



Agenda

CITY CLERK'S OFFICE

DATE 5/4/15 TIME 9:30am

SERVED BY Robert Wood

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SANTA FE WATER CONSERVATION COMMITTEE MEETING
CITY HALL - 200 LINCOLN AVE.
CITY COUNCILORS' CONFERENCE ROOM
TUESDAY, MAY 12, 2015
4:00 PM TO 6:00 PM

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF CONSENT AGENDA
5. APPROVAL OF MINUTES APRIL 14, 2015 WATER CONSERVATION COMMITTEE MEETING
6. CONSENT ITEMS

DISCUSSION ITEMS:

7. DROUGHT, MONSOON AND WATER RESOURCE UPDATE (Rick Carpenter, 10 minutes)
8. CLIMATE ACTION TASKFORCE (Councilor Ives, 10 minutes)
9. 13th ANNUAL CHILDREN'S POSTER CONTEST THEME SELECTION. (Caryn Grosse, 15 minutes)

INFORMATIONAL ITEMS:

10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES: (Councilor Ives, 40 minutes)
 - A. GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH (10 minutes)
 - B. GROUP #3- WATER CONSERVATION CODES, ORDINANCES & REGULATIONS – LEGISLATIVE UPDATE (10 minutes)
 - C. GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS (10 minutes)
 - D. NEW! GROUP #5- WATER SYSTEM MAP (10 minutes)

MATTERS FROM STAFF:

- Search Process for Water Conservation Staff – UPDATE.

MATTERS FROM COMMITTEE:

MATTERS FROM PUBLIC:

NEXT MEETING – TUESDAY, JUNE 9, 2015:

CAPTIONS: FRIDAY MAY 22, 2015 @ 3 PM

PACKET MATERIAL: WEDNESDAY, MAY 27, 2015 @ 3 PM

ITEMS FOR NEXT AGENDA:

- Rebates - 2014 Rebate Update
- Our Virtual Water Footprint and Impact on Santa Fe Water Sustainability (Paul Gibson)

ADJOURN.

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

WATER CONSERVATION COMMITTEE
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APRIL 14, 2015

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Roll Call/Call to Order	The Water Conservation Committee Meeting was called to order by the Chair, at 4:00 pm in the City Councilor's Conference Room.	Page 2
Approval of Agenda Rick Carpenter not in attendance at today's meeting, Mr. Erdman to report. Add appointment of Vice Chair after Consent Items.	<i>Ms. Randall moved to approve the agenda as amended, second by Mr. Wiman, motion carried by unanimous voice vote.</i>	Page 2
Approval of Consent Agenda	No Action needed	Page 2
Approval of Minutes, March 10, 2015 Corrections: Page 5: assimilations simulations Karen Karyn Page 5: Segway segue Wyman Wiman	<i>Ms. Randall moved to approve the minutes of March 10, 2014 as amended, second by Mr. Roth, motion carried by unanimous voice vote.</i>	Page 2-3
CONSENT AGENDA	No Action Needed	Page 3
Discussion Items <ul style="list-style-type: none"> Drought Monsoon and Water Resource Update Climate Action Task Force 	Informational	Page 3-5
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Adjournment and signature	Meeting was adjourned at 5:10 pm	Page 8

**SANTA FE WATER CONSERVATION COMMITTEE MEETING
TUESDAY, APRIL 14, 2015
4:00 PM TO 5:45 PM**

MINUTES

1. CALL TO ORDER

Councilor Ives, Chair called the meeting to order at 4:00 pm in the City Councilor's Conference Room. A quorum is reflected in roll call.

2. ROLL CALL

Present:

Councilor Peter Ives, Chair
Stephen Wiman
Tim Michael
Lisa Randall
Grace Perez
Bill Roth
Doug Pushard
Giselle Piburn

Not Present/Excused

Nancy Avedisian
Karyn Schmitt

Others Present:

Caryn Grosse, Water Conservation Specialist
Andrew Erdman, Water Department
Robert Wood, Water Conservation Specialist, Sr.
Andy Otto, Santa Fe Watershed Association
Fran Lucero, Stenographer

3. APPROVAL OF AGENDA

Rick Carpenter will not be in attendance at today's meeting.
Add appointment of Vice Chair after Consent Items.

Lisa Randall moved to approve the agenda as amended, Mr. Wiman seconded the motion, motion carried by unanimous voice vote.

4. APPROVAL OF CONSENT AGENDA

None

5. APPROVAL OF MINUTES MARCH 10, 2015 WATER CONSERVATION COMMITTEE MEETING

Corrections:

Page 5: ~~assimilations~~ simulations
Karen Karyn

Ms. Randall moved to approve the minutes of March 10, 2015 as amended, second by Mr. Roth, motion carried by unanimous voice vote.

6. Appointment of Vice Chair: The Chair made the recommendation with committee concurrence for Lisa Randall to be the Vice Chair for the Water Conservation Committee. Ms. Randall was honored to accept.
7. CONSENT ITEMS

DISCUSSION ITEMS

8. DROUGHT, MONSOON AND WATER RESOURCE UPDATE

Andrew Erdman: Runoff predictions have been reduced slightly. This drought is likely to present significant challenges to all water purveyors, utilities, and irrigators going forward into the rest of this water year. The minnow numbers are down, we aren't sure what the San Juan Chama Release will be or what our allocation will be. The city has a fair amount of well water in storage up at the top of the water shed in the Chama so we should be good for this year in terms of relying on surface water and taking it easy on the wells which is our management goal.

