

SANTA FE WATER CONSERVATION COMMITTEE MEETING CITY HALL - 200 LINCOLN AVE.

CITY COUNCILORS' CONFERENCE ROOM

TUESDAY, July 10. 2012 4:00 PM TO 6:00 PM

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF AGENDA
- 4. APPROVAL OF MINUTES JUNE 10, 2012 WATER CONSERVATION COMMITTEE MEETING

#### **DISCUSSION ITEMS:**

- 5. UPDATE ON THE SUSTAINABLE SANTA FE PLAN AND GREEN BUILDING CODE (Katherine Mortimer) (25 minutes)
- 6. UPDATE ON WATER CONSERVATION PRESENTATION INCLUDING CHANGES TO THE PRESENTATION AND FEEDBACK (Stephen Wiman / Doug Pushard) (25 minutes)

### **INFORMATIONAL ITEMS:**

- 7. STATUS OF IMPLEMENTING THE LONG RANGE WATER SUPPLY PLAN (Claudia Borchert/ Rick Carpenter) (15 minutes)
- 8. UPDATE ON RECLAIMED WATER USE PLAN (Claudia Borchert/ Rick Carpenter) (15 minutes)

### **MATTERS FROM STAFF:**

9. SCHEDULE AND PROPOSAL FOR UPDATE OF WATER CONSERVATION PLAN 2010 (Laurie Trevizo) (15 minutes)

### **MATTERS FROM COMMITTEE:**

10. SUMMARY OF WATER CONSERVATION COMMITTEE INITATIVES, INCLUDING WATER CONSERVATION COMMITTEE DUTIES AND RESPONSIBILITIES (Councilor Ives) (25 minutes)

### ITEMS FOR NEXT AGENDA - TUESDAY, AUGUST 14, 2012:

### 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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# MINUTES OF THE CITY OF SANTA FE WATER CONSERVATION COMMITTEE

Tuesday, July 10, 2012 4:00 p.m. to 6:00 p.m.

### 1. CALL TO ORDER.

A meeting of the Water Conservation Committee was called to order by Councilor Peter N. Ives, Chair, at approximately 4:00 p.m., on July 10, 2012, in the City Councilor's Conference Room, City Hall, 200 Lincoln Avenue, Santa Fe, New Mexico.

### 2. ROLL CALL

Roll call indicated the presence of a quorum as follows:

### **MEMBERS PRESENT**

Councilor Peter N. Ives, Chair Tim Michael Grace Perez – telephonically Giselle Piburn Doug Pushard Lisa Randall

Karyn Schmitt

Stephen K. Wiman

### **MEMBERS EXCUSED**

Melissa McDonald, Vice-Chair

### **MEMBERS ABSENT**

Lise Knouse

### **OTHERS ATTENDING**

Laurie Trevizo, Acting Water Conservation Manager Claudia Borchert, Water Louise Pape, Sustainable Santa Fe Commission Robert Wood, Parks Department Betsy Conover, Citizen Melessia Helberg, Stenographer

There was a quorum of the membership in attendance

### 3. APPROVAL OF AGENDA

MOTION: Giselle Piburn moved, seconded by Tim Michael, to approve the agenda as presented.

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

### 4. APPROVAL OF THE MINUTES: JUNE 10, 2012, WATER CONSERVATION COMMITTEE MEETING

**MOTION:** Doug Pushard moved, seconded by Giselle Piburn, to approve the minutes of the meeting of June 10, 2012, with the following correction:

Page 15, paragraph 1, line 1, "..haven't done anything with the exception of saying..." [Mr. Wiman explained that he was speaking of 2011 and 2012].

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

### **DISCUSSION ITEMS:**

# 5. UPDATE ON THE SUSTAINABLE SANTA FE PLAN AND GREEN BUILDING CODE (KATHERINE MORTIMER)

### Sustainable Santa Fe Plan

Katherine Mortimer presented information from her Memorandum of July 2, 2012, to the Water Conservation Committee, with regard to the Sustainable Santa Fe Plan.

The Committee commented and asked questions as follows:

 Mr. Pushard asked for clarification that the water section of the Sustainable Santa Fe Plan was written by this Committee, noting no one recalls having written this.

Ms. Pape said she was tasked with putting the Plan into one voice because every chapter was written by a different person, and the compiled. She said she recalls getting a draft from a member of the Water Conservation Committee.

Ms. Mortimer said the original Plan was written in 2006-2007.

 Ms. Pape said she submitted in December 2007, and it took until October 2008 to get final approval. Ms. Mortimer said there was a lot of public outreach before it was drafted, and after it was drafted there was public input before it was adopted by the Council.

