



# Agenda

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## Santa Fe River Commission Agenda

Thursday, August 8, 2019 (Round House Room), 6 pm to 8 pm  
City Offices at the Market Station Building at the Railyard  
500 Market Street, Suite 200, Santa Fe, NM  
505-955-6840

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES FROM JULY 11, 2019
4. COMMUNICATION FROM OTHER AGENCIES /COMMITTEES
  - a. SF Watershed Report (Andy Otto, [andy@santafewatershed.org](mailto:andy@santafewatershed.org), 820-1696 )
5. INFORMATION/DISCUSSION/ACTION:
  - a. Informational Item: River Monitoring Report, Alan Hook, Water Resources Division (Alan Hook, [aghook@santafenm.gov](mailto:aghook@santafenm.gov) , 955-4205)
  - b. Informational Item: Overview of the Upper Watershed and the bypass channel (Alan Hook, [aghook@santafenm.gov](mailto:aghook@santafenm.gov), 955-4205 and Melissa McDonald, [mamcdonald@santafenm.gov](mailto:mamcdonald@santafenm.gov) , 955-6840)
  - c. Discussion Item: Review of River Commission Goals ([zoe.isaacson@gmail.com](mailto:zoe.isaacson@gmail.com))
  - d. Action Item: RiverTalks Educational Series for Fall 2019 ([mamcdonald@santafenm.gov](mailto:mamcdonald@santafenm.gov), 955-6840)
6. MATTERS FROM STAFF
  - a. Stormwater Strategic Management Plan Report ([mamcdonald@santafenm.gov](mailto:mamcdonald@santafenm.gov), 955-6840)
7. CITIZENS' COMMUNICATION FROM THE FLOOR
8. MATTERS FROM COMMISSIONERS
9. ADJOURN

### Next Meeting:

- September 12<sup>th</sup>, Mayor's presentation of Muchisimas Gracias Awards
- September 12<sup>th</sup>, How the City of Santa Fe is implementing One Water principles in its water management strategies and its role along SF River (Bill Schneider, Water Resources Division, [whschneider@santafenm.gov](mailto:whschneider@santafenm.gov))

Next Scheduled River Commission Meeting is September 12, 2019  
Captions & Packet Material are due by 10 am on September 4, 2019  
*Persons with disabilities in need of accommodations,  
Contact the City Clerk's office at  
(505) 955-6521 five (5) working days prior to the meeting date.*

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Santa Fe River Commission  
August 8, 2019**

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**MINUTES OF THE SANTA FE RIVER COMMISSION  
THURSDAY AUGUST 8, 2019**

**CALL TO ORDER**

Anna Hansen, Acting Chair of the SF River Commission, called the meeting to order at 6:00 p.m. in the Conference Room of the Railyard Market Street Offices.

**1. ROLL CALL**

**Present:**

Andrew Black  
Phillip Bove  
Susan Coulter  
Anna Hansen  
Heidi Klingel  
Rachel Kullman  
Vanessa Springer

**Excused/Absent:**

Zoe Isaacson, Chair (excused)  
Emile Sawyer (Alternate)

Roll call indicated that a quorum was present.

**Staff and Others Present:**

Melissa McDonald, City of Santa Fe  
Allen Hook, Water Division  
Bill Schneider, Water Division  
Andy Otto, Executive Director, Santa Fe Watershed Association  
Neal Williamson  
Melissa Byers, Stenographer

\*NOTE: The original meeting packet is on file with City Staff. Any materials submitted at the meeting are marked as exhibits.

**2. APPROVAL OF AGENDA**

**MOTION:** Commissioner Coulter moved to approve the agenda as presented with a second from Ms. Klinger. The motion passed by unanimous voice vote.

**3. APPROVAL OF MINUTES FROM JULY 11, 2019**

**MOTION:** Commissioner Kullman moved to approve the minutes of July 11, 2019 as presented with a second from Ms. Coulter. The motion passed by unanimous voice vote.

#### **4. COMMUNICATION FROM OTHER AGENCIES/COMMITTEES**

##### **a. SF Watershed Report (Andy Otto, andy@santafewatershed.org, 820-1696)**

Mr. Otto stated the Santa Fe Watershed Association does the Adopt a River Program and now added the Adopt an Arroyo Program. He said that in July they had nine reaches; seven river and two arroyos. Thirty-nine volunteers picked up 45 bags of trash. There are also angel volunteers who come to town and pick up trash along the river. He said it's great to have clean river. He's been working on trying to get arroyo plans in place for the approximately 15 reaches.

#### **5. INFORMATION/DISCUSSION/ACTION:**

##### **a. Informational Item: River Monitoring Report, Alan Hook, Water Resources Division (Alan Hook, aghook@santafenm.gov, 955-4205)**

Allen Hook, City Water Resources & Conservation Section and Steven Finch, Contractor for John Shumaker & Associates presented a Power Point Presentation titled *Santa Fe River Target Flow 2018*, which is attached hereto as Exhibit "1."

