



Agenda

DATE 8/28/13 TIME 2:45pm

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SANTA FE WATER CONSERVATION COMMITTEE MEETING
CITY HALL - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, SEPTEMBER 10, 2013
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, 2013 WATER CONSERVATION COMMITTEE MEETING
6. CONSENT AGENDA
 - A. DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE (Rick Carpenter)

DISCUSSION ITEMS:

7. UPDATE ON WATER TRUST BOARD CHANGES (Councilor Ives, 10 minutes)

INFORMATIONAL ITEMS:

8. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES: (Councilor Ives, 70 minutes)
 - A. GROUP #1 - WATER CONSERVATION AND DROUGHT MANAGEMENT PLAN UPDATE
 - B. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH
 - C. GROUP #3- PROMOTE OUTDOOR WATER CONSERVATION
 - D. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS
 - E. GROUP #5- DOMESTIC WELLS WITHIN THE CITY LIMITS
9. REBATE ANALYSIS (Councilor Ives, 20 minutes)

MATTERS FROM STAFF:

MATTERS FROM COMMITTEE:

10. 2014 LEGISLATIVE RECOMMENDATIONS (Councilor Ives, 10 minutes)

ITEMS FOR NEXT AGENDA - TUESDAY, OCTOBER 8, 2013:

Open Meetings Act Presentation

Demand Elasticity, if available

CAPTIONS: September 20, 2013 @3 pm PACKET MATERIAL: September 25, 2013 @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.

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SANTA FE WATER CONSERVATION COMMITTEE MEETING

TUESDAY, AUGUST 13, 2013

4:00 PM TO 6:10 PM

1. CALL TO ORDER

The meeting was called to order by Councilor Peter N. Ives, Chair, at 4:00 pm on August 13, 2013, in the City Councilor's 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
Stephen K. Wiman
Grace Perez
Giselle Piburn
Karyn Schmitt

NOT PRESENT

Lisa Randall
Bill Roth
Lise Knouse

OTHERS PRESENT

Laurie Trevizo, Water Conservation Manager
Caryn Grosse, Water Conservation Specialist
Nancy Avidisian
Fran Lucero, Stenographer

3. Approval of Agenda

Mr. Michael moved to approve the Agenda as presented, second by Ms. Piburn, motion carried by unanimous voice vote.

4. Approval of Consent Agenda

Chair requested Items 6 (A & B) be placed under discussion items.

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

5. Approval of Minutes July 12, 2013

Corrections:

Page 7, #8, 1st paragraph: She said that the objective of the Western Adaptation Alliance (WAA) is to have ~~three conferences a year~~ one conference each year over a 3-year period.

Mr. Michael moved to approve the minutes of July 12, 2013 as amended, second by Ms. Schmitt, motion carried by unanimous voice vote.

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6. Consent Agenda

- A. Drought, Monsoon and Water Resource Management Update
- B. Water Conservation Marketing, Education and Outreach Update: Year-to-Date

Discussion Items (Moved from Consent Agenda)

- a. Drought, Monsoon and Water Resource Management Update
The Chair made reference to the Report – (2nd page of the memorandum) at the top, 3rd line down it begins a sentence: However, city water resource managers are closely monitoring the water supply situation and are prepared to offer a variety of options to decision makers. Question: Is there anything new in those potential options that are being considered that we haven't touched upon in sessions past?

Ms. Trevizo: Mr. Chair, at this time I am also involved in those meetings regarding considering options and at this time there is no new information. It is a place holder to let policy makers know that they always have options and we consider all aspects of our sources of supply for policy makers.

Chair Ives: A few lines further down before the draft it states on the right hand side, July-August, 2013 [they are talking about various productions from the reservoirs]; is that July thru August 1st or August 31st?

Ms. Trevizo: I believe it is July 25th as that is the date of this memorandum through all of July. Rick did brief me on this in particular, what he said was that due to the recent rains they have noticed about 2 to 3 million gallons a day of inflow for the reservoirs but they are also producing 2 to 3 million gallons; or in this case 3 to 4 million according to the memo. The inflow is equal to the outflow so we won't see a reservoir change.

Chair Ives: It answers part of my questions; presumably we have enough in the reservoir, as I know we are trying to drain it to do the work in reservoirs so through August we have presumably the capacity to generate potentially 3 to 4 million gallons.

Ms. Trevizo: Yes.

Chair Ives: This would take us past the irrigation season.

Ms. Trevizo: Yes. I believe the water treatment plant or reservoir project is slated to get started mid-September.

Chair Ives: On the chart in looking at the reservoir in-flow, just the 5-year average which was 2.90 and looking at that figure and trying to figure whether or not that regular inflow is a matter of monsoon at this time of year or there is a reference at the end of that next paragraph that says, *there is no snowpack left in the upper water shed*. What is the balance at this point of year in terms of inflow in to the reservoirs between snow pack vs. monsoon rain.

Ms. Trevizo will provide Rick Carpenter with this question and provide the Chair with a response.

Chair Ives: Forecast for the San Juan River Basin is 75% of the 30 year average. (*Last page of the memorandum*). I guess the 30 year average is interesting as a historical note but it can also presume that it is potentially significantly different on a shorter term average. I am wondering instead of looking at a 30-year average if we could look at it on a 3 or 5 year average in a realistic sense.

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Ms. Trevizo will follow up with Rick Carpenter. My assumption is that it has something to do with the model that is used.

Additional Questions from the Committee:

Q: Has there been discussion or thought about postponing the work on the reservoir given that we are in the 3rd year of a drought and it looks like we will be in the 4th year of a drought?

Ms. Trevizo: Mr. Chair, Mr. Pushard, committee members, at this time it is actually the most optimal time to go ahead and work on the reservoir because the reservoir needs to be drained in order to do the work. , we would have to drain it regardless of what our reservoir levels were. This is work that needs to be done

The Chair asked Ms. Trevizo to describe the nature of work that is going to be done.