Ms. Pape said it took time to go through the Committee process.

- Chair Ives said that was in the past, and the way we can be helpful in this process is looking at the statements in the Plan. He said the Committee would be willing to help to redraft the water portion of the Plan.
- Mr. Pushard said in her Memo, Ms. Mortimer said that the Residential Remodel Program is due to be published later this summer.
- Responding to Ms. Mortimer, Chair Ives said we need to hold off this discussion until we finish with the portion about the Sustainable Plan.
- Ms. Pape said they had meetings with the Mayor and it will take about a year to do this, and the interest now seems to be climate adaptation and there is a Western Adaptation Alliance Flagstaff, Tucson, Boulder, Salt Lake City and the surrounding States are members, but no City in New Mexico is a member, but they are anxious to have us join. She said there are those who want to move forward on the issue of adaptation, and said perhaps the changes and the evolution accepting of issues current today would be a better venue than going back and rewriting this Plan. She said the Commission isn't totally committed to rewriting this Plan at this point.
- Mr. Pushard said he thought the Commercial Code was also being considered at this point in time, but it isn't covered here.
  - Ms. Mortimer said the Memo provides on page 2, paragraph 2, "The Commercial Code was recently released and work is underway to compare the published Code to the work that done by that Advisory Group."
- Chair Ives said it is worthwhile to look at the provisions, because in the event the Sustainable Plan
  is updated, we could agree to take that on. He asked if they are looking for one-page.
  - Ms. Pape said they aren't ready to say this at this point.
  - Ms. Mortimer said she had thought it would be a good idea to update the plan, but the process of adoption takes a fair amount of time. She said the thought was to do it almost like an executive summary, where we targeted it as an update, what has evolved and the current targets and areas of focus, and then do one page for each topic, so it is succinct and more of an update, rather than a new Plan. She said this is her thinking, partly because it would be easier for her as the only staff person, and probably a more useful document in the end.
- Chair Ives said the Committee can commit to an abbreviated statement of the Committee's perceptions of that, but it likely would be longer than a page.

 Mr. Pushard asked what were the benchmarks, targeting, reporting when the Sustainable Plan was done.

Ms. Mortimer said the Plan does have the idea of reporting, but there was a ridiculous number of action items listed in the back. She said they did a table the first year which indicates what progress was made on the items, and the reason no progress was made, and some were waiting for something else. She said as some of the items became no longer what we were thinking of doing, they fell off, but they are still in the plan. There were no strong benchmarks in most cases, because starting out they really didn't know what was realistic and what funding would be available. She said they haven't been able to do what they thought they could do, noting two additional positions were approved for Sustainable Santa Fe which went away because of the economy at that time.

Ms. Mortimer said the sustainable community has been grappling with benchmarking and how to measure success, noting there really was next to nothing available at the time. However, there is a lot available now.

 Chair Ives said he would like to see if the Committee can commit to getting her something in the Fall.

### **Green Building Code**

Ms. Mortimer further reviewed the information in her Memorandum of July 2, 2012.

The Committee commented and asked questions as follows:

- Mr. Pushard said the recirculation pump is worth "6 points in the water," and asked if she has any data which shows that they actually save water.
  - Ms. Mortimer said a lot of what they use is the professional knowledge of the team of people who helped, and when they get a specific topic they go out and ask people in the trades. She said the thinking with the recirculation pump is that when you turn on the shower you aren't sitting there waiting for cold water to run through the system before it gets hot.
- Mr. Pushard said independent studies show it uses more electricity to run the pump than you are saving by heating the water.
  - Ms. Mortimer said in the energy part of the Code, they have to use at least 30% less than "a Code can build it. So if you increase your energy in on place, you have to decrease it somewhere else." She said it is a trade-off.