Ms. Randall: There was recently an article in the New Mexican talking about the spring runoff and 8 million gallons a day coming off the mountain and in to the reservoirs; is that accurate.

Mr. Erdman said that is correct and they are trying to create as much as water as they can, basically the reservoir would significantly reduce the past ____, we are at 10% capacity right now. The reason is that we have a lower reservoir which is quite a bit smaller and you have to reserve some space in order to protect in case of flooding or a bad runoff event. They are also releasing for the living river flows.

Ms. Grosse commented that the forecast for tomorrow indicates that a cold front is coming in tomorrow which will give us 6" to 12" above 8500 feet.

Mr. Pushard asked about the diversion and the intake work at Buckman.

Mr. Erdman said they basically built an enormous dam that is taking the water to the side and they are assessing the potential damage of the intake structure and what is needed to get it back operational again. At this point they are haggling over exactly what the causes are, but in general it is actually in better condition than they had expected. The diver went down there and at some point – basically it is looking better than what he had told them. This is not meant as a negative reflection on the diver but there is a lot of sand down there and it is looking better.

Mr. Pushard said he is going to arrange a tour of the inlets in Colorado and asked if the WCC members are interested to please let him know. The WCC members said that a Saturday would work best. It would be the San Juan Chama inlets diversion,

there are three up there. Interestingly they are not like ours, not like what we see on the Rio Grande, they are very different. They are located south – east & west of Pagosa, there are three and we will try to get in as one is on Indian Tribal land.

The Chair asked about the capacity of the water treatment plant, how much water is being pumped through there.

Mr. Erdman said we are running it at the highest capacity; it has more nutrients in the water than it often has had in the past because the diversion was flowing through the sediment that was at the bottom of the reservoir, it is picking up a lot of nutrients through the process. It is about 3.5 million gallons a day.

9. CLIMATE ACTION TASKFORCE

Councilor Ives reported that the taskforce has delivered its first report on the energy efficiency and renewable energy matters to the City Council and to follow will be some resolutions that have resulted from this meeting. At the Task Force meeting last Thursday, County Commissioner Holian who has the Food, Land and Water Working Group of the Task Force has indicated that their group would like to come forward next to present to the City Council which may likely happen in the first meeting in May. Chair Ives said this is an important meeting to attend and the WCC members would get copies of what the task force reports at that meeting.

Councilor Ives and Mr. Erdman are representing the city on the Jemez Sangre Water Planning Board are working together. Next meeting will be held on Thursday – April 16th. A planning meeting will precede and additional meeting in June and the Interstate Stream Commission has assigned a task to have everyone involved in any of these regional water planning efforts to come up by June with a statement of their water project priorities. This first meeting is gathering all the folks within the Jemez and Sangre area which includes Espanola and Los Alamos. It is not bounded by heavy boundaries or watershed boundaries.

Lisa Randall made a comment about Jeff Ethan who is putting together something called Green Our Schools. The City's Earth Day event is happening this Saturday from 10 am – 2 pm at the Geneva Chavez center. From 2pm – 4:30 pm there is a community conversation being organized by Jeff Ethan on Green in our Schools and Ms. Randall will be the key note speaker.

Mr. Wood asked if Ms. Randall would send her documentation to him for distribution. Ms. Randall will do so.

Ms. Randall said that the State released a list of the 7 energy service companies vetted by the State to do energy audits, recommendations, retrofits and installations for Higher Ed, Public Schools and government entities in the State of New Mexico. This is one thing that the Climate Action Task Force – Energy Efficiency renewable energy has put forth as an action item.

Chair Ives noted that Mayor Gonzales two Council meetings ago brought forth his green community initiative which a number of other Councilors including Councilor

Ives signed on as co-sponsors. That was accredited to being able to secure \$20 million dollars that have been sitting with the state for several years.

Ms. Wiman asked if the Climate Action Task Force has a website, he would like to know who is on the task force and learn more about it.

The Chair responded that meetings and information should be posted on the city website. The Chair said they are also in the process of working on different planning groups and more information will follow. John Alejandro is the Energy Efficiency Staff Person at the city level.

INFORMATIONAL ITEMS:

10. GROUP REPORTS FROM WATER CONSERVATION COMMITTEE INITIATIVES

- a. **GROUP #2- WATER CONSERVATION EDUCATION/OUTREACH**
Grace Perez: A meeting with Winnelson Plumbing Supply Company has been scheduled for May 8th to discuss existing rebates.

Ms. Randall asked if Ms. Perez would be educating Winnelson so they could educate their customers.

Ms. Perez said no, they would be educating their customers and there would probably be employees at this meeting as well.

