this committee is recognized and acknowledged.

Ms. McDonald noted that Councilor Ives is also the Co-chair of the above mentioned task force with former Mayor Coss.

The Chair noted that there is a wide spectrum of community leaders as members, list not available at this time.

It was recommended that the Chair provide an update on the task force progressiveness at each meeting if available.

8. WCC Follow Up on Sustainable Santa Fe Proposal on Water Conservation in City Facilities

The Chair noted that this is something he would like to tackle and find a resolution quickly to spur the city in to action in that regard. It would involve an initial survey on some 60 odd buildings to find the nature and expense of water use and needs are in those various facilities. The Chair will be calling on the Water Division to produce some records over the last year of actual water use and get to the level where recommendations are being made and figure out how to fund replacements of toilets, aerators, whatever the case might be. At the last meeting it was very clear that the City needs to lead on these issues and that is correct.

Caryn stated that Laurie specifically asked to include information on the Alliance for Water Efficiency. There is a proposed ban for use of federal funds on replacing water efficient toilets.

Ms. McDonald asked if POSAC has been approached by Sustainable Santa Fe.

The Chair believes that they have not been approached.

Ms. McDonald believes it would be helpful and great if Esha could be informed.

The Chair stated that Esha and Louise gave the presentation and of course the Watershed Association is involved.

The Chair invited any of the WCC members to join him in working on a proposed resolution as soon as possible to engage the attention of all the building managers across the cityscape in a good way. Ms. McDonald volunteered to work with the Chair. Ms. Randall also volunteers to assist and to include SFPS.

9. Results of EPA Region 6 GL/LID 2014 Poster Competition (Robert Wood)

Bob Wood stated that the city won most honorable mention. EPA approached the city of Santa Fe wanting to know if we wanted representation; we did not have much representation. Mr. Wood worked together with David Pike on storm water on this small project. The reason it was successful was because it was small and the next smallest project actually won 1st place, which was over \$1 million dollars (poster circulated). It showed what you could do with recycled material in a short period of time with very few dollars and a lot of people liked it. It was Mr. Woods understanding that Storm Water

has been getting calls of inquiry on how they did it and how could it be done some where else. The poster will be on the EPA website for 1 year and the WCC logo is there.

Ms. McDonald extended her congratulations and commented that it is a very nice poster.

Ms. McDonald asked if there was any other interest in moving this board on to other conferences. There might be other conferences where it could be posted and Ms. McDonald is willing to pass the information on.

Mr. Wood said he is interested but that the requests should go through the Storm Water Management Department. Mr. Wood did say that he is working with Storm Water Management to find other projects that could be done throughout the city.

Mr. Wood said that in 2010 he worked with Land Use and the resolution passed on the design median guidelines for medians and parkways. It was noted that that the design guidelines and BMPs are already there. The Chair asked Mr. Wood to please provide him with copies.

Mr. Wood stated that Phoenix, AZ has not done very much in the way of storm water work. They had 3.2 inches of rain, a lot of property and infrastructure damage, things like that which will cost the city millions of dollars to repair.

Ms. McDonald stated that although passive water harvesting is not a water conservation issue, she actually thinks that passive water harvesting is a water conservation issue. If you reduce demand which it does it is going to benefit everybody. She would like to see a shift in the thinking in the city saying; "this is a resource for us". When we talk about leadership, which is an area where we have so many resources around town that understand passive harvesting.

With the full consensus of the WCC members it was asked that congratulations be extended to David Pike and his staff and the committee and group who worked on this Storm Water Management.

INFORMATIONAL ITEMS:

10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES: (Councilor Ives 60 minutes)

- **GROUP #1 - WATER CONSERVATION & DROUGHT MANAGEMENT PLAN UPDATE**

Caryn reported that a great deal of progress is being made, they have most of the sections drafted and are being edited. Caryn has started the graphic layout for the report and plan to have a final draft ready next month to be given to Committee rounds.

Councilor Ives stated that the report is due in final form in February, 2015. Caryn said it is due in 2015 and January is the target date.

Ms. Perez asked if it would be shown to the working groups before the committee?

Caryn reported that the working groups have already seen and done their part on the report.

Ms. Perez inquired if the consultant had made dramatic changes. Caryn stated that the consultant picked up all of the edits that the working group had made. Caryn will speak to Laurie for clarification.