- Mr. Pushard said they actually don't save water, because power plants use water, so the net of a
  recirculation pump is more water because of the energy used to run it, and the pumps don't work
  because they leave them on for 24 hours.
  - Ms. Mortimer said under City Code you get the high points if you have an activated pump where you push the button.
- Mr. Pushard said, "The packet may be wrong, but what's in here is a temperature controlled one, which is different from what you just said. Temperature control means it does it automatically."
  - Ms. Mortimer said it means when it gets to temperature it turns itself off.
- Mr. Pushard said this never came through this Committee, or the Committee would have questioned that.
  - Ms. Mortimer said that has been in the Code.
- Mr. Pushard said the Code currently requires only "18 points for water," which means one efficient clothes washer and two water efficient faucets.
  - Ms. Mortimer said the City made a lot required which was optional in the old Code, and a lot more is required in this one, commenting we might start ratcheting up the requirements over time, but in this transition from one Code to another they didn't want to increase the requirements right now.
  - Responding to the Chair, Ms. Mortimer said the updated Code is in the packet. She said people were able to use the old or the new Code which was approved in January. However, effective July 1, 2012, they can use only the new Code, noting there is no difference between the two Codes in terms of requirements of water.
- Mr. Pushard asked the reason the Code didn't come through this Committee, or at least let us see it before it went through.
  - Ms. Mortimer said the only change was to make certain things required, so it didn't change and they didn't bring it through the Committee. She said at this point they have elected not to increase the requirements, because they were writing this in the worst building time and it wouldn't be well received, and because they were asking people to through a home improvement revision process. She said as building comes back and is more healthy, the City will be looking at increasing that, plus a lot of the technology is become more affordable.
- Mr. Pushard said then this Committee should see the Remodel Code and the Commercial Code before they are approved.
  - Ms. Mortimer said yes.

 Chair Ives asked to whom we would make the request to see the Codes before they go to the Council.

Ms. Mortimer said, "You just made it, " and said the Committee can be involved when they look at increase the energy and water requirements.

Ms. Schmitt said she recalls discussions on this, and there was a lot of discussion on all of the action items. She said at that time, the Committee was trying to achieve some active goals, which we put aside because this came up, and then the Committee spent quite a lot of time on it and on each individual item. She said there can be improvements. She said it is very difficult for contractors to get themselves back in business and it is important to realize the realities. She supports that decision.

Chair Ives thanked Ms. Mortimer for her presentation to the Committee.

# 6. UPDATE ON WATER CONSERVATION PRESENTATION, INCLUDING CHANGES TO THE PRESENTATION AND FEEDBACK. (STEPHEN WIMAN AND DOUG PUSHARD)

Presentation by Stephen Wiman. He said he and Mr. Pushard see changes that can be made which don't involve amending ordinances, and they can talk about those. He said some members have expressed concern that they don't know where this is going, and the reason they put together the *Salient Points – Water Conservation and Emergency Water Regulations* for the Committee, which is in the Committee packet. He presumes people have read the attachments.

Mr. Wiman said one of the missing pieces is how other Committee members feel about the water ordinances. He would like to go around the room and hear from the Committee if you think they're on base. He said we are approaching half of the annual and year-to-date average, because of the recent rains, but we are not over the hump. He believes there are simple things we can do without going to the Council. He would welcome suggestions and feedback.

Mr. Pushard said when Mr. Wiman speaks of Ordinances, it is in the broadest possible context, not that it requires rewriting of existing ordinances, but of tweaks to different things we have in place which would be from a water conservation perspective.

Mr. Wiman said they haven't given the presentation since the last meeting because it's not effective, noting they have had audiences with as few as two people. He said we probably need to do this through the media. He said what they do will be influenced by the Committee. He said the slide show isn't the City's official position and can't go on the City website. They would welcome suggestions as to how to proceed from this point.

Chair Ives said he is willing to go around the table and hear from the members of the Committee in terms of obtaining helpful criticism and helpful, constructive thought, commenting there are no right or wrong responses.

Tim Michael said he doesn't know what level of water consumption is sustainable for Santa Fe. He said he hasn't seen document of the level of water we can continue to use. He doesn't have a clear idea of why we should have a sustainable level. He said in the broadest sense we don't want to have over-consumption and collapse. He said he would like to know what is sustainable, and more clarity on how to get there. He said, "To get right to the chase, I don't think whatever that level is, we'll get there without Ordinances however defined."

Louise Pape said she isn't a member of the committee. She said Ms. Borchert did a good job in presenting, and it was more than reinforced at the United Nations Conference in Tucson at the end of May. She said the reports continue to be quite grim for the entire southeast area. She said one of the chief authors of the IPCC Report said we used to get our spring rains coming through the four-corners area and that may be changing permanently. She said he said we are seeing the rains go almost all the way up to the Canadian border sometime, and we have to be prepared and we have to adapt because the projections aren't good. She said with increased temperatures happening more quickly it makes it even worse. She said no one can say what level is sustainable, but it probably is more stringent than we have at present.