- b. **GROUP #3- WATER CONSERVATION CODES, ORDINANCES & REGULATIONS – LEGISLATIVE UPDATE**

Mr. Pushard: SB279 was signed on Friday which is the new housing tax credit which extends the tax credit until 2026. It does not add any money and the water component does not go in to effect until 2017. Energy and Minerals needs to figure out how they will process the water. HB578 passed and Mr. Pushard will need to review. This is the HB that shows lines item that indicates how much money everyone gets. (Exhibit A)

Other Items: Ms. Avedisian has formed a working group to look at the MOS green listings. Amanda as a result of the WERS resolution that got passed, Amanda and Kathryn have formed a Green Building Code Committee that meet in City Hall at 10:00 am on Wednesday mornings to look at the green building codes and integrating WERS in to it. Mr. Pushard said it is his understanding that they look at the FIR and it was passed in the budget for their head count and they did clarify and what was submitted was historic head count numbers not WERS related head count numbers. Mr. Pushard said that he believes that the Resolution is official. The intent of the committee is to integrate WERS in to the Green Building Code and they will also look at updating the HERS numbers at the same time. They would like to do this quickly to get numbers back to City Council which will come through the WCC first.

Santa Fe Community College will take over the QWEL Training. Need to recommend optional trainers to Bob and Xubi. They will need to be either QWEL or IA certified. They are planning to make this an 8 week course in order to accommodate the landscaping community vs. a 16 week course.

Mr. Roth added clarification on the Sustainable building tax credit as to what happens to houses that are in the pipeline now in regards to funding down the road because there is no money until 2017 and they need to clarify the acceptance of those current applications. Essentially if you apply now you are applying under the new regulations.

Mr. Pushard asked if someone from the City signed up for the WERS Pilot. Caryn Grosse said she received the link but has not signed up. Mr. Pushard said he would like to get staff on the WERS Pilot so they could see the changes as they are being put through.

Mr. Pushard noted that last week they did a Webinar to recruit more partners; both the city and county were invited. Several people from Florida, California, Boston, etc. joined in. It is fascinating that several others around the country are joining in.

Mr. Pushard said he is beginning to work the launch plan for version 1.0.

Mr. Pushard said that interestingly enough, water companies did not participate.

c. **GROUP #4- REESTABLISH TREND OF NET ANNUAL REDUCTIONS IN PER CAPITA WATER USAGE AND IDENTIFYING LARGE WATER USERS**

Mr. Michael, nothing to report at this time.

Ms. Randall reported that SFPS did not make that list.

d. **GROUP #5-WATER SYSTEM MAP**

Andrew Erdman and Mr. Wiman have met and discussed the creation of the map which will serve as an educational tool. For example if you looked at the reservoirs it will tell you how much water has been stored. The goal is to put as much information in this map about water. There is a new employee, Marquita Ortiz and she has a degree in Geography who will be an asset in the creation of this map. Mr. Wood asked if water quality would also be included and Mr. Erdman said absolutely they would include that.

Timeframe: Mr. Erdman said that there is a great amount of research to put together and the GIS data will need to be populated which is one element of the data. At this point it will take possibly 2 months to complete.

Mr. Wiman offered help from any of the committee members.

MATTERS FROM STAFF:

- Search Process for Water Conservation Manager
Mr. Wood stated that the search process has not progressed. The understanding is that there may be a possibility of hiring in a temporary position. HR has not provided the reasons for the delay.

Letter of resignation has been received from Ms. Karyn Schmitt. Mr. Wood distributed a Certificate of Appreciation for Ms. Schmitt and asked the WCC members to send a note to Karyn.

MATTERS FROM COMMITTEE:

- 2015 Meeting schedule was included in meeting packet.
- Mr. Pushard asked about the annual water report; when can they expect the 2015. Mr. Erdman said he would provide a response at next meeting.
- Mr. Pushard had submitted a topic request on what the rebates were for last year. Can that be placed on next meeting agenda?
- Ms. Randall said that last year she was able to send around the Water Conservation Proclamation that was written by several of the members. She just received this year's and it will be the same as was submitted next year. Ms. Randall will send a word version to the WCC for review and input.
- Mr. Michael asked if there has been any progress on new assignments to the committee. The chair reported that recently as in the New Mexican, many of the committees are being reviewed as to term status on committee and mission of each committee.
- Mr. Michael asked about the policy on unexcused absences.
3 unexcused absences are automatic dismissal.
Ms. Randal: Excused absences, are there any penalties?

Mr. Wood said that members are to notify the staff liaison if they are not attending. With all due respect, the excused absence is accepted if the call is made and the Chair concurs.

MATTERS FROM PUBLIC:

Mr. Otto reported that the fishing derby is scheduled for May 16th. It is earlier this year to assure that we hit the flows.

Andy Otto – 17,000 ac. - \$600,000 for management – the concept is to get the collaboration going and to continue to get grants.

Chair: Water Fund website, MOU – asking people to sign on.
Rio Grande Forest Restoration Fund, check on name through Nature Conservancy Rio Grande Water Fund.

NEXT MEETING – TUESDAY, MAY 12, 2015

CAPTIONS: MONDAY, APRIL 27, 2015 @ 3 PM

WEDNESDAY, APRIL 29, 2015 @ 3 PM

PACKET MATERIAL:

ADJOURN

There being no further business to come before the Water Conservation Committee, the meeting was adjourned at 5:10 pm

Signature Sheet:

Councilor Peter 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 *RC*

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

DATE: April 23, 2015

SUBJECT: 44th Monthly Update on Drought and Water Resource Management

ESA/Silvery Minnow Update

There are no new updates on endangered species related to our water supply (e.g., silvery minnow, SW willow fly catcher, yellow billed cuckoo, etc.). River and wetland conditions are still expected to be challenging unless significant monsoonal activity occurs. All resource agencies will attempt compliance with the prevailing Biological Opinion.