Mr. Hook presented the following information in the presentation:

- Ordinance No. 2012-10 which has allowed for Santa Fe River target flows since 2012
- Santa Fe River watershed map and study area
- Photos of Santa Fe River below Nichols Reservoir gage
- 2018-2019 Santa Fe River Target Hydrograph: 300 AF
- Resolution 2017-81 which states:

"The governing body hereby:

1. Directs Water Division staff to study the hydrogeologic factors influencing or affecting releases or bypass flows into the Santa Fe River.
2. Supports the Water Division's use of CIP funds in the design and construction of infrastructure necessary to improve the diversion and delivery of water for irrigation and Living River flows and other uses.
3. Supports all actions and applications necessary to obtain credit for water releases to Santa Fe River
4. Directs staff to explore hosting fishing derby at Two Mile Pond

- Bypass Flows and Reservoir Releases
- *Santa Fe River target flow year 2018 (April 14, 2018 to April 14, 2019)*
- Santa Fe Snotel Site which had a graph of daily snow-water equivalent for Target year 2018 and a Graph of daily precipitation for Target year 2018
- Living River Target Graph for 2018
- Two Mile and Acequia Monitoring Locations
- Diversions
- Diversions Measurements: Cerro Gordo; Cerro Gordo Return; Acequia Madre; Acequia La Murella; TNC Diversion staff gage
- Upper Santa Fe River Acequia Diversions
- Water budget for the Santa Fe River from below Nichols Reservoir to below Two-Mile Pond, July 23, 2018 to March 16, 2019
- Groundwater Monitoring
- Summary
  1. Study of Hydrogeologic Factors
    - Stream flow monitoring including end of flow
    - Seepage studies
    - Groundwater monitoring
  2. Design and Construction of Infrastructure
    - Installation of monitoring system
  3. Evaluation of credit for water releases to Santa Fe River
    - Preliminary ASR and City Well Field Optimization Studies
    - Recharge from Living River supports City WF Optimization
  4. Annual Fishing Derby at Two Mile Pond
    - NMOSE determination there are no water rights for storing water
    - NMDG&F guidelines consider pond unsuitable for stocking trout

Commissioner Hanson asked if it states in the ordinance that the fishing derby has to move to two-mile pond.

Mr. Hook responded "no" it wasn't in the ordinance it's in the resolution. The Governing Body said check out these four things and one of them was to explore moving the Fishing Derby to Two Mile Pond.

Commissioner Hansen<sup>E</sup> said she thinks it's much more acceptable to have the Fishing Derby downtown.

Ms. McDonald said in dry years it's a challenge and the thought was whether it could be held higher up where there is water. She thinks the TNC is open to it and logistically it could be worked out. It would be a different event.

Mr. Hook said there are some legal ramifications, so their hands are tied and limited. He said there are creative ideas in this community, so we never know.

One of the commissioners said she was curious about the credit from groundwater infiltration.

Mr. Hook responded that it's an underground storage and recovery permit. We would look at how we could capture all that infiltration and later extract that water potentially for drinking water purposes or potable water. It's a process and it depends how extensive the monitoring is going to be. In some ways the City is already doing passive water recovery.

The Commissioner asked if the OSE is limiting the amount of water the City can pull out of their wells.

Mr. Hook said the City is only permitted for a certain amount. To add to that, an infiltration gallery or extraction well, that's a whole other permit and process with the OSE.

Commissioner Coulter asked a question about the Acequia Llano that they pull out of every day, she wanted to know if that is a grandfathered right.

Mr. Hook said part of the stipulation when they built Nichols pretty much buried the acequia so the consolation was that they would put a pipe through and deliver.

Commissioner Coulter asked when and how does the Acequia Madre ask for releases.

Commissioner Bove responded that it's on a schedule and has been for several years.

Commissioner Hansen<sup>E</sup> said the Acequia Madre goes into the Santa Fe River just past Frenchy's Park.

Mr. Hook said the head gate for the Acequia Madre is at Henry Lynch Road.

Commissioner Coulter said that since the release is to go to Agua Fria, there must be a gate around Ashbaugh Park. So much was going into the river, she asked how much was going into Henry Lynch.

Commissioner Hanson said there's a gate at the back of the Indian School, between Montano.

Commissioner Coulter said people have gone in there to plug it up.

Commissioner Bove said all the water should go through the Indian School gate and continue down to Henry Lynch Road.

Neal Williams, a member of the public, asked if the City measures any of the acequia flows in the diversions.

Mr. Hook said they measure Acequia Madre because they have a staff gage.

Mr. Williams said he saw in the report that said six measurements throughout the period.

Mr. Finch said when they do a seepage run, they account for any acequia diversions. So, they're measuring at that time.

Mr. Williams asked if those are the spot measurements.

Mr. Finch said there were some events when a seepage run was done, when nobody was taking water, supposedly. There were times when a run was done and people were taking water. So both were done.

Mr. Hook said they've done at least six throughout the irrigation season and or before. Last year in October, after the irrigation season was done, measuring throughout a day, all the different locations. There are nine locations all the way down the river.

Mr. Williams referred to the 1990 Anaya Court Order which said the water system must measure flow into acequias daily. Then in 2015, the amended stipulated agreement, the Court ordered the City to put in meters. He doesn't think that it ever happened, he said he was curious about who's measuring those daily.

Mr. Hook said that OSE is going to take that on. They already have one set up at Cerro Gordo. They're going to track Llano, through the City's meter that's on the four inch pipe that's coming out of Nichols. Eventually, they will have all that on their website.

Mr. Williams said the Court had said the City of Santa Fe shall install these and report results to the OSE. He said this report has estimates of acequia diversions that are based on releases of Nichols. He's talking about the annual hydrograph.

Mr. Hook said that Canyon Road does a daily measurement at Acequia Madre because there is a flume there. For Cerro Gordo, all they have is a measurement coming out of Nichols. He said they are not measuring twice a day, most of the time they are measuring once a day. With limited staff trying to treat water, that's where they are. The OSE has agreed to do the metering. He thinks they are taking leap forward. They've taken on that cost and they're going to take on that responsibility, which is great for the City.