Ms. Trevizo: The nature of the work is from the Engineering Department and Robert Jorgensen is the Project Lead on this project. It is my understanding that it has something to do with the dam structure; they are either elevating the dam and then they are going to patch it up, or fix it -. If they elevate the dam we will have more capacity in the future and then there are some conveyance issues between Nichols and McClure. There are some conveyance issues between both of the reservoirs to the water treatment plant. If you are interested in more details we can have the Engineering Department come in and give a presentation. My recommendation is to let them get started on their work considering our September meeting would coincide with breaking ground and that would not be optimal. Possibly they could come in the next couple of months to give a presentation. The Chair also stated that a site visit might be in order. Ms. Trevizo stated that a site visit would have to be a Public Notice and that there are safety issues associated with that and she would let the Water Division, Public Utilities Director know of that decision.

Mr. Michael: Which of the reservoirs are being drained?

Ms. Trevizo: Neither of the reservoirs are being drained because we are at such low reservoir capacity we don't need to drain, however if we were in normal monsoon conditions we would have to drain.

Mr. Michael: Which reservoir dam is being raised?

Mr. Pushard: I know a little bit about the project, both of them will be changed, they will take one off line, do the work and get it back on line, do the conveyance work and take the second one off line. It is going to be a multi-year project; it is not a single year project.

Mr. Pushard: Second question, **San Luis Valley in Colorado** is pumping water out of the ground to fulfill their Rio Grande obligations to New Mexico. Is that something we track?

Ms. Trevizo: That would be a Rick Carpenter and Claudia Borchert question; I will follow up on this question. Rick routinely conferences with all of the San Juan Chama contractors and some of those things are discussed but it has not come up in any of those meetings.

- b. Water Conservation Marketing, Education and Outreach Update: Year-to-Date
The Chair reported that since the launch on March 25, 2013 the site has had 68,531 hits which are probably equal to the entire population of the City of Santa Fe. The Chair said that he would be mentioning some of the statistics to the City Council as there have been many inquiries from the Council asking what the Water Conservation Committee has done in terms of marketing efforts.

The Chair asked about the second chart where it reads; *there is an overall decrease in consumption in comparing 2012 to 2013 with an increase in the number of connections. In 2013 there were 3,578,900 million decrease in consumption compared to 2012 even though there are*

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more customers than in the previous year. The Chair stated that he is trying to understand the 3,578,900 million.

Ms. Trevizo: I was working in million gallons and I went straight over to gallons trying to keep everything consistent, so 3.5 million gallons is what it should be.
The Chair concurred this is a much more reasonable figure that would calculate to roughly 12 ac. ft.

Ms. Trevizo stated that it wasn't quite that much.

Chair Ives said if you compare that to the 10,000 ac. ft. we use on an annual basis it is comparatively small amount, approximately 1/10th of a percent.

Ms. Trevizo: 10.98 so 11 ac. ft.

Chair Ives: It is a relatively small amount and granted it is along the pathway that we desire but if we are going to hit 1% reduction or 2% reduction on our daily per capita usage we have to presumably improve that significantly.

Ms. Trevizo: It is a downward trend and the GPCD is the trend analysis as well; given the first quarter this is the data that we have.

Chair Ives asked if this was the amount in the first quarter and noted it didn't say comparing quarter to quarter, it compared year to year.

Ms. Trevizo: January thru April of 2012 vs. January thru April 2013 so it is a little bit more than the first quarter.

Chair Ives: Good then it shows we are doing 40 ac. ft. less on an annual basis between the years that those figures hold, but again we use about 10,000 ac. ft per year. It is basically 4/10th of a percent.

Informational Items

7. Group Reports from Water Conservation Committee Initiatives

Mr. Michael moved to amend the agenda to hear item 7 (D-E) before 7 (A-B-C), second by Ms Perez, motion carried by unanimous voice vote.

D. Group #4 – Reestablish trend of net annual reductions in per capita water usage

Ms. Schmitt stated that with her and Melissa McDonald being the only members on Group 4 requested consideration of combining Group #4 and #5. Mr. Michael spoke on behalf of Group 5 and was in agreement to combining both groups.

Ms. Schmitt moved to combine Groups 4 and 5, second by Mr. Wiman, motion carried by unanimous voice vote.

Ms. Schmitt reported that she will be meeting with Nick Schiavo, Public Utilities Director about the new systems that were discussed with Brian Snyder about the selection of the billing system and the replacement electronic reader reading systems. We will also talk about our concerns being many but also the homeowner or large consumer/commercial user has the ability to know in real time know what water use to have. Ms. Trevizo will attend this meeting and the Chair will make every effort to attend on the 23rd at 9:00 am.

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Ms. Schmitt reported that in terms of the numbers they are looking at; one of the questions again is the trending with the new annexation of the new part of the city we will get more capita and we are also going to get more water use. Over the years that we have been working some of the billing systems, if you have a household on the east side of Santa Fe you probably don't have 10 people in that house or that apartment yet on the south side of Santa Fe that is very common, maybe not 10 but 6. There is a lot more density in habitation whether it is an apartment, condo or house. A lot more water use per household. When looking at these numbers, relationally speaking they vary quite a bit. We will get more capita but we are also going to get more water users and a lot of those capita's will not be recorded.

Ms. Schmitt has been navigating through the website and made comparisons to the Denver, CO website which is a good one. She did the landscape tool first, entered her garden and made a wonderful mistake of putting in a measurement of a meter size listed as ½ gallon and she put in 1/10th of a gallon and it told her to water five times a week for 543 minutes. The next three zones she appropriately entered had her water in April and May twice a week for 44 minutes which goes along with what the Water Conservation Committee has said. Ms. Schmitt said she was interested in seeing the large amount of error and she does not think anyone would go out and water 543 minutes five times a week. Ms. Schmitt put in different calculations and the results returned were not common. A question from Ms. Schmitt's clients has been; "how much water does a person use when they take a shower"? She will continue the search through the new website to find that answer. Ms. Schmitt said that this is a tool they have been looking at for a long time, it looks great, there is a lot of information and it is fun to get around. It is interesting, colorful and very user friendly. She shared with the committee that it is important because this is an important tool and the information should be shared. The tool is effective.