The Chair asked if time permitted if it could be re-circulated to the WCC members.

Caryn did reiterate they are trying to get it complete before Ms. Treviso's deadline.

Ms. Randall stated in reference to this topic, historically there is a working group working on this report and then when the state issued their template it was removed from the hands of the working group and the group had done all the existing decade report and there were still some additions that the working group is interested in making, strategies for conservation and other things. At this point are we a working group?

Caryn stated if there were recommendations that the working group wanted to make she would recommend they get them in to Laurie Trevizo ASAP.

Ms. Randall added to Ms. Perez point, she thought that the conversation was once the paid person had done their job it was coming back to the working group and to the larger committee for review and input. If they are going to push up against this deadline and not really have any time for input, she felt the committee should just be told that.

Caryn stated that her understanding was that the working group was working on those things, strategies and so on. Nothing has been turned in to staff to include in the report.

Councilor Ives stated if we have a draft back from the consultant it would be a perfect time to get it back out to the working group as it sounds they have additional input for it. The Chair said he did not know what the contract with the consultant called for in terms of production and those types of things.

Caryn stated that she has not been involved in those conversations and will discuss them with Ms. Treviso to report at next meeting.

Ms. Perez stated that she was not sure that they were going to produce something that fits in to the new format. The bigger issue is the overall process which she thought included review of what the consultant has done, as we have no idea if it includes new data and new information that wasn't in what was reviewed before. After comments were made previously, was it revised as necessary or not and it would come to the full committee.

Caryn said that where they left off with the working group was that the working group was working on a number of strategies but it isn't know if those every got finalized.

Mr. Pushard said that the al the working group was in attendance at tonight's meeting and the entire working group feels that they have worked at a team together and then the consultant came in; I think we can all understand that decision. Since that there have been no call for meetings, no distribution of information to the working group. What you are hearing is the frustration of the working group.

The Chair outlined the timeline for corrections and input and feels that there is time for the committee to review and provide feedback to Ms. Trevizo.

Mr. Pushard asked for clarification on the calendar as it says input items to Council by October 8th.

Caryn said that what she knows is that Laurie is hoping to have it ready to go through city council before her leave of absence.

Mr. Pushard said the next WCC meeting is the 7th; typically the WCC would get an update before it would go to Finance Committee of City Council and this schedule has it going to them before it comes to the WCC. Mr. Pushard feels it would be inappropriate for it to go to council prior to coming to this committee.

Caryn stated that given the time constraints, bringing it to this committee first might mean that it happens next spring rather than this fall.

- GROUP #2 - WATER CONSERVATION EDUCATION OUTREACH

grace peng (all)
Ms. ~~Nancy Avedisian~~ and Tim Michael presented to the Homebuilders Association. It was reported that it went well; there was a large audience in attendance. They are starting about updating the presentation so it is more than the basic presentation it is now.

Councilor Ives asked what type of feedback is coming from these presentations.

Ms. Avedisian said in her recollection that at another presentation it was mentioned at every other presentation about the importance of developing grey water use. At the Green Chamber of Commerce they also talked about grey water harvesting.

Mr. Roth said that there is a lot of interest in substituting collected water for potable water and maybe addressing that more and illustrating what possible impact and savings would be with those types of things based on what we can concurrently do by code. Mr. Roth feels that they can raise people's awareness of what's available and discussion on passive collection. The other thing would be certain groups going in with a higher level with information already, it might be worth prior to going – "we can't tailor to everyone", with some groups you can be more specific than others because they are going in at the ground level. That may be something to think about as you go in with two or three presentations.

Ms. Avedisian said she was quite surprised at all the water related experts in the room. There was a lot of interest in the basic information even in an educated audience. Ms. Avedisian said if they went back to that group they couldn't do the same thing they would have to take it another step up. There is a lot of room for development in future presentations.

Mr. Andy Otto from the Watershed Association said that he was also at the Homebuilder's Association and they talked about retrofitting and grey water.