Lisa Randall said she feels woefully under-informed compared to most of the Committee. She said in trying to set energy or water reduction goals at the schools, they feel they are on a "wild goose chase" to get the benchmarks. She said it is a moving target and the nature of the beast. She also would like to know the target we're shooting for, commenting we know there is wasteful behavior at both residential and commercial levels. She said she doesn't know what that means, what the targets are and how we isolate that fairly. She gets better responses when she can articulate the meaning of the behaviors they are requesting – the what and why. She said if we can do a more effective and articulate outreach to the water users on every level – what is sustainable, how it is calculated and the reason it matters. She said it gets down to models of fact mixed with opinion. She has more questions than answers, and she doesn't feel capable of critiquing one way or another, especially since she hasn't seen the slide show.

Karyn Schmitt said she is unsure what the two are trying to do here, and her sense is that they are trying to change the Ordinance to make it more strict. She said her absences this year may be the reason she doesn't understand, and apologized for the unavoidable absences. She said her sense is that they want to take an approach more oriented to the stick than to the carrot. She said we all understand what is happening and sustainability is our biggest goal. She said when the City went through several severe drought years, she sat in the Water Division Office and helped to hammer out an ordinance that worked for the Santa Fe Water Coalition and the City of Santa Fe and it was a lot of work. She was on the Committee through two revisions. She said what she saw through that process, is that if you only come at people with a stick, they're not going to comply and you will defeat your purpose. She recognizes we have to come up with something else, and we're working on it. She said it is important to recognize that people are concerned about what is happening. She said we are struggling to find a happy medium, and obviously irrigation is a huge use. She is part of the problem and part of the solution. She thinks it's important that we don't approach this from an adversarial perspective.

Ms. Schmitt said she doesn't have the answer, but she feels an antagonism that we just have to batten down the hatches and force people to conserve water, which she believes is a mistake. She said she might be mistaken, but this is her sense. She doesn't see a carrot here. She appreciates the amount of work they have done, commenting that they have brought some new energy which is important. She said it is also important to balance it and that's what she wants to see. She said she isn't feeling as happy or as comfortable on this Committee as she used to, and this isn't directed to anyone. She feels this is a process we can work through together, recognizing that most people of the city care and are scared about the future, and don't want to water their plants until water is running down the street. She said her goal is to bring them back to the fold and get rid of some plants and analyze where water is being wasted. She said the longer she is on the Board, the more she sees that answers are hard to find. She would like to see more of the feeling of unity on the Committee which she felt in the past, and would like this to be an engagement of the community. However, she agrees we do have to tighten things up to some degree.

Giselle Piburn thanked "you guys" for all your work, and the overview you have produced for this is really valuable. She said it is all in one place which hasn't been easy to find before. She said she thinks that the education approach at the beginning of their quest makes more sense to her, to have it to be more the carrot and to be more educational and team-building than working more on regulations.

Grace Perez said she has gone to the presentations done by Mr. Pushard and Mr. Wiman, and thinks there is a tremendous value in the education and outreach they have tried to accomplish through these presentations. She would like to see this Committee and the Water Conservation Office pursue this on an ongoing basis. She would like to see something along the lines of a speaker's bureau and try to get the word out and present to as many individuals as possible, and have that as part of the Committee's and the Water Conservation Office's ongoing mission.

Ms. Perez said one of the earlier people who spoke was Katherine Mortimer who talked about climate change.

Chair Ives said that was Louise Pape.

Ms. Perez said, with regard to the memo about the Salient Points, the bottom line is whether we, as a Committee, want to develop recommendations for dealing with drought, and fold into that the projected climate change. She would like the Committee to investigate that and what we as a Committee want to see over the next two years in terms of being prepared if droughts get worse. She said there is a need to look at the worst case scenario and be prepared to deal with it with whatever means are appropriate. She said we can't afford to ignore this as a City and a Committee. She said we have a secure water supply and we've done well so far, but we already foresee a gap. If climate change begins to impact our water, we will be in a drought situation more and more. She wants to see a thoughtful way of dealing with this.

Ms. Perez said she supports developing recommendations to deal with drought/climate change. She too really appreciates the work done by Mr. Pushard and Mr. Wiman. She feels much better about the Committee, because when people get together to do work outside of the Committee meetings, it means they are more engaged and productive. She said they have been moving in the right direction. She would like to see all of us doing work between the meetings and reporting back to the Committee at the monthly meeting.

Chair lves said he would echo everyone's comments on the hard work which has been done, commenting the graphics are very good, especially the blue one demonstrating per capita consumption. He said the drop is very much a leveling off in the populace. He said once the lesson is learned, people don't suddenly go back to increasing their water use dramatically, even with the changes to the Ordinance. He said part of the problem he has with how you go about this is the approach, because it seems focused on trying to criticize the City for the effort it has undertaken. He looks at what the City has done, and sees so many reasons for applause in terms of the ordinances, noting Santa Fe has one of the lowest per capita consumptive rates of any City across the country. He sees Santa Fe as a leader in this effort, and would intend that we continue in that.