Ms. Trevizo expressed her thanks for the feedback on the website. She stated that when they were building the website they definitely tailored it to be user friendly to the lay person. In the Water Use tab on the www.savewatersantafe.com website it does have a link to the calculator on how much water is used in a household.

The Chair proposed that the committee members peruse the website and provide feedback to Ms. Trevizo. The Chair suggested inserting a discussion agenda item on a monthly basis; Website Suggestions. Ms. Trevizo noted that the contract ended with the website designer and developer and therefore any changes or suggestions would need to be defined and presented for budgetary considerations. The Chair added that should there be necessary changes he would direct staff to work with the City Manager to identify the funds to accomplish the changes.

Melissa McDonald reminded the committee that the Boulder home base water budget allocation is working wonderfully and people are not complaining. She stated that as we go in to our new billing system which is quite a ways away, it will be important to stay apprised of what is being done.

The Chair asked if we could pull their ordinances.

Ms. McDonald will look in to this matter and would like to wait a while to see how the billing is working. They have done their residential work and they are starting their commercial.

The Chair offered his help to work with Ms. McDonald and Ms. Trevizo to discuss some of the parameters.

Ms. Schmitt said that Claudia had mentioned that Nick Schiavo was potentially interested in the Neptune system. Ms. Schmitt went on and said that it is very heavily technical but she was not able to find any mechanism for the homeowner so that I something that will be discussed in their group. She stated that the Santa Fe Water Coalition worked very heavily on this kind of detail as it was more appropriate to you in a household. You didn't get 10,000 gallons if there were two of you or 10,000 gallons if there were 6 of you.

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The Chair said that he believes PNM is starting to offer that service. Nick Schiavo is very informed in energy issues and is a welcoming audience in that regard.

E. Group #5 – Proper regulation of water usage and waste avoidance by large water users.

Mr. Michael reported that he and Melissa McDonald met and provided the notes from that meeting. (Exhibit A) (Attachment: POSAC/Water Conservation Committee Draft Recommendations and the second side are the Usage Estimates for Some Large Water User Groups)

Mr. Michael provided estimated water use for Residential, City Parks, Hotels and Motels, Schools and State of New Mexico buildings in Santa Fe. These listed areas account for 60% of our users, 6,190 acre feet per year. There are other users that are not accounted for, commercial, multi-family dwellings and other uses.

Ms. McDonald circulated an article from today's Albuquerque Journal – New Mexico Lacks Drought Tools.

Exhibit A is an evolving document, basically what they have been doing is going around and interviewing people who are involved with parks and trying to come up with a recommendation on how to approach looking at the parks and how to increase water conservations. The list was put together in no particular order and it was suggested that the group work through a thorough list of people, put out a lot of ideas and have the various departments; Water Conservation and Parks rank them. Ms. McDonald stated that they are not being ranked at this point.

The objective is to suggest methods and procedures that will improve water efficiency and conservation at the parks to identify potential barriers, to come up with solutions to further water conservation goals.

(All suggestions listed on Exhibit A)

An added topic is to develop a park and trails master plan with a water conservation section. There are currently several plans for the parks but they are through the bond. Ms. McDonald said that they have to look at the parks and to the city and ask, "How much water do we want to allocate." When we plan for a new park we should know how much water is going to take.

Mr. Wiman: Is it common in other cities that the parks get a preferential rate in water?

Ms. McDonald: In some cities, yes. When we attended the conference that was the case on some of the cities who were in attendance and there were different rate structures. Ms. McDonald stated that she is not advocating to go to an institutional rate unless it is tied to water conservation measure(s).

Chair Ives noted that the City of Santa Fe owns our water system so to some degree it is the question of what we are charging ourselves.

Ms. McDonald added that it is also problematic understanding if they will have enough money next year to be able to maintain the parks effectively with the fees they are paying.

Question for Mr. Michael: Ms. Perez - On the summary chart, if there are about 4,000 ac. ft. a year missing from this, is the largest chunk missing other commercial ventures and if so will you be looking at that as well as the large water uses?

Mr. Michael responded that he did not think so.

Ms. Trevizo: According to the GPCD, we have single family residential, we have multi-family, commercial and other meter which are fire and irrigation meters. Those are designated fire and designated irrigation that are not in this matrix as well as what is called non-revenue water. Those are

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items like system line breaks, those types of things. In Fire, they have to drain the line for our fire safety and protection. Single family residential is 55% of our gpcd.

Ms. Perez asked if it was known what the next largest category is.

Ms. Trevizo did not have that information available and will provide it at the next meeting. *NOTE: Next largest water use sector is commercial at 22%. Other Metered, which includes irrigation and fire, accounts for 8%.

Ms. Perez stated that it would be useful to her to know what that is.

Mr. Michael said his intent was to parse it out differently from what it has been seen before. It does point out in the metering issue which is at some point if we have meters in our system we can study the approaches.

The Chair expressed his thanks to Mr. Michael for putting this graph together and for partialling it out in this way.

Ms. Perez commented that it is great to focus on the parks. Santa Fe wants to be the conservation capital of the US, leading by example is the best method.

Ms. Trevizo: Thank you for putting the graphs together in Exhibit A. Ms. Trevizo commented that she is analytical in that sense and looking at the numbers it sort of prioritizes itself for how the Committee might want to move forward. This is a good approach and Tim on the team with Karyn and Melissa is a really good balance. Caryn is our point of contact for our green lodging initiative; she is working with that group and if anything needs to be coordinated, please contact Caryn.

Melissa will present in September to the POSAC committee. A lot of education needs to be done in our community to let them know how much water green parks take. The Water Conservation Committee and POSAC as volunteer advisory boards can be very helpful to get the community educated.