CURRENT UPDATE – GENERAL WATER RESOURCE MANGEMENT

As the Committee/Board is aware, our region is still suffering through a drought. Our region has gone through four consecutive years of record drought and heat, and it appears that we are in our fifth year of drought – albeit drought conditions have eased slightly. This drought is likely present significant challenges to all water purveyors, utilities, and irrigators going forward into the rest of this water-year.

Most models are still predicting the likelihood of a return of an El Nino weather pattern, 50%-60% chance of a return to El Nino conditions with normal to above normal precipitation over the spring and summer. The most recent April NOAA ENSO update states that:

ENSO- (El Nino) conditions continue to improve with increasing equatorial sea surface temperature (SST) anomalies continuing across the Pacific Ocean. There is an approximate 50%-60% chance of El Nino conditions will continue through summer 2015.

It is worth noting that City of Santa Fe has invested in a robust and diverse portfolio of four distinct water supply sources that allows for flexibility in meeting demand: Buckman well field, City well field, Canyon Road Water Treatment Plant on the Upper Santa Fe River, and the

Buckman Direct Diversion on the Rio Grande. Supply from these groundwater and surface water sources are expected to be adequate in meeting local demands. The City also has a considerable amount of SJCP water stored ("banked from previous years") in reservoirs upstream from the BDD diversion, and that water could be called for if needed over the coming 2 or 3 years.

LOCAL CONDITIONS

Source of Supply Utilization Summary

March 2015

City Wells	0.276mg/m	0.85af/m
Buckman Wells	0.00mg/m	0.00af/m
CRWTP	99.24mg/m	304.56af/m
BRWTP	34.84mg/m	357.70af/m
<i>Other Wells(Osage, MRC, etc)</i>	<i>0.00mg/m</i>	<i>0.00af/m</i>

Upper Santa Fe River/CRWTP

	Total Combined Reservoir Level	Santa Fe Snow Gage	Reservoir Inflow
April 23, 2015	14.3.0%	31.00 inches	4.78 MGD
5-Year Average for This Date (2010 – 2014)	54.37 %	23.02 inches	6.13 MGD

As of April 23, 2015 total combined storage in Nichols and McClure reservoirs is 14.3% of total (or about 572 acre-feet of storage out of 4,000 acre-feet of capacity). Some flows have been by-passed or released due to construction on the new intake facilities and the start of irrigation season. Inflows are expected to continue for the near future and so the reservoirs have been managed to allow for water treatment plant production, active construction, irrigation, and draining/drying.

Buckman Regional Water Treatment Plant (BDD)

Flows in the Rio Grande are relatively high for this time of year (earlier than normal runoff), and turbidity has been generally good. The BDD has been able to divert and treat in line with demand with the exception of time off-line for repairs/maintenance to the diversions structure.

REGIONAL CONDITIONS

Rio Grande Basin

Surface flows in the Rio Grande and its tributaries through mid-April have been relatively good. However, storage levels in regional reservoirs are still very low (see attached figure). There was very little carry-over storage from 2014 into 2015. There are no new updates regarding Wild Earth Guardians legal actions or endangered species issues.

San Juan Basin

It should be stressed that, conditions could significantly worsen for San Juan Chama Project deliveries this coming year, if the drought persists, due to a lack of carry-over storage in Heron from last year to this year. Heron Reservoir is currently at a very low level. Recent estimates by the BoR suggest that the deliveries from the San Juan-Chama Project should be about 50%- 55% of normal firm yield, but if there are dry conditions and unseasonably warm temperatures, these figures will likely continue to be revised downward.

Rio Grande Water Fund/Watershed Management Update

The Rio Grande Water Fund Charter will be going before Santa Fe City Council on Wednesday, April 29, 2015.

Contributors

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Established by the Center Agreement for the Southwest (CLIMAS), with support from the University of Arizona Cooperative Extension, the Arizona State Climate Office, and the New Mexico State Climate Office.

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April Southwest Climate Outlook

Precipitation: In the past 30 days, most of the southwestern U.S. received below-average precipitation (Fig. 1). The winter wet season is wrapping up, and instead of above-average precipitation (as many of the El Niño influenced seasonal forecasts suggested), water year observations since October 1 show below-average precipitation across much of Arizona and portions of New Mexico. The situation is dire in other western regions, with California, the Pacific Northwest, and the Intermountain West recording significantly below-average winter precipitation (Fig. 2).

Temperature: In the past 30 days, temperatures were above-average across Arizona and New Mexico, with anomalies between 4 to 8 degrees F above average across most of the region (Fig 3). In the six months since the water year began on October 1, Arizona, California, Nevada, Oregon, and Washington saw record-warm average temperatures (Fig. 4).

Snowpack: High temperatures and below-average precipitation led to limited snowpack across the western U.S. As of April 16, snow water equivalent (SWE) is below average in every basin in the West (Fig. 5). In our region, SWE ranged from 0 to 32 percent of average in Arizona and 0 to 50 percent of average in New Mexico.