Chair Ives said he has issues in several areas. He said it has been said we have lulled the community into a false sense of water security with the onset of the BDD. He said we are meeting daily demands, even during peak demand days during the summer. He said if meeting demands creates a false security, then let's hope that we always create a false sense of security because we always want to meet demand. He believes that what they are saying is we could do more to educate people on the reasons it is important to conserve water, recognizing that great efforts are being undertaken currently to accomplish that with the goal of reducing that number. He said the daily per capita consumption is at 105 gallons per individual.

Chair Ives said, "I tend to think we're actually doing a good job as opposed to having lulled the community into some false sense of complacency. I think the fact that we're at 105 gpcd, reflects the fact that the community is aware that water is significant and important, which doesn't mean we can't do better and we should strive to do be better. But, we talk and the point Karyn was making, which is there is great commonality as we go around the table in terms of what everybody here is thinking which is, water is a precious resource, we're likely facing circumstances in our future due to climate change or whatever, that will make it even moreso. What are we doing to appropriately respond to that, be respectful of that, and how do we then move ourselves forward in the way that engages the community as a whole in a constructive effort, as opposed to any type of destructive finger pointing, etc."

Chair Ives continued, "And you do note in your piece that Santa Fe has access to a wide array of water sources due to past foresight... very true in our work. And then you say, but it is not doing enough now to conserve water and demonstrate its commitment to water conservation. Again, in my mind, a very debatable statement. I do think we're doing a great deal towards those – can we always do more. Yes. And, as I've talked about this issue, and mind you I'm on a steep learning curve myself on any number of these issues, and I tend to ask... I mean, some of the questions I think we need to really ask and bear down on before we figure out exactly where we're going, or how we get where we're going is... I've heard

the figure of 85 gallons per day thrown around as a goal for per capita usage. I'm not sure exactly where that comes from. I'm not sure if anybody else in the country, for instance, is doing that. It doesn't mean we shouldn't be doing it, but I'd like to figure out what kind of goal we think is a reasonable or appropriate one, because that gets us around something that we can all start saying: Okay, how do we get there. And so, I would think we could constructively look at what that goal should be, as part and parcel of figuring out our pathway to do that. And I don't think we have consensus on that at this point. And I don't think it's enough to just say we need to conserve more. I think it's good to have a target that we think would be sustainable for the City in a real way."

Chair Ives continued, "You guys say we have no provisions for drought. We do have provisions for emergency regulations. I have a hard time getting my head around the terminology, because really it's to some degree those emergencies that will highlight that we don't have an over-abundance of supply, but we'll stretch our capacity to deliver water. If the objective is to conserve our existing supply, because water has to be put to beneficial use and it flows, and if you don't use it, it's sort of passed on, how do we capture that to the benefit of the City into the future. And I'm certainly aware and becoming informed on how we store water capacity in Abiquiu, in Heron, in Elephant Butte. You know, currently we have about 31,000 afy of stored water in these various facilities, challenges with regards to how that get used in a drought circumstance, I believe would be a fair statement. And please, Claudia, if I'm incorrect, please say so."

Chair Ives continued, "These are things we can look at and to me, they're part of the picture of your conserving. If you have 10 afy available and you're using 8 afy annually, so your supply exceeds your demand. What are you doing with the extra 2 afy, how do you capture that. And suppose you bump your usage down to 6 afy, then you have 4 afy for capture. How are you capturing that, and what use is it to you."

Chair lves said he has problems with some of the language and some of the tone of what they do, but he has no problem with the ultimate goal. However, he wants to make sure that we have a relatively common goal which is well defined, and we can determine the methodology to get there. He said he applauds their passion for this issue and hopes everyone on the Committee will find that passion for themselves with one or more of the various issues with which we are dealing, so we will have good discussions about how we move forward.

Mr. Pushard thanked the Committee. He said part of the frustration you may sense from him and Mr. Wiman isn't what the City is doing. If you read the minutes and attend the presentations, you will see they are very complimentary of past efforts, noting we have done a lot of great things. He said he and Mr. Wiman tend to be passionate about the issues, and sometimes their language may be a little over-zealous at times, but it really is intended to push us forward. He said we are in a very fortunate situation. He believes 70 years ago, a treaty was negotiated to give us Colorado River water. About 20 years ago, someone started working on the BDD, which came on line in January 2011, and "really saved our butt." He said his point is that 70 years ago, 20 years ago, people took actions which got us to where we are today. He said Claudia will talk about the goal of 85, noting it is a calculation based on what we are going to need. He believes it is doable without action by the Council, but he and Mr. Wiman believe this Committee should be the center of that leadership and generation of ideas which help create the plan to get us to the 85.