Mr. Williams said he thought the Court was guiding the process.

Mr. Hook said that's a yardstick for the process, but the OSE has jumped into meter it, since they're the regulators.

Commissioner Hansen said that's who the City would report to anyways.

Mr. Hook said it's a three-way agreement between the Acequias, the OSE and the City.

- b. Informational Item: Overview of the Upper Watershed and the bypass channel (Alan Hook, aghook@santafenm.gov, 955-4205 and Melissa McDonald, mamcdonald@santafenm.gov, 955-6840)**

Ms. McDonald said this item was requested by Commissioner Coulter in response to a newspaper article by Richard Ellenberg which questioned whether the City was meeting its obligations.

Commissioner Coulter said the reason she was curious is because that article called out the River Commission. It said the River Commission had tried to fix it and the City wouldn't do it. She didn't know if the River Commission had tried to fix it. She didn't know how accurate the opinion piece was.

Ms. McDonald said she sent out the facilitated notes of the City setting up the living river ordinance. The previous Commission spent a lot of time on this issue. The City feels there are no water rights, specifically designated for the TNC pond, however, some seepage goes in there and there is a relationship there. Other people would like to see a more regular flow go into that pond. The City feels that would be a violation by constantly putting water in at that rate.

*Hansen*  
Commission Hansen referred to the graphic that had the TNC pipe.

Mr. Hook said it's not really a pipe, he showed where the gate was and showed where it ponds up. As for a pipe, it goes through a culvert. He also showed where the restoration channel with the gate is.

Commissioner Hansen questioned whether the water really goes in.

Mr. Hook said it does at certain flows it will pull through and pond. Last year there was primarily nothing because there was hardly any water coming through.

Commissioner Coulter didn't understand what the author of the article wanted. She guessed more water, more consistently and an agreement with the City. She said it seems like the pond has water.

Ms. McDonald said that it's been a wet year. In dry years, there's concern that it may be dry.

Commissioner Hanson said when this was acquired from PNM, there were no water rights. She said the Acequia de Llano has a lot of water rights. If TNC wanted to, they could lease some water rights from the Acequia de Llano. She said there are possibilities so they could get water on a regular basis.

Commissioner Coulter said she just wanted to understand the River Commission's previous involvement and what its position was, now that she's a member. She felt like the article was saying that the River Commission was on their side.

Ms. McDonald said it was a divided group at the time. She included the recommendations that the River Commission agreed upon that went to the Governing Body. That is the only official position that this body has taken. There is a reference to two-mile pond which they suggested looking into purchasing water rights or buying well water from the City.

Mr. Hook referred to the administrative procedures and goals, one of them is to improve the river for a riparian habit. Another goal is getting it as far down as possible; another goal is educational purposes. He said once the City bypasses its right to deliver water, its not in charge of where that water goes.

Commissioner Hanson asked if the OSE had made an opinion about this right.

Ms. McDonald said "yes," it was included in the packet that was sent out.

Mr. Williamson said he wanted to state the other interpretation of water rights, which some of the prior River Commissioners agreed with. He referred to a 2010 letter from Bruce Richardson of the State Engineer's Office. The letter was to Claudia Borchert of the City and to TNC, wherein he said the State Engineer has no authority to dictate channel alignment, if the water is delivered to beneficial use via the bypass channel, that's the diversion. He said the Nature Conservancy does not divert water. Diversion is taking water out of the natural channel and putting it to beneficial use. In his opinion and the old State Engineer's opinion is that the restoration channel is the river. It was the natural bottom of the Water Shed. That was not a diversion to return water to its natural riparian channel. He said the diversion is the bypass channel and it serves Acequia Cerro Gordo only, in terms of water rights. Also, it serves a flood control function which is derelict at this point. He just wanted to point out that there is another

alternative. He doesn't think the Nature Conservancy should be asked to buy water rights to allow water to flow by gravity.

Bill Schneider commended the group for progress that was made last year. He said we were out of water basically trying to keep plantings alive. We were in the third worst drought in 75 years. The fact that the acequias were cooperating; delivering water to the head gates on the same day; and the fact that the City and the County were participating on contributing San Juan Chama water to keep the Buckman Director Diversion Operating so we didn't have to be 100% reliant on groundwater. There's a lot of successes that came out of this group.

**c. Discussion Item: Review of River Commission Goals (zoe.isaacson@gmail.com)**

Ms. McDonald wanted to do a quick recap of the Commission is doing so that everyone understands what they need to be thinking about.

Commissioner Coulter said besides the actual goals, there is the charter of the River Commission.

Ms. McDonald said the charter is less important. She said the goals that are in the packet are the last Commission's goals. Chair Isaacson would like the commissioners to be thinking about those goals. The Commission is going to be coming up with their own goals. The commissioners can speak with her or Chair Isaacson. She said Chair Isaacson wants to make sure the Commission channels its energy into things this Commission cares about, in the context of what the Governing Body needs from the Commission and what they're asking for.

Commissioner Coulter said on the first page, under the powers and duties, it has six items listed. That's what she was looking at to see if the thoughts she had lined up with any of the six. She asked if this is even in the charter of the River Commission.

Ms. McDonald said that's from the ordinance. In order to change the ordinance, there would need to be a sponsor from the Council, and it would require everybody to vote. The main thing it says is that the Governing Body can direct things to the Commission and ask for feedback as well.