Mr. Wiman agreed with the comments made by Ms. Perez regarding the parks and stated that we talk about curb cuts and yet the parks have parking lots and it would be really good if we had retention and built in retention as part of their irrigation plan. A lot of the grading is actually opposite of the park.

Ms. McDonald agreed and she will add this in to the draft listing, thank you.

Returned to Order of Business (A-C)

A. Group #1 – Water Conservation and Drought Management Plan Update

Grace Perez: The committee met on July 25th and finished going through the body of the report. For the most part, the final two parts, the main one being Section 5, which is our plan for the future; the report was very easy to edit. There were some things that were out dated; some things that needed additions, Caryn and Laurie have the edits. Section 5 is about the future, because of the nature of this report by law; it is to be produced and provided to the State Engineer. In the past it has been present oriented and the section on the future needs to be more specific. Ms. Perez and other members of the committee are working forward to working through that and coming up with new ideas and putting it in the context of some sort of strategy. We had a brainstorming session to discuss what could be in that section and also in terms of strategy before the last Conservation Committee meeting Doug ran a brainstorming session about strategy. Those will lead in to this report.

The Chair asked when feedback would be brought to the WCC.

Ms. Perez: It was noted that the due date to OSE is not until next year; suggestion would be that a draft be provided latter part of the year or first part of the year. Mr. Pushard said that right now they are scheduled to bring it back to the committee the first part of the year.

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The Chair asked to bring it back when they have something and not wait until close to the deadline date.

B. Group #2 – Water Conservation Education/Outreach

Giselle Piburn: Ms. Piburn included notes for this meeting. A productive meeting was held with Laurie Trevizo, group members and Rick Carpenter. Laurie shared a presentation that she has done to the general public and the group agreed to work from her version for a presentation that could be utilized by any member of the Water Conservation Committee. The details are included in the report.

Stephen Wiman: Addressed the Chair and Committee noting that he has volunteered to do is to create a slide to question that always comes out: “Why should we conserve?” Tim has done some work on that. One single slide that summarizes the obligations of what developers should bring to the table is what Mr. Wiman will formalize. Two other things Mr. Wiman signed up to do are; 1) What are the effects of water restrictions, what will it do to you as an individual if you can’t water, you should know that it in advance rather than when it happens, and 2) projecting out in time what the reduction we need in our gallons per capita a day. One of the things that we always do is we stop with the present but I think it would make the presentation much more effective if we take it out in time. It is known that the numbers are out there and as mentioned earlier, are we reducing the gallons per capita by 1% every two years or ½% per year, there is a little confusion and I would like to know if there is an official policy there.

Chair Ives said that there is an official policy that the Mayor has challenged which is to reduce the annual average per capita consumption by at least a gallon every year. Another thing the Chair would like to see is information on the different sectors of the economy for each of those slides that we can see within the greater city of Santa Fe and how everybody plays in to average per capita consumption.

Mr. Michael said we need clarity and we should provide the evidence. Answer is always the same, maintain and improve the quality of life.

Melissa McDonald asked if they should be asking their groups what they think quality of life is. She stated this would be great to get that feedback instead of putting out what the committee thinks is good quality of life; it would be great to hear what the general public thinks.

The Chair stated that the presentation made to the Santa Fe Home Builder’s Association was very interactive and designed to involve them in the process. The Chair would like to take the presentation to City Council.

The Chair would like to receive more information on the comment indicated in the report, “Why are we at war with the city?” The Chair is happy to discuss this off line and he would like clarity on this comment.

One comment and example is when a customer makes the inquiry if they have over used water and when they interact with the Billing Department and there is that classic; “well you just wasted water and how do you want to pay this, there is that guilty until proven innocent.” That is a detrimental manner to deal with that.

The Chair stated that there is a resolution that will address how to deal with single occurrences for large user bills. The Chair made reference to the ACT Program; Accountability, Customer Service and Transparency. This is a paradigm within the city for approximately 2 years. This is to prompt the city employees to know and understand that they are the representatives of the city that face looking outwards and they have to provide accountability, believe in customer service and transparency.

Ms. McDonald stated that in part she joined POSAC to improve and strengthen the collaboration between Parks and Water Conservation and invited anyone at this meeting to attend next Tuesday,

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from 3pm – 5 pm. In general we need to get more communications going between departments and the city.

Ms. McDonald made mention and said that although it might not be the committees particular interest but it is important and it might be where the city might be coming in conflict with each other is that this idea of edibles do take more water. The City is looking at the edible gardens and Ms. McDonald supports clean water for edible gardens in our city because when you look at bringing edibles from California; I'm not sure that this is a Water Conservation issue but the reality is we are going to see some differences of this 2-day of watering scenario that we are putting out as a recommendation. That is very hard to achieve in an edible situation. It is important that we look at the conflicting values within the city and the Sustainable Santa Fe Commission.

The Chair commented that during his attendance at the Public Works Committee day prior, he picked up the measure on urban gardens and captured in the address the food policy plan that is being developed across the city. The Chair will assure that the report needs to include a water use part.

Ms. McDonald stated for the record that having edibles in your garden in the city is very important, it is essential to the overall health in our community. She stated that she worries about when conversations take place on reductions, how is that going to affect some other things. It really needs to be evaluated and balanced. Right now we are not there but eventually we will be there.

The Chair said that nevertheless we need to be conscious of that. Another question mentioned in response to a point in Albuquerque was that the city targeted outdoor water use and the Geographic Irrigation System Department (GIS) looked at landscapes to come up with water savings. That is certainly something the Chair is interested in undertaking and talking with GIS, Trust with Public Lands and discuss with the City of Santa Fe and interact with ABQ. Ms. McDonald will also be supportive.

The Chair asked when the presentation would be ready for review by the committee.

Ms. Perez said that it should be ready by next month's meeting.

Ms. Trevizo asked for clarification; the presentation would be brought back as part of Working Group #2. She asked if there would be a vote on moving forward with the presentations in general.

The Chair and Ms. Trevizo will discuss the next steps and timing to get this on the agenda and the appropriateness for potential action.