- **GROUP #3 - WATER CONSERVATION CODES, ORDINANCES & REGULATIONS**

(Written report presented) (Exhibit B)

Mr. Pushard reported that he sits on the International Code Council, which is a joint consensus committee on rain water collection systems design and installation. They had their third meeting in August; next meeting is scheduled for October. They are defining rain water code for ICC which is specifically the building code and more so the commercial code in most places in the country. There is a draft which has been done and it is on the public website. This is a Canadian / US standard which would be the first of its kind, which is definitely presenting some challenges. Mr. Pushard is in charge of the Controls Working Group and on the Quality Working Group. The intent was to have a draft ready by November but that is not going to happen. Best case taking in to consideration the holidays a draft that will go out with wide public circulation in January. It will probably miss the 2015 code vote. It will probably be published as a standalone code. Public website for review and comment.

There are a couple of challenges they are trying to address; one is potable water so it will be codified and how to build a rainwater harvesting system for potable water. They are breaking it down in to four water quality levels, sub-surface irrigation, human no contact, human limited contact, human contact and then potable. The standard will break it down as to what is required in each one of those areas. They are also addressing another area which is a tough one; potable water is tough enough because it has not been codified anywhere although we do it. There are no codes for it. Water quality input is also one of the things that the committee is working on, as there are not codes as to what is acceptable rainwater input. People today try to do rainwater harvesting out of green roofs. There are also no published controls on any of the standards or guidelines so there will be minimum controls installed.

In response to Chair Ives question from the last meeting, we want to make sure there is no confusion, because they are tied but not tied. There is going to be a building tax credit bill that goes forward to the legislature this year. Senator Wirth wants to have water in that bill. Mr. Pushard said that he is not clear at this time, having met with the builders, Senator Wirth wants to have something drafted by November 13th to the Tax Committee. The bill would then go to the interim committee, December 18th or 19th. Senator Wirth is also thinking it might go to another committee, that is what he is thinking and he would like to see the building tax credit bill and has put that timeline on the builders. He has also told them that water has to be a portion of the bill. At this point in time, Mr. Pushard is not sure that the builders have heard from the Senator.

Mr. Pushard continued on the second part of his report, the working group met last week and they worked on a couple of things, 1) the state has picked up WURS and is running with it given the timeline, exterior is probably not going to occur even if they adopt something. The working group pushed exterior off the agenda for a while until they find out what the state is going to do with the credit and what the Senator wants

to do with the water portion of that. The group is trying to work on the WURS water rating system as showed to this committee 2 months ago. They are trying to push this forward as what they would include in the bill.

WURS, as mentioned, working group is not going to work on the exterior right now, we will finalize what we have as a working prototype and get that refined as they need to have something working anyway. At the meeting they also reviewed David Dunlap's comparison of the different programs. Summary is provided for information. (Current Water Efficiency Programs and Codes)

Next step, they did get some feedback on the existing tool, there have been a couple of people who have used it and to get that working model agreed upon, get it finalized and bring it back to the WCC and also take it to the Sustainable Santa Fe Committee.

Mr. Pushard stated that by the next WCC they will have summarized the notes that they took and the summary will be presented at the next meeting.

Ms. McDonald commented that she was recently in Canada and they discussed the closed loop system, they have tons of water. They said they have been doing this for 13 years and that they were top of the line, it is municipal level. Ms. McDonald will bring more information.

- **GROUP #4 – RE-ESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS**

(Written report attached) – Ms. Melissa McDonald (Exhibit C)

The city has been interviewing for a new Parks Director, there has not been one selected but they are hoping to make a job offer this month. POSAC is very happy about this as many of the projects are on a holding pattern. In the meantime they have been pulling together different things that they are concerned and interested in so that when the new Director comes in they can sit with him/her and discuss some of these things. One of the things they did this month was start the process of looking at how they are going to inventory urban agriculture and community gardens and a piece of water conservation is a part of that. The Food Policy group and several others, Santa Fe Community College for one, looked over what they might look at, they participated in that. POSAC's role is to look at the initiative, what do we have, how is it being used, and then they may go in to how will it change. There is a lot that will happen between those two points.

Ms. McDonald went to Sustainable Santa Fe - Climate Action Task Force. Ms. McDonald is very interested in how they are going to look at urban agriculture as it relates to water. She is hoping that POSAC is going to take an active role.

Giselle Piburn has also joined the committee to look at education, food policy and health. She is an active gardener as well.

The Majordomos are reading meters now and that has been communicated through the Food Policy Group.