Drought & Water Supply: The U.S. Drought Monitor highlights persistent drought conditions across the West and identifies both short- and long-term drought conditions in Arizona and New Mexico. Total reservoir storage in March was 45 percent in Arizona (same value as last year) and 26 percent in New Mexico (compared to 24 percent last year) (see reservoir storage on page 5 for details).

Wildfire: There is potential for wildfire in any month of the year, but March through June is the windiest time of year (see page 4), which increases likelihood of red flag warning days. This is also one of the driest times of the year, so all eyes are on fire risk potential from now through the onset of the monsoon.

El Niño: Despite a relatively late start, El Niño continued for a second consecutive month, with potential for a stronger event as we look forward towards summer and fall of this year (see page 3 for details).

Precipitation & Temperature Forecasts: The April 16 NOAA-Climate Prediction Center seasonal outlook predicts above-average precipitation this spring into summer for most of the Southwest and Intermountain West, although California and southern Arizona are notable exceptions. Temperature forecasts remain split across the region, with elevated chances for above-average temperatures along the West Coast and eastward into Arizona (and most of the western U.S.), and increased chances for below-average temperatures in western Texas and into eastern New Mexico.

Streamflow Forecasts: The April 1 forecast for the Colorado, Rio Grande, and Arkansas river basins project well below-average streamflow for Arizona and New Mexico. This pattern is repeated across much of the western U.S., especially in Utah, Nevada, California, New Mexico, and Arizona (Fig. 6), following the unusually warm and dry conditions in March.



Tweet April SW Climate Outlook

CLICK TO TWEET

Apr 2015 @CLIMAS_UA SW Climate Outlook - El Niño Sticks Around, Snowpack, Drought, Streamflow, and Wildfire <http://bit.ly/1DNxUNI>



Online Resources

Portions of the information provided in this figure can be accessed at the Natural Resources Conservation Service

Arizona, <http://f.usa.gov/9qz25d3>

New Mexico, <http://www.wcc.nrcs.usda.gov/bin/reserv.pl>

pl?state=new_mexico

Notes

The map gives a representation of current storage for reservoirs in Arizona and New Mexico. Reservoir locations are numbered within the blue circles on the map.

Corresponding to the reservoirs listed in the table. The cup next to each reservoir shows the current storage (blue fill) as a percent of total capacity. Note that while the size of each cup varies with the size of the reservoir, these are representational and not to scale. Each cup also represents last year's storage (dotted line) and the 1981–2010 reservoir average (red line).

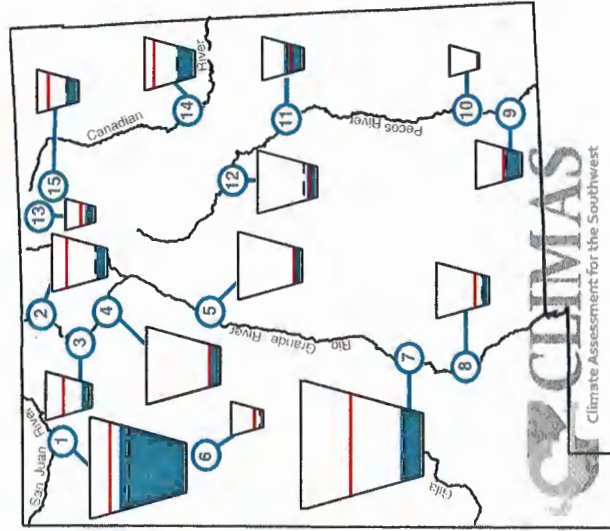
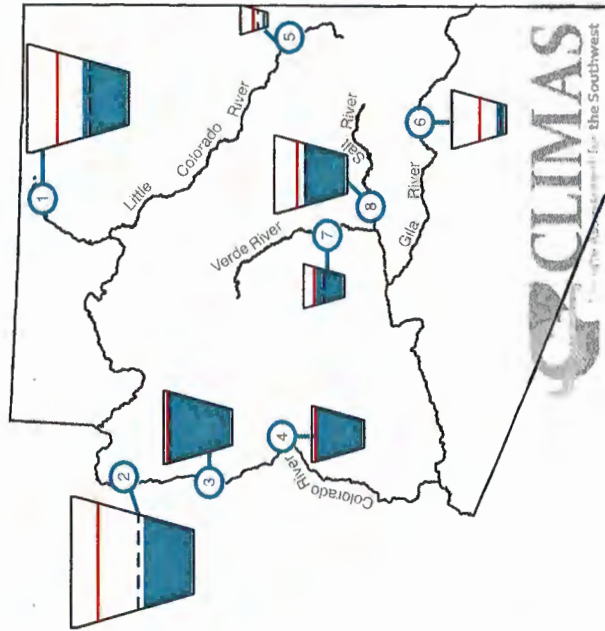
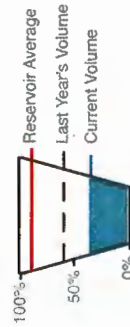
The table details more exactly the current capacity (filled as a percent of maximum storage). Current and maximum storage are given in thousands of acre-feet for each reservoir. One acre-foot is the volume of water sufficient to cover an acre of land to a depth of 1 foot (approximately 325,851 gallons). On average, 1 acre-foot of water is enough to meet the demands of 4 people for a year. The last column of the table lists an increase or decrease in storage since last month. A line indicates no change.