Ms. Piburn stated that another important conversation within the committee was moving the great brochure around. Ms. Piburn has had conversations with Jody Porter, Public Information Officer from the City who is also coordinating the distribution of the brochure electronically with Ms. Trevizo.

Ms. Schmitt also talked about City Hall Live. Ms. Trevizo stated that City Hall Live is every Wednesday morning at 11:00 am and Ms. Porter's office coordinates this as well followed by a weekly e-mail newsletter called City Highlights. Ms. Trevizo has been interviewed and she is invited periodically depending on the topic. This is on Channel 28 on Comcast.

Ms. Piburn asked if the committee members wanted to send out E-mails with the brochure. The electronic brochure has been sent today.

Ms. Perez issued a challenge to each committee member to send out 10-15 brochures and encourage them to forward on to their friends. Share a blurb of what you write in to your e-mail and the members might be able to use the same comment.

Ms. Schmitt would like to share the brochure with the Landscapers both electronically and in her billings and attach to client lists.

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Ms. Trevizo and Caryn Grosse will research Neighborhood Association list serves.

Brochure: Nursery – City does routine vendor run. We distribute information; some of the nurseries have them. Info Send, who is the contractor has not sent us the overage to hand out. Landscapers and Real Estate People should be handing out water conservation information. Botanical Gardens are a good source to leave information.

C. Group #3 – Promote Outdoor Water Conservation – Doug Pushard

Brainstorming Session with Santa Fe Home Builder's Association

Mr. Pushard touched on the recent meeting with the Santa Fe Home Builder's Association which occurred shortly after the last Water Conservation Committee meeting. The intent is to get local organizations involved in brainstorming things that they would like to see what the WCC will do. The goal is to continue to meet with home builders and drill down and prioritize on some of the ideas as documented. The second avenue is that another group will go and present and get another new list from another group and continue to combine and integrate the lists to obtain the community support from the community organization behind those ideas.

Mr. Pushard said that he is very data driven and Mr. Michael and he have been spending time on the history and what was done in the past is an important thing. They have been spending time on history to prepare for the future and one of the first topics they have been working on is the rebate program. (*Exhibit C*) The end result might be a tool that the city can use to better tune our programs. Thank you to Laurie and Caryn for their help. The first chart shows that the Rebate Program had an impact on the reduction by day. Showing from an accumulative stand point all the rebates have been done and water savings reported from those rebates, it has had an impact of 1.4 gallons per person per day.

The next chart shows the total rebates: 2010 was a big year because of the state rebate. We are on trend this year to beat last year number for # of rebates. The types of analysis we will be able to look at such as which was the best or worse rebate and come up with some ideas on why rebates work or not work.

Mr. Pushard commented as they get in to each one of the devices they will be able to come up with hypothesis of why something was more effective than something else and also come up with the idea of population. Which category have we not attacked effectively with our rebates?

Melissa McDonald: Do you do random surveys when someone gets a rebate?

Mr. Pushard: No.

Ms. McDonald: It might be helpful to improve the rebates.

Mr. Pushard will be meeting with Laurie in the next week to discuss more analysis and bring back to the committee as best practices on the rebates and what impact they can have.

Karyn Schmitt: How did you isolate if the savings of this GPCD was associated with the water program

Ms. Trevizo: Each one of the rebates has a water co-efficient assigned to it, and that co-efficient amount is what we bank in to the water bank. Those coefficients are in acre feet.

Ms. Schmitt asked if this was based on a 4 people average in a household.

Ms. Trevizo commented that it was done on the census amount of 2.2 people.

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Mr. Pushard said that almost 95% of the data was publicly available and published how much acre feet in every one of the annual reports per rebate program. That data is published; there were just some very specific things that weren't published that were gotten from Ms. Trevizo. When a rebate program was done in the past, the understanding is that it was modeled and they come up with an assumption of what that fixture is going to save and that goes in to the water bank and that is done by city staff.

Ms. Schmitt: So in the calculations there are variables.

Ms. Pushard: When we have done rebate programs in the past we work with assumptions. It is a calculation and there will always be variables.

Chair: As we prepare graphs we should have a methodology sheet to show what was used. If these graphs are taken out those types of questions will be asked.

Doug Pushard: The intent was to share the work that was on-going, the graphs are not for publish, it is a draft.

8. Identification of strategies to implement working group goals and objectives.

- A. Group #1 – Water Conservation and Drought Management Plan Update
- B. Group #2 – Water Conservation Education/Outreach
- C. Group #3 – Promote Outdoor Water Conservation
- D. Group #4 – Reestablish trend of net annual reductions in per capita water usage
- E. Group #5 – Proper regulation of water usage and waste avoidance by large water users.

9. Matters from Staff

Flagstaff and Tucson Plant Lists

Chair asked for information on the Flagstaff and Tucson Plant lists. The lists are suggested plant lists.

Mr. Michael asked for the status of the City Plant List: Doug Pushard stated it is a working draft and can be sent to the committee members.

Ms. Trevizo: The City Attorney's office is doing training on public policies and a piece of those is the Santa Fe Code of Ethics as well as Open Meetings Act and Ms. Trevizo did go in to detail about some of the questions that the committee brought forth for an official assessment. There is a Power Point presentation the City Attorney's office will be conducting a presentation for this group in the near future.

Code of Ethics is also coming to the committee in the next few weeks, please respond and return to the City Clerk's office.

10. Matters from the Committee

The Chair stated the possibility of a single resolution or two resolutions to the City using the example of the Fiscal Impact Report (FIR) that we get with any matter that has fiscal impact so we understand the budgetary effects which is putting forth the Resolutions that requires consideration of any measure in terms of an impact on water usage and also on climate issues. The Chair stated that it would be a helpful exercise to go through on a citywide basis. This would build on the consciousness, building the awareness on the items in terms of all the activity and work from the Water Conservation Committee. The Chair will work on resolution to accomplish those types of purposes.