Ms. McDonald has invited Ms. Lisa Randall to come to the POSAC meeting as there are a lot of ideas they share that would be beneficial to people taking in to regard the overlap that is shared with the parks.

Ms. McDonald said that they would like bring Laurie Treviso in on the conversation; they have been looking in the internet as to what might be large water users and how to approach them. There is a great fact sheet that is put out by an organization called, Green Colorado and it is for HOAs. The discussion is to possibly do their own worksheet with Water Conservation, running it through the committee so the HOAs could have, since there are a lot of HOAs who don't know what to do. Ms. McDonald said that they here this through POSAC as well as they have blurred areas where they share meters with the city, or they get turned over later and people don't realize that it gets turned over. The fact sheet was circulated for the WCC members to review.

- **GROUP #5 - DOMESTIC WELLS WITHIN THE CITY LIMITS**

Stephen Wiman

The report is still in the hand of some of the working group members and I will respond if I get their comments in time otherwise I am going to make the deadline for the next meeting and present the whole report. It will include the conclusions and the action items that we recommend. That will basically be the end of that working group; we want to submit the report and not try to negotiate. Mr. Wiman reported that he has gotten some good help from a local hydrologist, Peter Belue who has helped all the way through. Mr. Wiman said possibly at the next meeting he would present his idea of what the next working group should be. Mr. Wiman said he has done most of this work and would like to put it on a map, everything that you could possibly ask about the water system; the sources, the right of conversion, how much the reservoirs hold, what the laws are about the reservoirs, what the return credits are, etc.

It was suggested that Leonard be contacted to see if he would map it.

Doug Pushard suggested that the group report on domestic wells in the city limits be added to next month agenda as a separate topic of discussion for 30 minutes.

MATTERS FROM STAFF:

Caryn: REMINDER. 1st Tuesday of every month for the next 2 months package materials need to be in a week earlier due to the holidays. October 7th is the next meeting date.

The Chair asked that at the next meeting if a staffing plan could be shared with the WCC members during Laurie's absence.

MATTERS FROM COMMITTEE:

Mr. Wiman stated that he could not locate the 2013 City of Santa Fe Annual Water Report on the website.

Caryn responded that it is in the works. She will consult with Allan Hook in Water Resources for a status.

Mr. Wiman asked how many tickets have been issued for water violation this year.

Caryn did not have data off hand and will bring that information back to the WCC.

Mr. Wood said that he has been issuing a lot of warnings.

Public Comments:

Mr. Bill Liberman, Creator and Founder of the new "Put Water First". Mr. Liberman said that he has some really ideas that he would like to interest the WCC members today and ask for time to meet with any of the WCC members who would be interested in helping him present to full committee. Mr. Liberman said he had spoken with Lisa Randall and therefore did not present a formal presentation and provided a handout. Mr. Liberman stated that his modest goal is to make Santa Fe the Water Conservation Capital of the world. (Exhibit A)

Bob Kreger, Architect & Builder – The meeting last month was amazing. In Seattle there is a "Living Community" – which is a living building challenge to reach a net zero water criteria. Out of that living building challenge also comes out the scale jumping at the community scale where you can plant, there is always something flowing for a master plan for St. Michael's Dr. Scale jumping for water would be an extremely advantageous solution. Document presented to Doug and he will circulate amongst the committee.

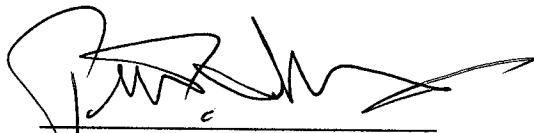
NEXT MEETING – TUESDAY, October 7, 2014:


CAPTIONS: SEPTEMBER 22, 2014 @3 pm PACKET MATERIAL: SEPTEMBER 24, 2014 @3 pm

ADJOURN.

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

Signature Sheet:



Councilor Peter Ives, Chair

Fran Lucero, Stenographer

Public Comment - Bill Liberman

PutWaterFirst.Org

**Designed to make Santa Fe
the Water Conservation Capital of America**

**Bill Liberman
putwaterfirst@gmail.com**

**1111 Morning Drive
Santa Fe NM 87507**

646.789.3879

**Simple programs
Simple Solutions
Working in tandem with
Water Conservation Committee
Santa Fe Public Schools
and Local Merchants**

Exhibit A

David Runlaps Summary @ Tierra Concepts.