**d. Action Item: RiverTalks Educational Series for Fall 2019  
(mamcdonald@santafenm.gov, 955-6840)**

Ms. McDonald reported that unfortunately the Canyon Road tour had to be cancelled because of the rain, it's a very muddy road and would have been difficult to get the vans through. The Water Division likes to make sure that we're conscious that it's a pristine area and we didn't want to tear everything up. She said there is a long list of people who want to take the tour. She's looking to the end of October to schedule another tour. She wants to make sure the Commission is interested in doing that. She needs two people committed to help with the tour because it takes a lot to organize. She is asking the Commission if this is something they want

her to work on.

Commissioner Coulter and Commissioner Black said they would be interested.

Commissioner Hansen said it would be good for all the commissioners to take the tour.

Ms. McDonald said a tour of Canyon Road and Buckman should be done every year.

One of the Commissioners said she was curious about how the July 20<sup>th</sup> River Talk went.

Ms. McDonald said it went wonderfully. She said it was a hot day, they were underneath a tree. She thought it was very educational. She learned a lot about soils, he did an excellent job on simplifying it for everybody. There was a diversity of things that were covered.

## **6. MATTERS FROM STAFF**

### **a. Stormwater Strategic Management Plan (mamcdonald@santafenm.gov, 955-6840)**

Ms. McDonald said she included this in the packet so the Commission could see what they are talking about. She said there have been two meetings so far, they're going to be doing three more in the next month. They are going to the community and talking about the stormwater master plan and talking about how it's going to be funded. She said they're getting great feedback. They didn't get as good a showing with the business community, so she was a little bit disappointed. She said there are 40,000 water users and that's where the stormwater fee comes from. It's usually \$3.00 on the bill or \$15 for a 1½ inch meter. A lot of people feel like it's not equal because it's not tied to what's being generated. One of the things being looked at is an impervious surface fee that's replacing the storm water fee or having a combination fee.

Ms. McDonald said she would let the Commissioners know the dates of the next meetings.

## **7. CITIZEN'S COMMUNICATION FROM THE FLOOR**

There were no communications from the floor.

## **8. MATTERS FROM COMMISSIONERS**

Commissioner Hansen asked the Commissioners to introduce themselves.

Commissioner Black said he was born and raised in Santa Fe. He currently works for the National Wildlife Federation. He has a law degree and is a Presbyterian minister. He is also a fly-fishing guide. He's passionate about being on the Commission because he grew up in this community and he knows the complex and many layers of the Santa Fe River; what it means to people and the identity of the culture. He wanted to understand more about the inside of the

Commission. He also covered public land and water issues when he was on the staff of Senator Bingaman and Senator Heinrich.

Commissioner Klingel said she grew up in Santa Fe. Her passion is the intersection between geology and earth surface processes and water and biology. She works for US Forest Service on various forests across the country, including the Santa Fe National Forest as a water shed manager, hydrologist and geologist.

Commissioner Coulter said she's been in Santa Fe since 1992. She is interested in the River Commission because she and her husband have lived between the Santa Fe River and Acequia Madre for 25 years. She's seen them when they go dry and she's seen them when they run. She's interested on how those entities allowed Santa Fe to grow and to be here, the culture and the history and how important they are. She doesn't have a background in the area. Her background is in computer science, she worked on the super computers in Los Alamos, she's retired now.

Commissioner Kullman said she is relatively new to Santa Fe; her husband grew up in Santa Fe and that's how she ended up here. She said she is a water rights engineer, she mostly worked in Colorado dealing with water rights. She said there's some overlap with what's going on here locally, but she has a broader interest in what's happening with the River and she wants to serve the community,

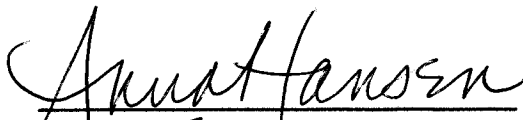
Commissioner Springer said she works for the New Mexico Environment Department as an environmental scientist. She has a broader natural resources background. She's done some wildlife research too focused in the Southwest. She said she's here because she's interested in how we manage our resources in Santa Fe, the biggest one being water and how a river flowing through a city can connect people.

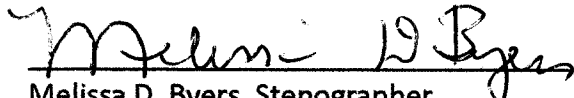
Commissioner Bove said he has been a commissioner on Acequia Madre Commission for 35 years. He's been in Santa Fe since 1964. The Acequia Madre goes right in front of his house. He's been on the Commission at least 12 years.

Commissioner Hanson said she is a Santa Fe County Commissioner. She has been in Santa Fe for 50 years. She grew up in Southern California and she fell in love with the mountains when she was 8 years old and she's lived here ever since. She's been on City boards since 2007. She was on the Parks and Open Space Advisory Commission before she moved to the River Commission. She loves being a Santa Fe County Commissioner and her door is always open.

## **9. ADJOURN**

The Santa Fe River Commission meeting was adjourned at 7:52 p.m.