Ms. McDonald suggested the chair talk to Katherine Mortimer as she is working through Sustainable Santa Fe on this same item.

Mr. Wiman would like to see us work towards a resolution on private wells. He went through Rick's numbers and looked at the usage on private wells and it could be over 2100 ac. ft. per year and the numbers are pretty significant. He has talked to Rick Carpenter and Claudia Borchert on this topic and to get city

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cooperation the effective way to do this would be to present them with a resolution to create a joint venture between the City and the Water Conservation Committee and Mr. Wiman offered to head up this venture.

Chair Ives said that the ultimate goal is to understand the impact of private wells within the city. The city has a jurisdictional position to potentially assert in terms of a relationship between domestic wells and the Santa Fe River. Part of the problem is that there has not been a way to compel the OSE to do any type of information capture, metering, etc. Those types of approaches allow for some of that to potentially occur.

Mr. Pushard asked to take this forward he proposed the creation of Working Group 5.

Committee Approval to Create Working Group #5.

Chair Ives asked if it was the consensus of the group that we create a new Working Group #5 regarding Domestic Wells. The members of the Water Conservation Committee were all in agreement. The members who volunteered to participate in this group are, Grace Perez, Councilor Ives, Doug Pushard and Stephen Wiman.

The Chair would like the Members of the Water Conservation Committee to begin to identify items for the New Mexico Legislature for the short session coming up.

11. Items for Next Agenda Tuesday – August 13, 2013

- Discussion on Wells
- Demand Elasticity – no information available at this time.
- Captions: August 23, 2013 at 3:00 pm
- Packet Material: August 27, 2013

12. Adjourn

There being no further business to come before the Water Conservation Committee, the Chair called for adjournment at 6:05 pm.

Signature Sheet:

Councilor Peter N. Ives, Chair

Fran Lucero, Stenographer

MEMORANDUM

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

FROM: Rick Carpenter, Water Resources and Conservation Manager

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

DATE: August 22, 2013

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

CURRENT PUC UPDATE

As the Committee is aware, our region is still suffering through a severe drought. Our region has gone through two consecutive years of record drought and heat. It is now apparent that we are in a third consecutive year of severe drought and heat which will present significant challenges to all water purveyors, utilities, and irrigators. Even though much of the State and our region have received moderate monsoonal rains, most of the state of New Mexico remains in “extreme” drought conditions or worse. New Mexico appears to be the epicenter of the western U.S. drought. Although rainfall associated with the monsoon should diminish during September, improvement is forecast for parts of Arizona, Colorado, and New Mexico. Weather prediction models indicate that, at least through October of this year, drought conditions in the southwest (especially Arizona and New Mexico) should improve slightly, but that overall drought conditions will still persist. Above average temperatures are also expected.

This current drought is extreme, but what sets it apart from previous extreme droughts is that, absent significant monsoonal rains and winter snow the rest of this year, the region will enter into next spring and summer without carry-over water in regional reservoirs – they are at historic low levels. This condition is unprecedented and could make next year much more challenging than the current year. However, the City of Santa Fe has invested in a robust and diverse portfolio of four distinct water supply sources that allows for flexibility in meeting demand: Buckman well field, City well field, Canyon Road Water Treatment Plant on the Upper Santa Fe River, and the Buckman Direct Diversion on the Rio Grande.

Water Resource Management

In accord with recent BoR/USACoE models that indicated the probability of critically low flows in the Rio Grande, the last few weeks have seen flows as low as about 350 cubic feet per second (CFS). In a “normal” year flow ought to be around 1,000 cfs or more. Turbidity and suspended sediment has also been high, especially following intense monsoonal rain storms. For this reason,

the BDD Project was been more-or-less shut down during the month of July and many days so far this August. Also, the Canyon Road Water Treatment Plant may also experience significant supply shortfalls later this year. However, City water resource managers are closely monitoring the water supply situation and are prepared to offer a variety of options to decision-makers. Local reservoirs on the upper Santa Fe River currently have about 29.9% of full capacity, or enough water to average about 2-3 million gallons per day of production from the Canyon Road Water Treatment Plant, through August. Beyond August, the BDD Project and wells are expected to meet demand. Also, policy makers may consider implementation of Emergency Drought Stages pursuant to the Conservation Ordinance. Therefore, City decision-makers and resource managers have a variety of policy options available in order to meet water supply demands during times of drought.

Local Conditions – Upper Santa Fe River

	Reservoir Level	Santa Fe Snow Gage	Reservoir Inflow
July 25, 2013	29.9%	0.0 inches	1.29 MGD
5-Year Average This Date (2008 – 2012)	60.9%	0.0 inches	2.07 MGD

The City of Santa Fe has rights to a total of up to 5,040 acre-feet per year in Nichols and McClure Reservoirs, although the reservoirs did not receive near that amount of inflow this year. It is anticipated that upper canyon reservoir water will be available through August, but there will be little to no usable carry-over storage in the local reservoirs without significant moisture/snow between now and next high-demand season. Additionally, capture and storage of any inflow that may occur this year will be challenging due to start-up in September of new construction of badly needed facilities within the reservoirs and abutting the dams (i.e., new intake structures and appurtenant facilities).

Rio Grande Basin

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

As indicated earlier in this memo, currently flows in the Rio Grande at the BDD are critically low. Over the last few weeks, the river in this location as had flows as low as about 350 cubic feet per second (CFS). In a “normal” year flows at this time ought to be around 1,000 cfs or more. Turbidity and suspended sediment levels have also been high, especially following recent intense monsoonal rain storms.

Wild Earth Guardians has recently filed a notice of intent (NOI) to file suit against Middle Rio Grande Collaborative Program signatories, citing violations of the current Biological Opinion under the auspices of the Endangered Species Act. However, the BDD Project is not a signatory to the Collaborative Program so the Project is not currently named. The outcome of the NOI and possible subsequent law suit are uncertain at this time.