These data are based on reservoir reports updated monthly by the National Water and Climate Center of the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

Reservoir Volumes

DATA THROUGH MAR 31, 2015

Data Source: National Water and Climate Center, Natural Resources Conservation Service



Reservoir	Capacity	Current Storage*	Max Storage*	One-Month Change in Storage*
1. Lake Powell	45%	10,917.0	24,322.0	-107.0
2. Lake Mead	40%	10,419.0	26,159.0	-349.0
3. Lake Mohave	94%	1,692.7	1,810.0	34.7
4. Lake Havasu	93%	577.9	619.0	-0.1
5. Lyman	16%	4.8	30.0	0.6
6. San Carlos	16%	138.4	875.0	-3.3
7. Verde River System	66%	188.5	287.4	62.4
8. Salt River System	57%	1,146.5	2,025.8	43.2

*KAF: thousands of acre-feet

Reservoir	Capacity	Current Storage*	Max Storage*	One-Month Change in Storage*
1. Navajo	68%	1,150.4	1,696.0	54.0
2. Heron	17%	67.6	400.0	6.3
3. El Vado	20%	37.3	190.3	20.1
4. Abiquili	11%	133.5	1,192.8	-0.3
5. Cochiti	10%	48.7	491.0	-0.2
6. Bluewater	6%	2.4	38.5	0.0
7. Elephant Butte	17%	368.1	2,195.0	39.4
8. Caballo	11%	36.1	332.0	0.8
9. Lake Avalon	33%	1.3	4.0	-1.9
10. Brantley	8%	84.9	1,008.2	0.4
11. Sumner	45%	45.6	102.0	-2.7
12. Santa Rosa	16%	71.2	438.3	1.9
13. Costilla	30%	4.8	16.0	0.8
14. Conchas	33%	84.4	254.2	-0.1
15. Eagle Nest	26%	20.5	79.0	2.2

*in KAF = thousands of acre-feet

Online Resources

Figure 1.

Australian Bureau of Meteorology
<http://www.bom.gov.au/climate/ensoi/index.shtml>

Figure 2.

NOAA - National Climatic Data Center
<http://www.ncdc.noaa.gov/teleconnections/ensoi/>

Figure 3.

International Research Institute for Climate and Society
<http://iri.columbia.edu/our-expertise/climate/forecasts/ensoi>

Figure 4.

NOAA - Climate Prediction Center
<http://www.cpc.ncep.noaa.gov/products/NMME/current/plume.html>

2014-15 El Niño Tracker

Strong signals in early 2014 stalled, delaying El Niño's onset until last month, when ocean-atmosphere coupling and an additional Kelvin wave indicated more favorable conditions. Despite this late start, El Niño continued for a second consecutive month. Recent increases in sea surface temperature (SST) anomalies (Fig. 1 - 2) and ongoing convective activity associated with El Niño-favorable conditions indicate we might be witnessing a two-year El Niño event. These forecasts rely on projections during a time of increasing uncertainty, and the so-called "spring predictability barrier" continues to make it difficult to anticipate how seasonal changes will help or hinder El Niño.

The most recent forecasts continue to offer mixed signals regarding El Niño, but are more bullish this spring than last year. On April 9, the NOAA-Climate Prediction Center (CPC) issued an El Niño advisory with a 70 percent chance that El Niño will continue through summer 2015 and more than a 60 percent chance the event would last through fall. They pointed to the large Kelvin wave, along with ongoing ocean-atmospheric coupling, as an indication a weak El Niño event would linger, with potential for further development in the long term. On April 10, the Japan Meteorological Agency declared the El Niño event likely to have ended in winter 2015, with current conditions being ENSO-neutral, but also projected El Niño conditions could return by summer. On April 14, the Australian Bureau of Meteorology upgraded their tracker to "alert" status (one below an official El Niño designation), with warming in the tropical Pacific, weak trade winds, and projected additional ocean warming listed as contributing factors. On April 16, the International Research Institute for Climate and Society (IRI) and CPC forecasts highlighted increasingly favorable oceanic and atmospheric conditions, with an 80 percent probability of El Niño extending from summer into fall, and a 70 percent probability of El Niño extending into next winter (Fig. 3). The North American multi-model ensemble shows a weak event extending through the spring, with potential for a moderate or even strong event by summer or early fall (Fig. 4).

This El Niño event continues to defy expectations, with some models indicating conditions are strengthening rather than weakening during the spring transition. Forecasting or characterizing this event remains difficult given the lack of analog events in the historical record, and the complexity of this El Niño guarantees it will be of interest to climatologists for years to come. Seasonal forecasts continue to indicate an increased chance of above-average precipitation through much of the Southwest, likely tied to the presence of El Niño favorable conditions. Perhaps more interesting is the possibility of a repeat of 2014's tropical storm season, when conditions favorable to El Niño were thought to have been driving increased storm activity in the Southwest.