  
Anna Hansen for Zoe Isaacson, Chair  
HANSEN

  
Melissa D. Byers, Stenographer  
Byers Organizational Support Services

Santa Fe River Commission  
8/8/19  
EXHIBIT 1

# SANTA FE RIVER TARGET FLOW YEAR 2018



Alan Hook, City of Santa Fe  
Steven Finch, JSAI

August 2019

Santa Fe River at  
South Meadows Rd bridge  
June 19, 2019



JSAI

Ordinance No.  
2012-10 has  
allowed for  
Santa Fe River  
target flows  
since 2012

CITY OF SANTA FE, NEW MEXICO

ORDINANCE NO. 2012-10

AN ORDINANCE

CREATING A NEW ARTICLE 25-13 SFCC 1987 REGARDING THE SANTA FE RIVER  
TARGET FLOW FOR A LIVING RIVER INITIATIVE.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SANTA FE:

Section 1. A new Article 25-13 SFCC 1987 is ordained to read:

25-13 [NEW MATERIAL] SANTA FE RIVER TARGET FLOW

Section 2. A new Section 25-13.1 SFCC 1987 is ordained to read:

25-13.1 [NEW MATERIAL] Short Title. Article 25-13 may be cited as the "Santa Fe  
River Target Flow Ordinance".

Section 3. A new Section 25-13.2 SFCC 1987 is ordained to read:

25-13.2 [NEW MATERIAL] Legislative Findings. The governing body finds that:

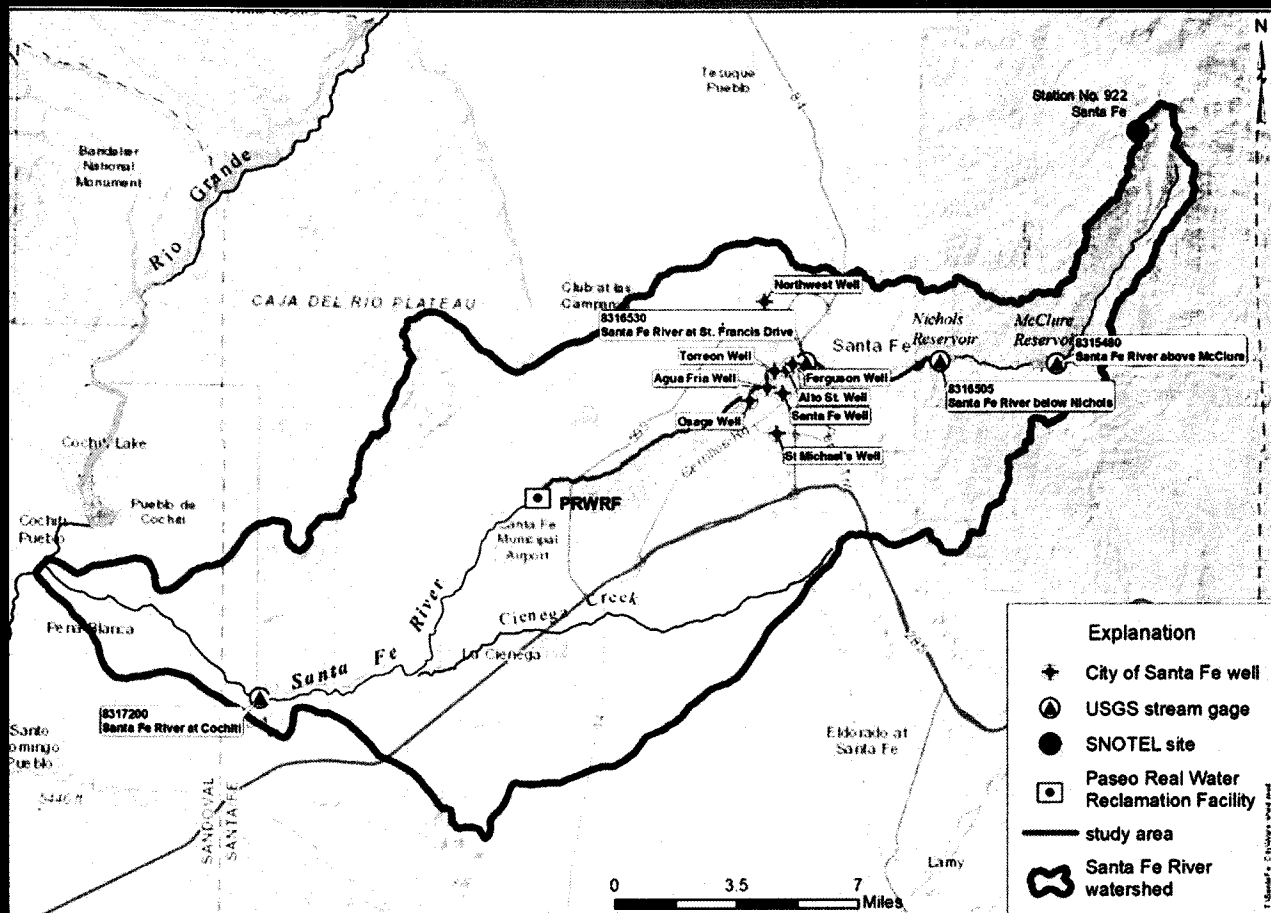
A. Through the adoption of Resolution No. 2009-47, Resolution No. 2010-15 and  
Resolution No. 2011-28 the governing body authorized the city to support a living Santa Fe River by  
allowing water to bypass McClure and Nichols reservoirs in 2009, 2010 and 2011.

B. The Santa Fe River is an important element of the city of Santa Fe and the city's  
origin was due to the existence of the river.

C. There is widespread community support for maintaining a living Santa Fe River for  
recreational and cultural purposes.

D. A healthy river provides riparian habitat for wildlife and minimizes erosion and flood  
damage, removes pollutants from storm water and helps recharge groundwater.