San Juan Basin

The streamflow forecast for the San Juan River Basin is 75 percent of the 30 year avg. (1981-2010). San Juan-Chama contractors have received full allocation of San Juan-Chama Project water this year (up from a previous forecast of only 80%). However, most of this water has already been used by the larger purveyors and irrigators in the middle Rio Grande, and so they are no longer calling for/releasing their water. The water that is currently in the Rio Grande at Otowi Gage is therefore not so much imported San Juan-Chama water as it is environmental flows and native Rio Grande water. However, when water quality conditions permit, the BDD Project is still able to call for and receive its allocation of San Juan-Chama water.

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. If conditions do not change, after deliveries are made out of Heron Reservoir this year, that reservoir will be heading into the next water –year at historically low levels.

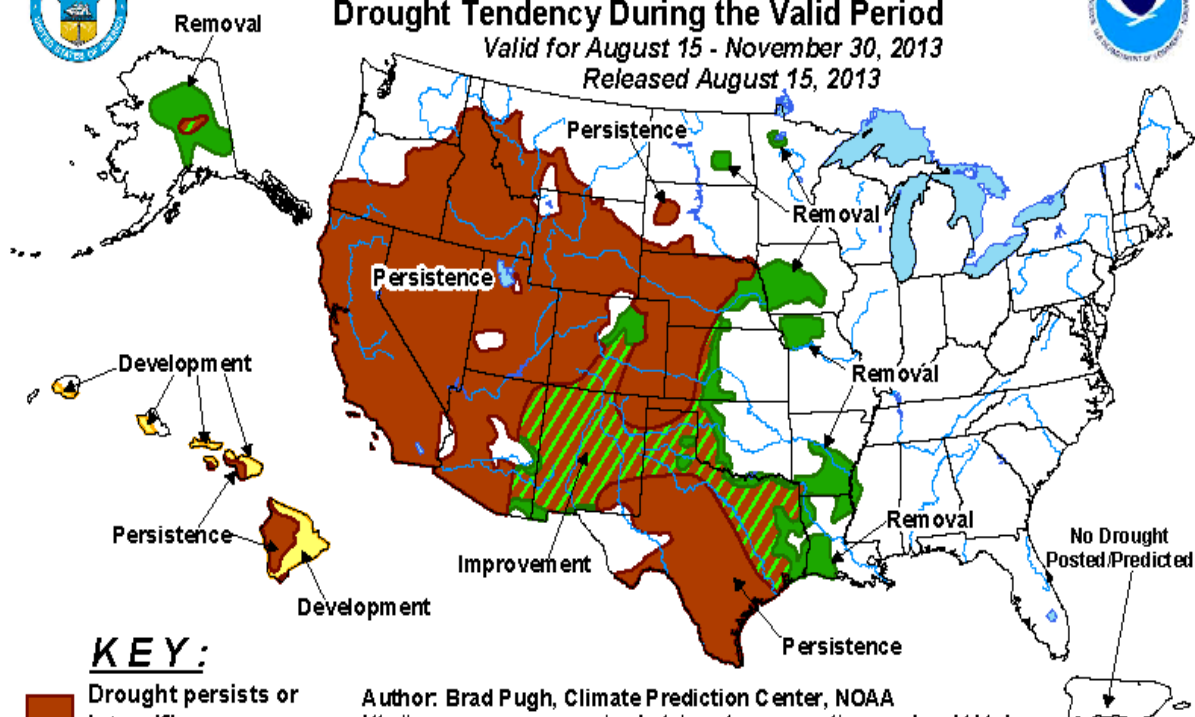


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 15 - November 30, 2013

Released August 15, 2013



KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: Brad Pugh, Climate Prediction Center, NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

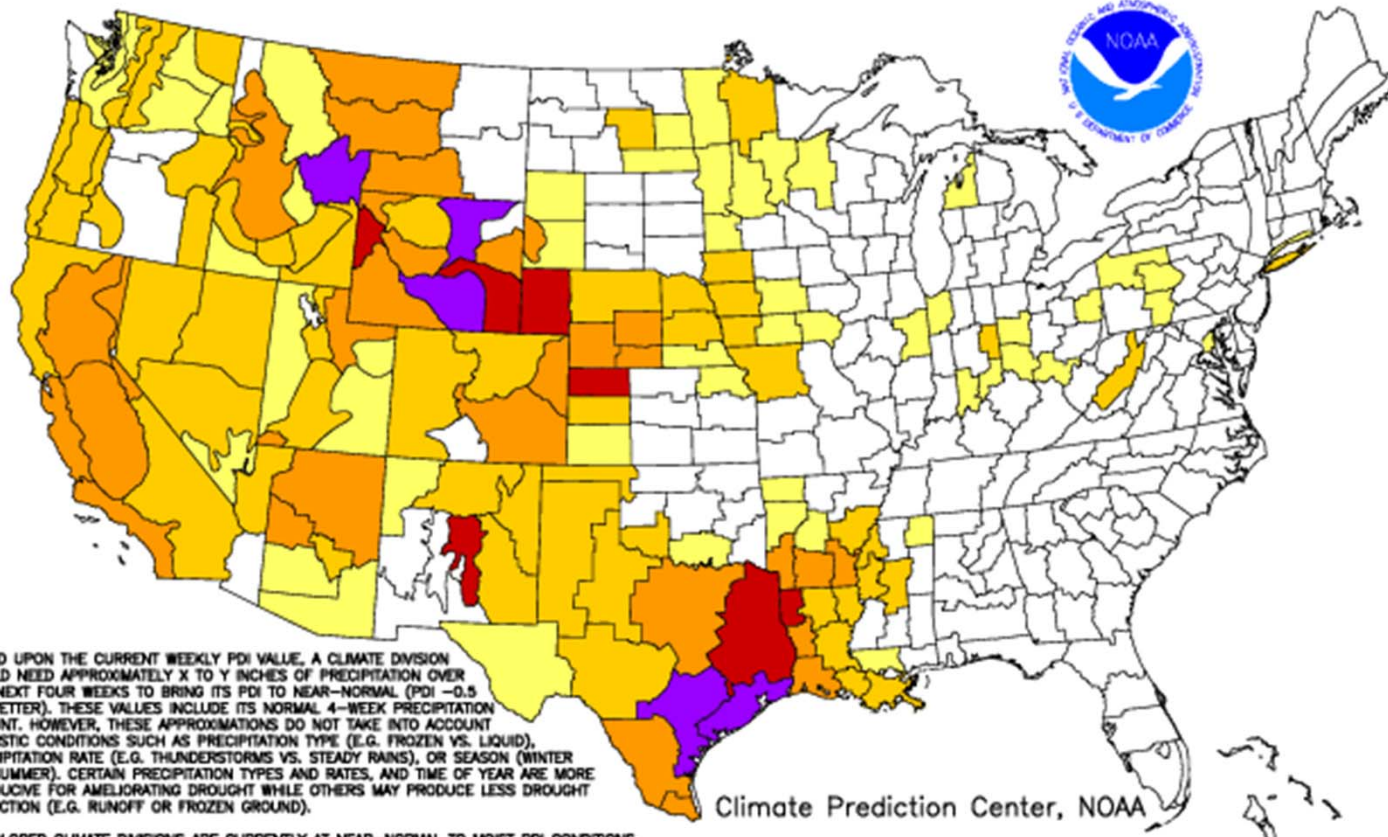
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none)