Summary across programs

Rain catchment and distribution

- BGNM – optional all levels
 - Passive collection in landscaping (5 pts)
 - Capacity of storage 50 gal – 2500+gal (5-15pts) and larger systems designed by certified prof; all landscaping demand met by rain catchment (25pts)
 - Use of rain water inside (5-25pts)
- City of SF Code – optional
 - Active system only
 - Storage capacity based on roofed area and collection from percentage of total roof area (6-10pts)
 - Distribution using renewable energy source or gravity (this is an energy criteria)
 - Tie rainwater in to irrigation system (10pts)
- EPA WaterSense – NONE
- LEED for Homes – optional
 - If municipal recycled water available and used under WE 1.3, must skip WE 1.1 and WE 1.2
 - Active system only
 - Storage capacity .62gal per ft² collected from 50% or more of roof area
 - Can be used indoors or outdoors
 - Should be integrated with landscape SS2 and irrigation system WE2
 - Subject to local codes and restrictions
- Santa Fe County rain catchment Ordinance
 - Storage size and collection area increasing under Sustainable Land Use code

Irrigation

- BGNM – optional
 - Multi-stream, multi-trajectory nozzles instead of spray nozzles for turf or landscaping (6pts)
 - Use of drip emitters for beds (4pts)
 - Subsurface drip for turf (4pts)
 - Design and Install by certified WaterSense prof (5pts)
 - Drip zones show plant type and water use by emitter
 - Either: Smart controller w/ rain sensor or soil moisture sensor OR no irrigation installed with applicable landscape design [503.5]
- City of SF Code – optional
 - Use of low-volume system (4-6pts)
 - Designed and installed by professional, in accordance with EPA WaterSense or equiv (3pts)
 - Hydrozoning (2pts)
 - Use of smart controller with rain sensor (4pts); soil moisture sensor (another 4pts?); or no irrigation with applicable landscape plan [503.5] (15pts)

- EPA WaterSense – Req'd
 - Weather-based controllers or approved soil moisture sensor
 - Designed OR installed by WaterSense partner
 - System audited by WaterSense partner
 - Audit Checklist completed by WaterSense partner
 - Provided waiver for audit
- LEED for Homes – optional
 - 2.1 High-efficiency irrigation system (up to 3pts max)
 - System designed by WaterSense certified prof
 - Design and install system with head-to-head coverage
 - Install central shut-off valve
 - Install submeter for irrigation system
 - Use drip irrigation for at least 50% of beds to minimize evaporation
 - Hydrozoning
 - Timer or controller to water at optimal times of day for minimizing evaporative loss and maintaining healthy plants, while in compliance with local regulations and water use guidelines
 - Install pressure-regulating devices
 - Use high-efficiency nozzles with avg distribution uniformity (DU) of at least .70. Drip system should be counted as having DU of .80
 - Check valves in heads
 - Install smart controller with rain sensor or soil moisture sensor
 - 2.2 Third-Party Inspection (1pt)
 - Spray heads are operating and delivering water only to intended zones
 - Switches and/or shut-offs are working properly
 - Timers and controllers are set and operating properly
 - Any irrigation systems are installed at least 2 feet from house
 - Irrigation spray does not hit house
 - Reduce overall irrigation demand by 45% (up to 4pts max) [must earn full pts in SS2.5 first]

Gray Water systems

- BGNM – optional
 - Innovative practices: irrigation use of reclaimed, gray or recycled on-site (10pts)
 - Cannot get points for this and Advanced wastewater treatment systems
- City of SF Code – optional
 - Innovative practices: irrigation use of reclaimed, gray or recycled on-site (10pts)
 - Cannot get points for this and composting or waterless toilets
- EPA WaterSense – NONE
- LEED for Homes – Optional (1pt)
 - System must include tank or dosing basin used in irrigation
 - Must be collected from at least one of the following:
 - Clothes washer

- Showers
- Some combination of faucets and other sources estimated to exceed 5,000 gals annually
- Cannot be used in conjunction with Municipal recycled water system

Automatic Shut-offs (intended primarily for leak detection, could be inside the house or outside)