Mr. Pushard said he doesn't want to see a plan where we go from green to orange overnight, because we have, for example, a fire in the watershed and on the Rio Grande. He said this isn't prudent management and he believes there is agreement in the Water Conservation Division that we could put in place things we can do which are between green and orange. He said the reason they started this whole process is that there is a gap and they would like to start filling that gap. Secondly, we have a target of 85, asked how we get there besides doing what we have already done. He would like to have that discussion as a Committee.

Mr. Pushard said the Chair brings up a third point with which he totally agrees, that the discussion we're not having as a Community and a Committee, is that "if we conserve water, so what. Are we just promoting future growth. Is that why we're conserving water." He said he hears that comment in some of the presentations he's done. He said we need to have this discussion among the Committee.

Ms. Perez said our Committee charter also includes discussing land use and how it is related to water use. She thinks in many ways, this is one of the long term "elephants in the room that nobody wants to talk about. She agrees that the Committee ultimately does need to talk about growth and how it dovetails with "conserve now only to grow more later, so I agree."

Chair Ives said he asked Water Conservation Staff at what point do we cry foul on constantly growing larger, given our limited resources. He said we hear from the State Engineer that all of the surface waters of this State are fully appropriated, if not over-appropriated and over-allocated. He said the corollary to that is, if we conserve merely for the purpose of allowing greater expansion, the greater expansion reduces the resiliency in the system to react to any sort of negative impact. He said another way to appropriately and properly look at these issues is what resiliency we want within these issues, which gets back to storage issues and how we can tap into that stored water, commenting that Heron water is more easily tapped into than if it is in Elephant Butte.

Ms. Trevizo said the enabling ordinance creating the Committee, states that among the duties and responsibilities are "examining building code provisions, construction practices and land use policies and their effect on water use." She reminded the Committee that Matthew O'Reilly, Land Use Department Director, was here last week to update us on land use policy and ordinance changes, as well as Katherine Mortimer was here today on the Green Building Code. She said those things are being addressed as well, and it is a matter of the interpretation of the particular Ordinance we're discussing.

Chair Ives said Ms. Mortimer probably gathered this Committee wants to be involved in discussions, even if there are no changes to an Ordinance, commenting that to say there are no changes isn't really accurate.

Ms. Schmitt said it's unfortunate we no longer have a representative from the construction industry.

Chair Ives said it would be great to have a representative from the Green Building industries who is actively involved, and believes it would be beneficial to purse that.

Mr. Pushard said he will contact Kim Shanahan in this regard.

Mr. Wiman said they have 3 suggestions. (1) When people call the hotline to repair a water leak, add "Push One for an overview of the regulations; (2) more inter-agency meetings about water waste we see every day, noting he and Mr. Pushard will meet with the State; and (3) having evapotranspiration controllers at the parks so we're not watering the parks at night and thus the City is leading by example.

Chair Ives said he is always in favor of the City leading by example. He said, however, budgetary problems always will be a limitation unfortunately, but that doesn't mean we shouldn't try. He suggested discussing the 3 items at the next meeting and how we can move those forward in a constructive way.

Mr. Pushard said this is part of the simple things we can do, "the low hanging fruit."

Chair Ives suggested inviting Ben Gurule, the Acting Parks Director, to the next meeting to talk about these issues.

### **INFORMATIONAL ITEMS**

## 7. STATUS OF IMPLEMENTING THE LONG RANGE WATER SUPPLY PLAN. (CLAUDIA BORCHERT AND RICK CARPENTER)

Claudia Borchert gave a brief overview of the information in her Memorandum of July 2, 2012, with attachments, which is in the Committee packet.

The Board commented and asked questions as follows:

- Responding to a question from the Committee, Ms. Borchert said the initial west-wide climate risk
  assessment results showed that the San Juan/Chama water supply is not nearly as vulnerable as
  the Rio Grande basin as a whole noting this was the big study done by the Bureau of
  Reclamation, and taking the big climate models and scaling them to the San Juan Basin the
  source of our San Juan/Chama water.
- Responding to a question from the Committee, Ms. Borchert said our whole hydrologic system was in balance before the City sunk its first well. She said that water was headed to a discharge point, whatever that might be. When we sunk the well, we were taking water which is headed elsewhere. She said the Buckman Well Permit requires us to keep the other systems whole which the City was impacting, but the City Well Permit does not. So, to some extent we're keeping the surface water system whole with the Buckman Well pumping, but she thinks we are impacting stream systems and drawing down the water table. The water we pump from the aquifer comes from storage and we are "robbing it from streams." In some cases we're fixing the problem and robbing from streams, but we are not replacing water which comes from storage.