Additional Precip. Needed (In.) to Bring PDI to -0.5

Weekly Value for Period Ending AUG 10, 2013

Long Term Palmer Drought Severity Index (PDI)



BASED UPON THE CURRENT WEEKLY PDI VALUE, A CLIMATE DIVISION WOULD NEED APPROXIMATELY X TO Y INCHES OF PRECIPITATION OVER THE NEXT FOUR WEEKS TO BRING ITS PDI TO NEAR-NORMAL (PDI -0.5 OR WETTER). THESE VALUES INCLUDE ITS NORMAL 4-WEEK PRECIPITATION AMOUNT. HOWEVER, THESE APPROXIMATIONS DO NOT TAKE INTO ACCOUNT REALISTIC CONDITIONS SUCH AS PRECIPITATION TYPE (E.G. FROZEN VS. LIQUID), PRECIPITATION RATE (E.G. THUNDERSTORMS VS. STEADY RAINS), OR SEASON (WINTER VS. SUMMER). CERTAIN PRECIPITATION TYPES AND RATES, AND TIME OF YEAR ARE MORE CONDUCTIVE FOR AMELIORATING DROUGHT WHILE OTHERS MAY PRODUCE LESS DROUGHT REDUCTION (E.G. RUNOFF OR FROZEN GROUND).

UNCOLORED CLIMATE DIVISIONS ARE CURRENTLY AT NEAR-NORMAL TO MOIST PDI CONDITIONS.

(EXAMPLE - IF 4-WEEK NORMAL PRECIPITATION IS 3 INCHES AND PDI DEFICIT TO BRING TO -0.5 IS 4 INCHES, THE VALUE IS 7)

Zero Inches

Trace to 3 Inches

3 to 6 Inches

6 to 9 Inches

9 to 12 Inches

12 to 15 Inches

Over 15 Inches

Climate Prediction Center, NOAA

#	Issue	Strategic Goal	Objectives	Tasks	Working Group Members	Reference Material	Fiscal Impact	Notes
1.	Update Santa Fe Water Conservation and Drought Management Plan		Assist in the 2015 Water Conservation Plan and create strategic framework and implement schedule	Read 2010 Plan and record suggested updates	Doug Pushard Grace Perez Lisa Randall Bill Roth Councilor Ives	City staff: Laurie Trevizo Caryn Grosse	Water Conservation programs and levy budget	Draft timeline created. Goal: Jan 2015
2.	Water Conservation Education/Outreach Program Including marketing ideas for voluntary water use				Giselle Piburn Stephen Wiman Tim Michael Grace Perez Lise Knouse		Costs associated with promoting outreach	
3.	Regulations/Ordinances in Support of Water Conservation	Reduce GPCD through selective use of ordinances		1.Research ordinances by other cities for effectiveness 2.Research current ordinances for possible improvements	Doug Pushard Bill Roth Councilor Ives Nancy Avedisian			<i>Request from D. Pushard to City Parks clarify Land Use Code 14-8.4 in E (4). Tree list also requested (pending land use approval)</i>
4.	Promoting Conservation Strategies of Large Water Users	Contribute to annual water reductions in water use	Optimize water use by large water users	1. Identify large water users 2.Estimate contribution to total demand 3.Identify ways to optimize water consumption 4.Engage in discussion	Karyn Schmitt Melissa McDonald Tim Michael	Water Use in Santa Fe, Borchert, et al, July 2009	Needs to be determined	Melissa will focus on Parks
5.	Domestic Wells Within City Limits				Stephen Wiman Grace Perez Doug Pushard Councilor Ives			

Working Group 4

Issue: Promoting Conservation Strategies of Large Water Users (NEW)

Matrix - still combining data from WG 4 &5

WG #4 Task Report

Karyn, Councilor Ives, Laurie, and Melissa met with Nick Schiavo, the City's water division director on August 23. Topics that were covered were as follows:

- Capability of new billing system— number of designations (up to 100), household water budgets, neighborhood comparison groups
- Meters – remote reading and daily reading with internet connection for clients/customers.
- Discussed resolution directing staff to look into EMI meters to accomplish this purpose

Mr. Schiavo indicated that all of the items we discussed are covered in the scope of work for the new billing system.

Melissa continued to research park/water conservation strategies and topic as follows:

- Bonding/rate structure—looking specifically at how changes in rate structure for public benefit rate would affect bonding
- Work Development – training structure for park staff
- Water Usage in the parks & percentage of turf areas

Melissa and Grace are moving forward with WAA networking by contacting participating member groups about sharing ideas.

Karyn continues to research water conservation websites with a residential water user focus.