- BGNM – optional
 - Innovative practices: excess water flow shutoff OR leak detection system (2pts)
- City of SF Code – optional
 - Innovative practices: excess water flow shutoff OR leak detection system (2pts)
- EPA WaterSense – NONE
- LEED for Homes – NONE

Other

- BGNM – Innovative practices: Advanced water treatment
- City of SF Code – Innovative practices: Real time water use meter device
- EPA WaterSense – other efficiency criteria
 - Landscape design
 - Slopes greater than 4:1 vegetated
 - Mulching
 - Pools and spas – single family, cover is installed (also required by state code for safety)
 - Ornamental water feature – recirculating and *serves beneficial use*
 - Home Owner Manual/ Education criteria

(Melissa) 10.4)

Working Group 4

Issue: Promoting Conservation Strategies of Large Water Users

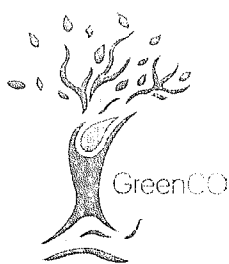
Strategic Goal	Contribute to reducing water use by optimizing water use by large water users
Objectives	Optimize water use by large users
Tasks	<ul style="list-style-type: none">• Identify large water users• Promote the installation of electronic transmitting water meters• Estimate contribution to total 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, Giselle Piburn, 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 Chiocchio• Parks & Recreation, national database report 2014, National Recreation and Parks Association• http://www.greenco.org
Fiscal Impact	To be determined

Update:

Parks: The city of SF is concluding interviews for new parks director (and continuing process of Parks/Rec Division Director). It is expected to have a candidate selected in September. POSAC is beginning a strategic session outlining committee priorities of which water conservation piece will be a part of. The community garden subcommittee reported that the mayordomos will begin reading meters for water usage these communications are likely to go through the Food Policy group. There was a brainstorming meeting to outline areas of interest for urban agriculture policy group that we participated in. In addition, WC member Lisa Randall will be presenting to POSAC in the fall on the status of the public schools and some of lessons they've learned.

Pamphlet – our working group is looking into creating a couple of pamphlets that the WCO could use as information for larger water users. Included is a sample from GREENCO in Colorado. We would like to work with WCO staff to make sure it included all the information. We think starting with HOA seems appropriate.

Exhibit C

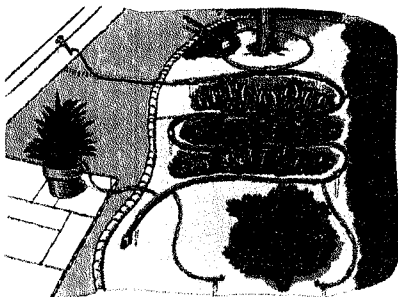


Water Conserving Tips for HOAs and Large Commercial Properties

The challenge of watering Homeowners Associations (HOAs) and other large commercial properties during a drought can be greatly reduced by using proven maintenance practices, integrating irrigation technology designed to water more efficiently and incorporating Xeriscape principles. Following are practical tips provided by landscape experts to help large properties keep landscapes healthy while using less water.

Tip #1: Determine the best water plan

In communities where mandatory water restrictions have been enacted, large properties are typically faced with two irrigation options: watering on assigned days or participating in a designated water budget program. Because many commercial properties with large landscapes need more flexibility to deliver water to all their irrigation zones, property managers may elect to use a water budget. Water budgets determine a certain number of inches per year, gallons per square foot, or percentage reduction of water use based on evapotranspiration (ET). If using a water budget, the property can normally be watered any day of the week, but is limited to a prescribed amount of water. Irrigation professionals can help develop a program that is best for the property.



A healthy and attractive property doesn't just happen – it begins with good irrigation design that delivers adequate water efficiently.