Ms. Borchert continued, "The way to look at groundwater sustainability is what impacts we are willing to live with, which is a kind of sustainability – am I willing to make that change and live with the consequences." She spoke about being tasked with determining a sustainable groundwater use for the City [which she hasn't done] and the criteria she has been looking at and has done some model runs, and she was willing to: (1) accept 10% impacts on streams, given those are offset; and (2) to go up to 250 afy of a drop in water levels in the aquifer, because over that you start to have compaction and permanent damage to the aquifer. She said with these two criteria, you can back-calculate how much the City can take out of groundwater sustainably before these thresholds are crossed.

Ms. Borchert continued, "Where the wells are will impact the answer. If the wells are evenly spaced on a one-mile grid, like they do oil wells, the amount you can take out before you reach that threshold is higher than if you take the configuration that we have today, so it's a very tricky question." She said the further question is, "When is enough, enough," with the current water sources.

- Mr. Michael said he would like to see nothing taken out, so that the water would return to the Santa Fe River.
- Ms. Borchert, referring to the color graph, said that means that the whole population relying on the blue line is "bleeped," either that, or you reduce the gpcd by half so that all you're relying on is the green. "We have crossed that threshold, so that criteria may be desirable, but it is gone."
- Mr. Pushard said the City's per capita use has gone down, as have many cities in the country, and very few have increased over this period, noting the United States as a country has gone down. He said, however, Spain is at 65 gpcd, noting Spain has a similar climate to ours. He said 85 gpcd is doable under the current technology, but in 25 years technology would change. He asked what we want to do to get us to the 85 gpcd.

Ms. Borchert said a lot of the maintaining of the plateau reduction is due to "hard wire" such as retrofitting of toilets, front loading washers and such, and not so much habit. She encourages the Committee think about this as it develop the programs which will "get us where you guys want to take us."

Ms. Borchert said the drought assumptions in the Long Range Water Supply Plan were consciously made and can be changed. However, they decided getting to 100-105 gpcd was a great effort by this community, and we didn't feel as if they needed to build in any provisions which would decrease demands in times of drought which is what "you guys are after right now." She said It was a policy decision which was approved by the Council. So, it's basically, "Way to go population. We can figure out the water supply so that when a drought comes you won't feel it and you don't have to do anything else, because we have been doing our planning and taking care of you. We have been using conjunctive use, we've build up these various sources of supply with our surface water, our groundwater. We have hard-wired a bunch of conservation. It was a conscious decision to say when drought hits you guys don't have to do anything differently."

Ms. Borchert continued, "I understand the reasons Doug and Steve have a problem with that, but the Emergency Ordinance which exists today was meant only to deal with a water utility emergency – a huge pipeline is broken, there is a huge fire, the BDD goes down, or whatever it is – and what we do to trigger going to red. However, the Ordinances were not meant to address the idea that when drought comes we all need to do something differently. It is explicitly just the opposite."

Mr. Pushard said the Ordinance says, "The City will seek to minimize or eliminate the use of emergency drought restrictions... What has happened over the last 15 years is, we have a drought ordinance, drought ordinance, drought ordinance, drought ordinance. And when we did this, it was specifically one of the things is we didn't want to do that any more. And it's always been the one that I sit here and question if it's the right thing or not."

Ms. Borchert said work on this was done between 2005-2006, and it's time to revisit that.

- Chair Ives said he understands the projections in out years based on reduction of the gpcd every two years, gives us the event horizon of 85 gpcd. He said clearly other places in the world are doing better and he would like to do better to provide resiliency within the system. However, he doesn't want to do better just for the sake of saying we're using less water and that water is going somewhere else and somebody else is using it and having the resiliency in the system is lost because we're not using the water we do have available.
- Ms. Borchert said if we were really to achieve this "whitish line," we would be using our surface water, and we would be using our groundwater less. She said if you don't use it, somewhere else will be using it is certainly true of surface water. However the "somebody else" could be the ecosystem. If it is groundwater, it addresses the question of how fast you are going to hit the 250. It also definitely bears the questions of, "Well are we leaving water in the aquifer so that all the domestic well that ring us can pump it out, because it is a shared resource." She said so there is a little bit of "Are we conserving so other people can take it." It definitely should be part of any management plan to manage resources on the scale on which they occur, which in our aquifer case, that's the whole southern Espanola basin from Pojoaque to Eldorado and Galisteo.