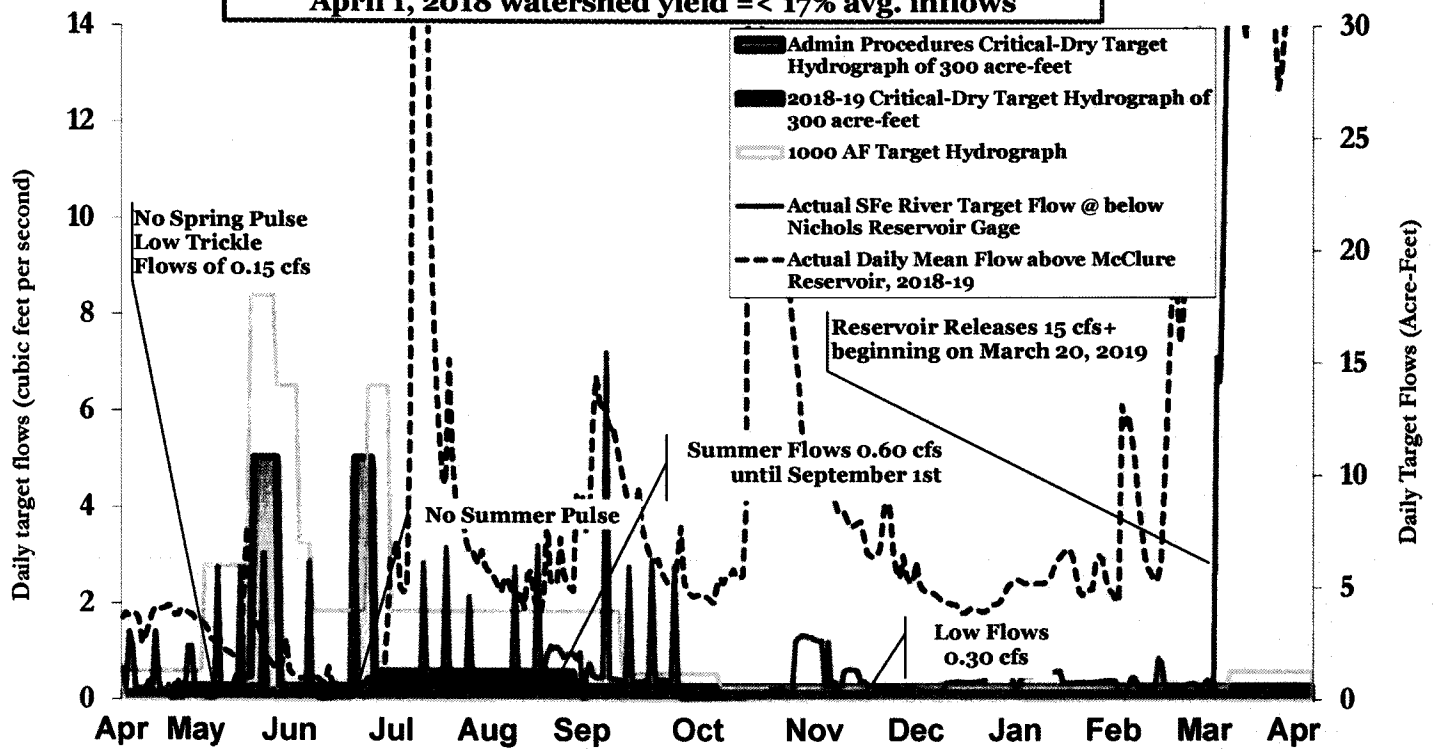
# Santa Fe River watershed map and study area



# Santa Fe River below Nichols Reservoir gage



**2018-19 SANTA FE RIVER TARGET HYDROGRAPH: 300 AF**  
**April 1, 2018 watershed yield =< 17% avg. inflows**



# Resolution 2017-81

The governing body hereby:

1. Directs Water Division staff to study the hydrogeologic factors influencing or affecting releases or bypass flows into the Santa Fe River.
2. Supports the Water Division's use of CIP funds in the design and construction of infrastructure necessary to improve the diversion and delivery of water for irrigation and Living River flows and other uses.
3. Supports all actions and applications necessary to obtain credit for water releases to Santa Fe River
4. Directs staff to explore hosting fishing derby at Two Mile Pond

CITY OF SANTA FE, NEW MEXICO

RESOLUTION NO. 2017-81

INTRODUCED BY:

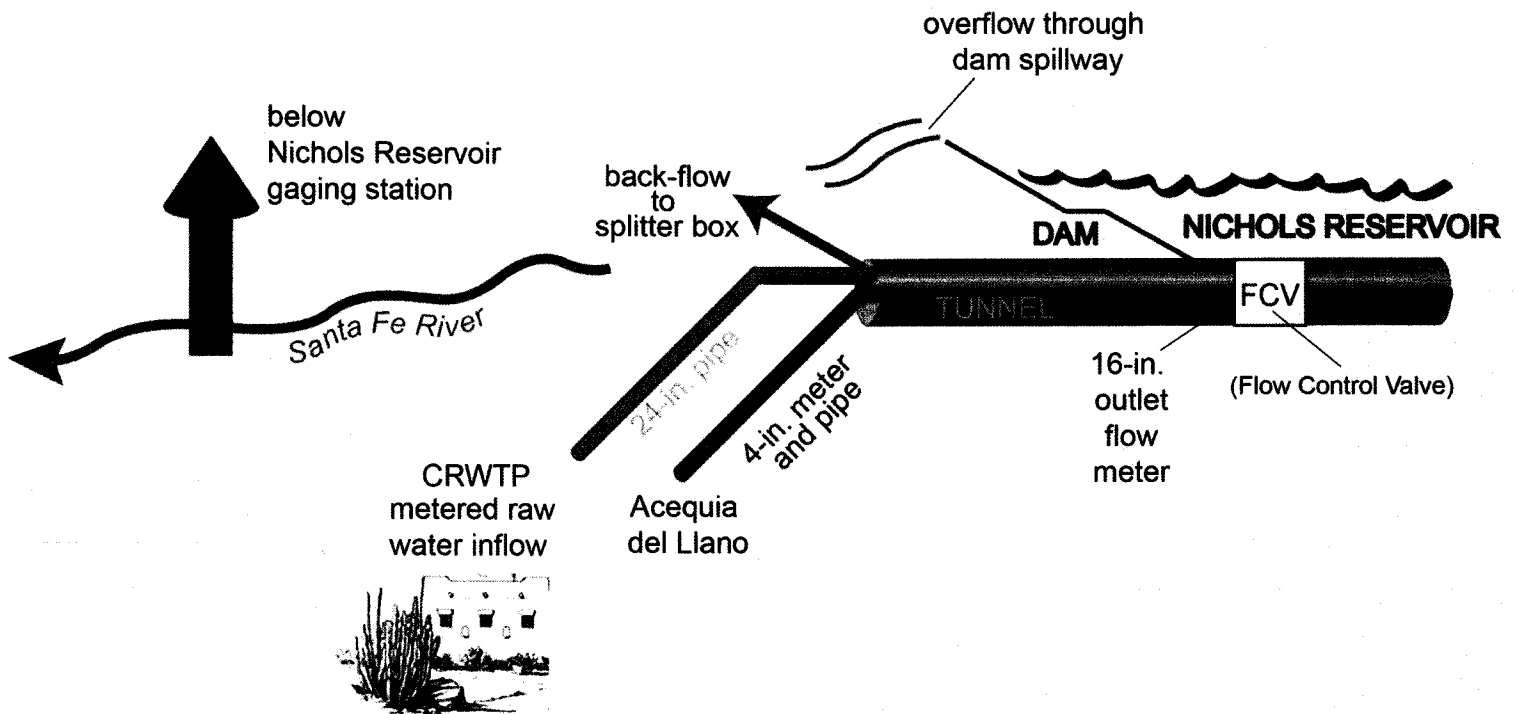
Councilor Peter N. Ives

Councilor Renee D. Villarreal

## A RESOLUTION

RECOGNIZING THE IMPORTANCE OF LIVING RIVER FLOWS TO ALL THE RESIDENTS OF SANTA FE; CALLING FOR THE STUDY OF RIVER AND HYDRO-GEOLOGIC CONDITIONS, AND THE BETTER MANAGEMENT OF BYPASSED FLOWS AND IRRIGATION FLOWS TO INCREASE EFFICIENCIES IN THE DELIVERY OF WATER TO THE ACEQUIAS; AND FOR THE FUTURE MANAGEMENT OF LIVING RIVER FLOWS FOR THE MAXIMUM BENEFIT OF THE CITY OF SANTA FE, ITS CITIZENS, AND THE CITY'S BENEFICIAL USE OF ITS WATER RIGHTS.

# Bypass Flows and Reservoir Releases



***Santa Fe River target flow year 2018 (April 14, 2018 to April 14, 2019)***

total volume of bypassed flows	1,702	100
loss due to evaporation	72	4.3
estimated acequia diversions *	36	2.1
evapotranspiration losses from Two Mile Pond system	38	2.3
streamflow past Paseo Real Water Reclamation Facility	1,031	60.6
streamflow infiltrated	525	30.8

***April 14, 2018 to March 14, 2019***

total volume of bypassed flows	319	100
loss due to evaporation	66	20.8
estimated acequia diversions *	36	11.1
evapotranspiration losses from Two Mile Pond system	35	11.0
streamflow past Paseo Real Water Reclamation Facility	1	0.4
streamflow infiltrated	181	56.7

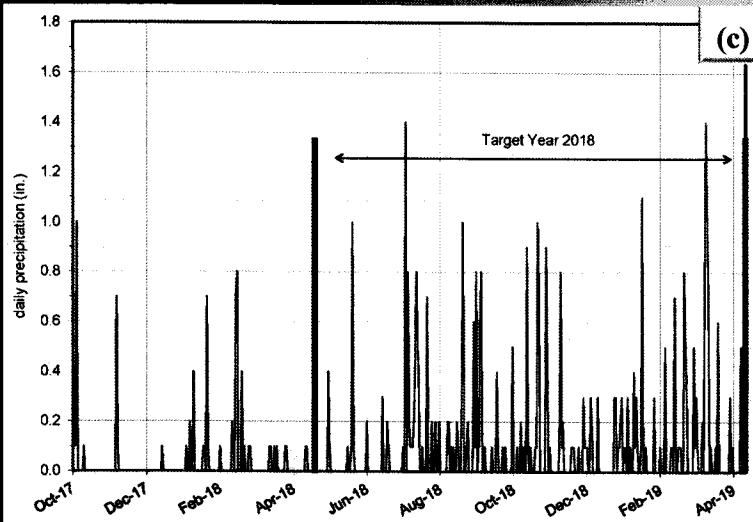
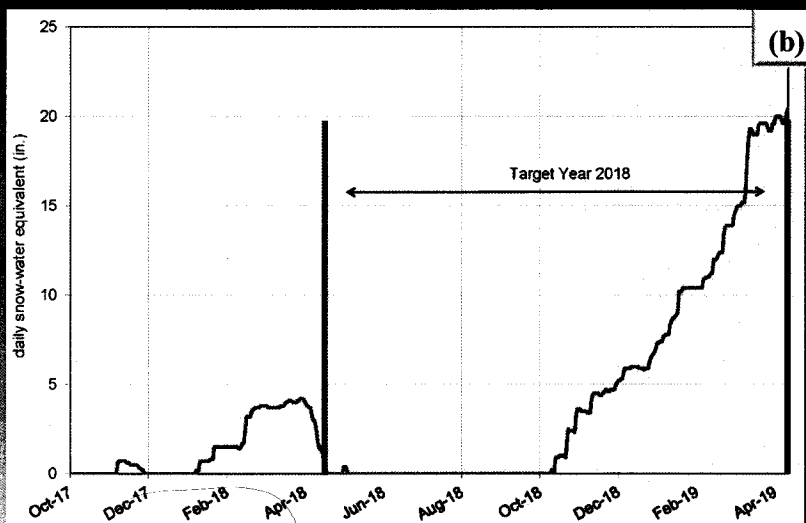
***March 15, 2019 to April 14, 2019***