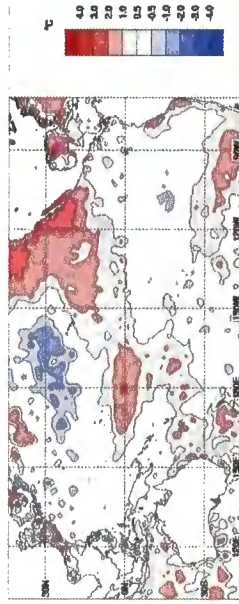


Figure 1: Mar 2014 Sea Surface Temperature (SST) Anomalies



Figure 2: SST Anomalies in Niño 3.4 & 4 Regions (NCDC)

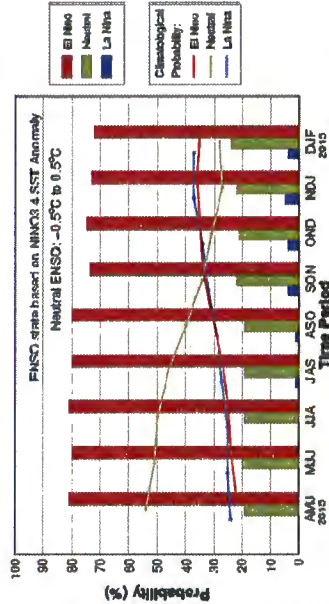


Figure 3: Mid-April IRI/CPC Consensus Probabilistic ENSO Forecast

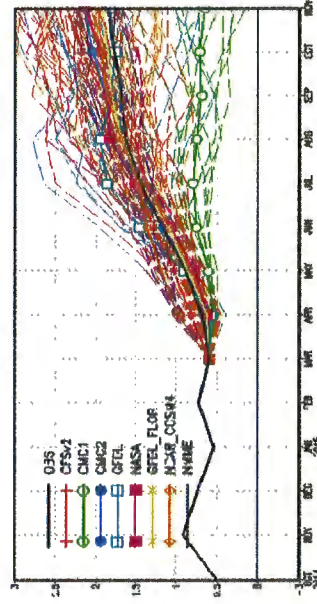


Figure 4: North American Multi-Model Ensemble Forecast for Niño 3.4

City of Santa Fe, New Mexico

memo

Date: April 27, 2015

To: Water Conservation Committee

From: Caryn Grosse, Water Conservation Specialist

Via: Rick Carpenter, Water Resources and Conservation Manager
Nick Schiavo, Public Utilities Department and Water Division Director

RE: 13th Annual Children's Poster Contest Theme Selection

Background:

Each year, the Water Conservation Office holds a contest for 1st through 6th graders to submit posters with a water conservation message. The winning entries are featured in the Water Conservation Calendar for the next year. The Calendar is one of the Water Conservation Office's most requested items; in 2015 nearly 5,000 were distributed (up from 4,000 in previous years) making this one of the most successful water conservation programs.

Request:

The Water Conservation requests that Water Conservation Committee vote to select one of the following themes which might be used for the 13th Annual Poster Contest:

- Then and Now; How did my parents/grandparents use water and how is it different from how I use water? (This ties in with 2015 campaign "It's Not Coming Back")
- What is Water For?
- Where Does My Water Come From?

Keep in mind that students find some ideas are easier to translate into a graphic message than others; while the Water Conservation Office does not wish to discourage anyone's idea, students will be encouraged to create images which do NOT include depictions of the earth. Trademarked and/or copyrighted materials, including reproduction of popular cartoons, are prohibited. The posters will be judged on:

- creativity
- design
- clarity
- water conservation message

The Grand Prize images, themes and deadlines from the last few years have been provided on the following page.



12th Annual Poster Contest (2014-15)

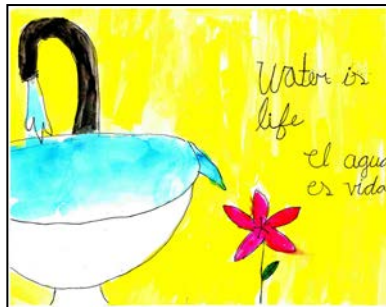
Theme: How Water Connects Us

Submittal Deadline: December 5, 2014

Judging: January 15, 2015

Awards Presentation: March 25, 2015

Grand Prize Winner: Meghan Kaschner, 6th grade, EJ Martinez Elementary



11th Annual Poster Contest (2014)

Theme: Saving Water is Always in Season!

Submittal Deadline: December 13, 2013

Judging: January 24, 2014

Awards Presentation: April 30, 2014

Grand Prize Winner: Molly Murphey, 4th grade, La Mariposa Montessori



10th Annual Poster Contest (2013)

Theme: Show Us Your Water Appreciation

Submittal Deadline: March 15, 2013

Judging: March 26, 2013

Awards Presentation: May 8, 2013

Grand Prize Winner: Tristen Lujan, 3rd grad, La Mariposa Montessori



9th Annual Poster Contest (2012)

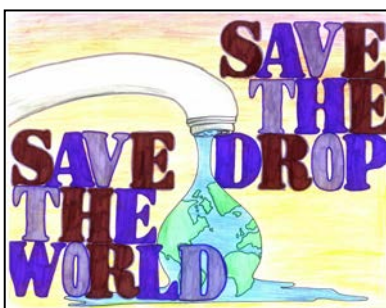
Theme: Living in a Drought!