Ms. Borchert said there is always the question of who is going to benefit from our conservation.

- Chair Ives wants to be sure it is us. He said the compelling argument to the City Council and to
  the people of Santa Fe to get them to conserve water, is that by conserving more we are somehow
  doing better in the future.
- Ms. Borchert said she the answer also is partially, we would not have the Santa Fe River Ordinance if we hadn't conserved. She said in 2001 our use was 12,000 ayf per year and we were in a dire situation – that was more need than the City's supply. And it is only because of the drop in water use that 1,000 afy of water can go safely into the River.

- Ms. Schmitt agreed that we have to have balance. She said we have to have a qualify of life, and
  if we don't balance all our need, it would be a ghost town. She said when we have a balance
  that's how we survive as a City.
- Mr. Wiman said Ms. Borchert is coming back next month to explain how she calculates the gpcd. He said this is important because there is a recurring question about what is the residential use, because the 105 gpcd is a "lumped number," which includes all of the irrigation. He said Mr. Ransom and Ms. Trevizo said that the average residential use is 65 gpcd. He would like Ms. Borchert to explain how we get there.
- Chair Ives said it would helpful to know how those numbers play out against different classes of users.
  - Ms. Borchert said here are issues with extracting current data from the billing records. She is unsure we have this information, noting it would be a helpful tool to do what he is talking about.
- Chair Ives said if there are structural or any other issues which this Committee can help address to
  ensure that we have the capacity with which to the job with which we are charged, he would be
  happy to carry those forward as resolutions to the Council.
- Chair Ives said the Council is trying to address current Ordinances to ensure there is enforcement of the Ordinances on the books.
- Ms. Pushard asked if it would be possible to look at the retrofit program and try to determine what the numbers would have been without that program. He said the developers were very supportive of that program, and are supportive of doing other programs in the future that are hard wired. He said with this information, we could highlight what developers have brought to the community. He said we have to a mix and the developers are part of the solution and not the problem.

Ms. Borchert said such a study was done, but it was difficult to parse-out the variables because our conservation program is so multi-faceted. She will provide a copy to the Committee members.

### 8. UPDATE ON RECLAIMED WATER USE PLAN. (CLAUDIA BORCHERT AND RICK CARPENTER)

Ms. Borchert reviewed her Memorandum of July 2, 2012, and the graphs which are in the Committee packet. She said between now and August, a bullet form of the plan will be prepared, which will go to the PUC, then will come here with that comment from the PUC, before going to the Public for input. It will then be digested into a final form.

Mr. Pushard asked if there are assumptions that the reuse customers will reduce their water use over time. He said two days after the last meeting when they did the BDD tour, the Country Club was watering its golf course at 2:00 p.m. in the afternoon.

Ms. Borchert said one of the people on the working group is John Allen and she will ask him this question. She said a budget can be created for use for that specific entity in that situation, noting conditions will be different in the future as it gets hotter and dryer.

### **MATTERS FROM STAFF**

9. SCHEDULE AND PROPOSAL FOR UPDATE OF WATER CONSERVATION PLAN 200 (LAURIE TREVIZO)

Ms. Trevizo asked to table this item to the next meeting, noting that not everyone on the Committee has a copy of the Water Conservation Plan, and she was going to discuss items in that Plan. She will email the Plan to the members.

Ms. Pape said she also would like a copy, and Chair Ives said it is also on the City website.

### MATTERS FROM THE COMMITTEE

10. SUMMARY OF WATER CONSERVATION COMMITTEE INITIATIVES, INCLUDING A WATER CONSERVATION COMMITTEE DUTIES AND RESPONSIBILITIES. (COUNCILOR IVES)

Chair Ives said most of the discussion today has been filling in this item.

### ITEMS FOR NEXT AGENDA - TUESDAY, JULY 18, 2012

- a) Discussion of how to get to the 85 gpcd goal.
- b) Invite Ben Gurule of Parks Division to discuss the 3 recommendations by Mr. Pushard and Mr. Wiman: (1) When people call the hotline to repair a water leak, add "Push One for an overview of the regulations; (2) more inter-agency meetings about water waste we see every day, noting he and Mr. Pushard will meet with the State; and (3) having evapotranspiration controllers at the parks so we're not watering the parks at night and the City leading by example
- c) Reschedule Item 9 for presentation by Ms. Trevizo
- Any items which were left over from this meeting.

### **ADJOURN**

There was no further business to come before the Committee and the meeting adjourned at approximately 6:05 p.m.

Peter N. Ives, Chair

Melessia Helberg, Stenographer