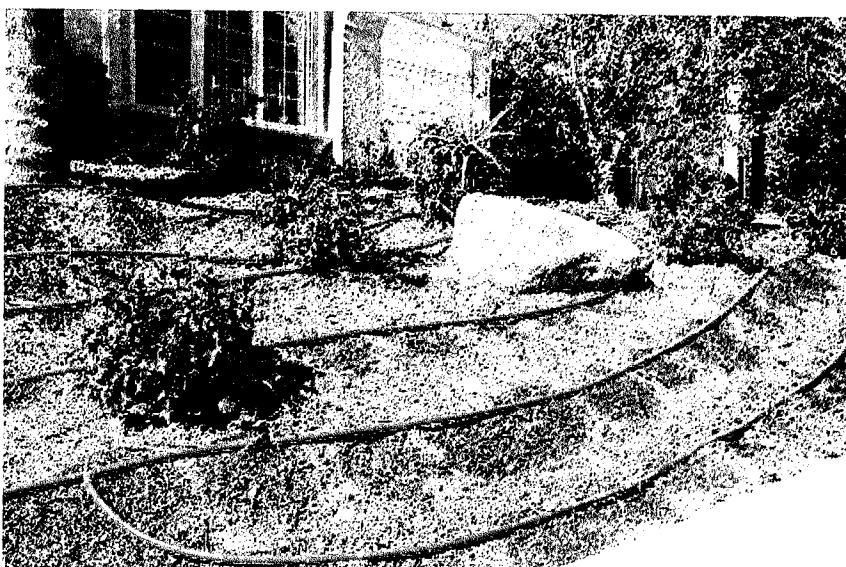
Tip #2: Perform proper irrigation maintenance

Improving irrigation system efficiency is one of the best ways to save water and money not only in a drought year, but every year. At system start-up and throughout the watering season, the system should be checked for leaks and broken heads and repaired promptly. Heads should be straight and not obstructed by tall grasses or plants.

Spray heads that mist or fog are indicators that the water pressure is too high and wasting water. Installing pressure-regulating devices will save water and help apply water directly to the plants.

Replacing mismatched nozzles and installing higher efficiency nozzles also save water. Many water providers offer rebates on high-efficiency nozzles, so be sure to check rebate qualifications online or ask your landscape contractor.

Drip irrigation is recommended for watering trees, shrubs and flower gardens. Drip irrigation systems are water efficient because they are not as susceptible to water loss due to evaporation, wind or surface runoff.



Tip #3:

Incorporate water-saving technology

Smart controllers, also known as evapotranspiration (ET) controllers, measure soil type and characteristics, precipitation rates, plant water requirements, and weather to deliver only the amount of water needed. Controller types, features and costs vary, and some brands allow the entire system to be maintained remotely via the Internet. Another important and inexpensive technology is a rain sensor, which prevents the irrigation system from watering during a rainstorm. Many water utilities offer rebates on water-saving technologies.



Tip #4:

Xeriscape

Xeriscape is more than a garden style or type of plant. It is a comprehensive approach to landscaping that combines seven landscaping principles to conserve water. The process includes proper design, soil prep, appropriate plant selection, water efficient irrigation, practical turf areas, mulches and appropriate maintenance. Converting all or part of an existing property to Xeriscape is another way to save water.



Tip #5:

Schedule watering based on site conditions

Several factors must be considered when setting watering schedules on large properties, including soil, slope, plant types, exposures and existing irrigation technology. To adequately determine frequency and duration of watering, water application rates, soil characteristics, plant needs, weather variation and the capabilities of your irrigation technology must also be considered. For example in May, the controller might be scheduled to apply only 50 percent of the peak water budget that would be applied during the heat of July.

The amount of water applied at any one time should not exceed the infiltration rate of the soil or water will run off. Newer controllers allow for multiple start times so that the cycle-and-soak method can be utilized for better infiltration.

Tip #6:

Hire a pro

Not all landscape contractors are irrigation efficiency experts. When interviewing contractors, ask for water saving data and case studies from their work on similar-sized properties. It is important to select a contractor who understands the principles of water management and also has the expertise to operate new technology. Providing the contractor the property's water bill will help him better assess how to employ water saving measures.



For more information:

Green Industries of Colorado -- www.greenco.org
Industry Best Management Practices and conservation resources

Plant Select -- www.plantselect.org
Water-wise plants suitable for the Rocky Mountain region

CWCB Drought Response Portal -- www.coh2o.co
Drought conditions and state-wide watering restrictions

This fact sheet is part of the Green Industries of Colorado (GreenCO) education series. GreenCO is an alliance of seven trade associations representing all facets of horticulture and landscape industries. This educational material is courtesy of GreenCO and made possible through a Water Efficiency Program Grant from the Colorado Water Conservation Board (CWCB).