Submittal Deadline: March 23, 2012

Judging: March 29, 2012

Awards Presentation: June 13, 2012

Grand Prize Winner: Sabrina De Domenico, 6th Grade, Santa Fe School for the Arts and Sciences



8th Annual Poster Contest (2011)

Theme: Fix a Leak

Submittal Deadline: March 25, 2011

Judging: March 31, 2011

Awards Presentation: May 11, 2011

Grand Prize Winner: Alicia Stewart, 6th Grade, Santa Fe School for the Arts and Sciences

Working Group #3 Update

Legislative Update

State of New Mexico has adopted UPC 2012 Code

City of Santa Fe will issue resolution adopting the same as a minimum

City of Santa Fe Sustainable Green Building Committee Update

A house built to the current 2009 UPC code would equate to a WERS 100 in the county, and under the City Green code, would require a min of 18 points (for instance the 2000 ft² home). I ran this city scenario through the WERS tool as well, and that equates to 97 if you just did (3) toilets with 1.28 gals/flush which is worth 18 points on the single line item. One alternate pathway could be to use an Energy Star Dishwasher (highest gals per cycle of Energy Star appliances is 4.25) and Clothes Washer with water factor less than 6.0, plus automatic drip irrigation. This equates to a WERS score of 87 (if using the same Energy Star appliances listed below).

Here is the full list of assumptions and inputs I used for the WERS score home, and expanded to meet the 2012 Green Supplement code prescriptions.

- 2000 ft, 2 under roof
- (3) Bedrooms, 2-1/2 baths
- (4) Occupants
- 2000 ft² softscape (exterior landscape) with automatic irrigation
- Flat roof
- No rainwater or greywater re-use since it's not currently required in the City or by this code
- Fixtures according to the code maximums. For toilets, 1.6 max is allowed when more the 30 ft upstream of the main drainline so I put one in; others are 1.28
- Clothes Washer – Code just says must be Energy Star product, so I picked the largest capacity (5.28 cu ft), highest water factor (4.3) Energy star model I could find
- Dishwasher – used the highest use per cycle allowed at 4.25
- No other water using equipment installed in the house such as RO, Evap cooler, humidification, etc
- Also assumes 1.5 gals water used waiting for hot water as measured at the farthest fixture from the hot water heater – so no recirc line or other strategy there. This is not addressed in the code that I can see. However, I also attached the county affidavit for this for anyone not familiar. It must be submitted with all new permits in the county. It offers a number of strategies to limit water wasting related to standing water in the hot water lines, one of which is “short hot water line distances” without a definition of what that is.

For outdoor, the 2012 code would require 12 WERS Best Practices points, just on the following lines:

- 2.2.2 Automatic irrigation installed and covering 80% or more
- 2.2.3 Rain Sensor or soil moisture sensor
- 2.2.4 Smart controller
- 2.2.9 Hydrozoning

We don't have specific Best Practices for the other prescriptive requirements of the code. I also did not find any of the Indoor Best Practices in the code, although the code does recommend Leak detection and automatic shut-off, just that IF installed they comply with IAPMO IGC115.

See sections 413.1 and 413.12 of the code regarding the Local Authority having the right to require certain stipulations. So if the City wanted to, they could require the qualified third party designer (2.6.1 worth 1 pt on our BPlist) and could require low water use plantings (2.1.1 worth 2 pts, and possibly 2.1.3 also worth 1-5 pts).

WERS Update

Partnerships:

1. A draft MOU has been sent from SFCC to The Coalition on curriculum training. The Coalition is currently reviewing.
2. I had a very positive preliminary discussion with the Executive Director of ARCSA regarding educational offerings. This topic is slated for their Board meeting in either May or June, but I reached out to ARCSA to get an understanding of their usual training parameters and to express an interest in working together. That interest was strongly reciprocated.
3. I will be having a similar call with the Alliance for Water Efficiency tomorrow morning. An update on that will be sent out before our next WERS meeting.

Technology:

Version 1 is in pilot test. Many improvements based on the inputs thus far. Working on version that is will incorporate the outdoors. First version is likely to mirror current Santa Fe code, Option B model (i.e. $\frac{3}{4}$ acre feet of water per lot) with the above requirements.

2015 Meeting Schedule

Santa Fe Water Conservation Committee

Location: City Councilors' Conference Room, 200 Lincoln Avenue

Time: 4-6 PM

Day: Second Tuesday of the month (except as noted)

Meeting Date	Caption Deadline, 3 PM	Packet Material Deadline, 3 PM
January 13, 2015	Tuesday, December 23, 2014	Monday, December 29, 2014
February 10, 2015	Monday, January 26, 2015	Wednesday, January 28, 2015
March 10, 2015	Monday, February 23, 2015	Wednesday, February 25, 2015
April 14, 2015	Monday, March 30, 2015	Wednesday, April 1, 2015
May 12, 2015	Monday, April 27, 2015	Wednesday, April 29, 2015
June 9, 2015	Friday, May 22, 2015	Wednesday, May 27, 2015
July 14, 2015	Friday, June 26, 2015	Monday, June 29, 2015
August 11, 2015	Monday, July 27, 2015	Wednesday, July 29, 2015
September 10, 2015 (Thursday)	Monday, August 24, 2015	Wednesday, August 26, 2015
October 15, 2015 (Thursday)	Monday, September 28, 2015	Wednesday, September 30, 2015
November 10, 2015	Monday, October 26, 2015	Wednesday, October 28, 2015
December 8, 2015	Friday, November 20, 2015	Monday, November 23, 2015