total volume of bypassed flows	1,383	100
loss due to evaporation	6	0.4
estimated acequia diversions *	0	0.0
evapotranspiration losses from Two Mile Pond system	3	0.2
streamflow past Paseo Real Water Reclamation Facility	1,030	74.5
streamflow infiltrated	344	24.9

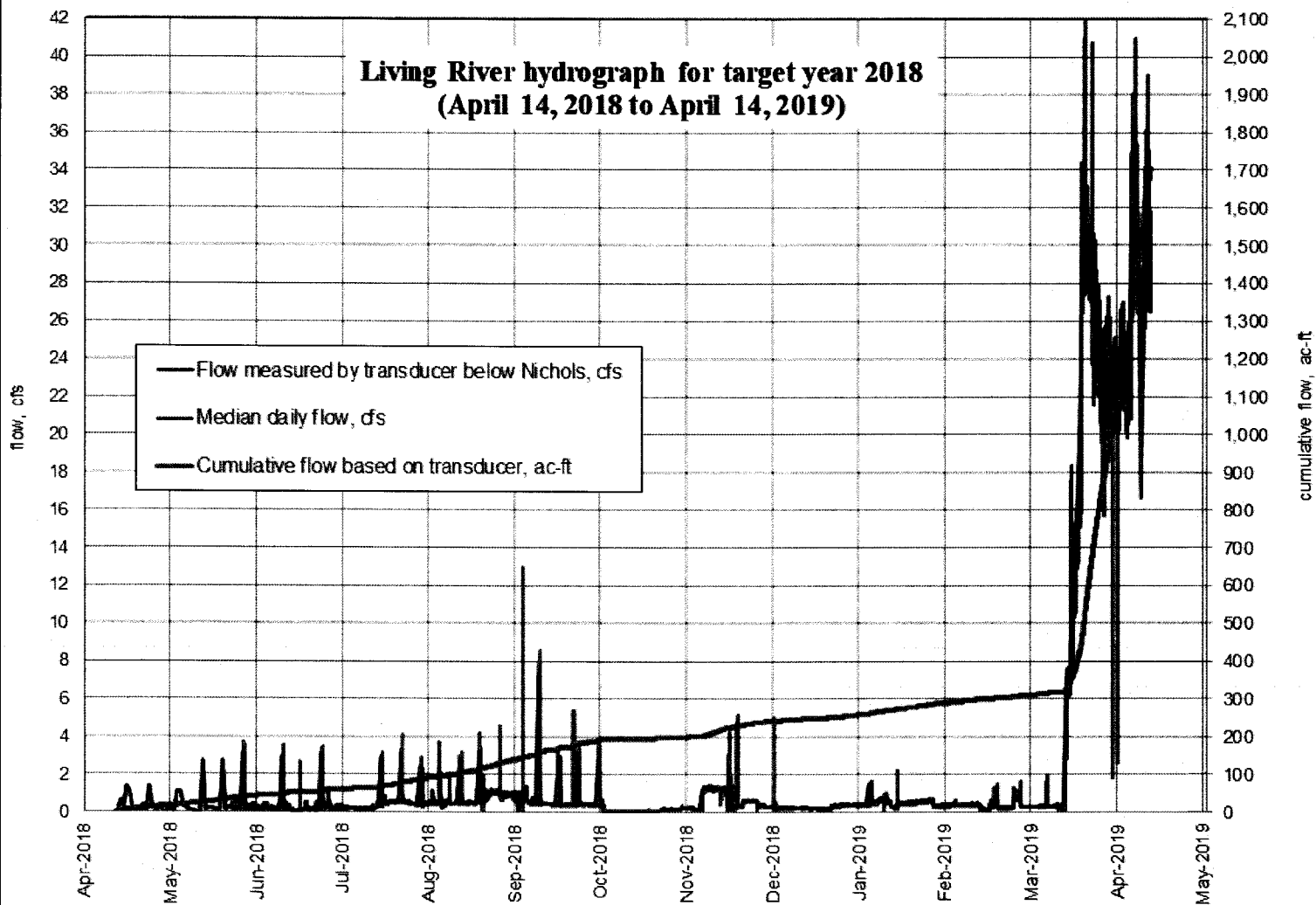
\* unmetered diversions estimated from increases in bypass flows on acequia delivery days

## SANTA FE SNOTEL SITE

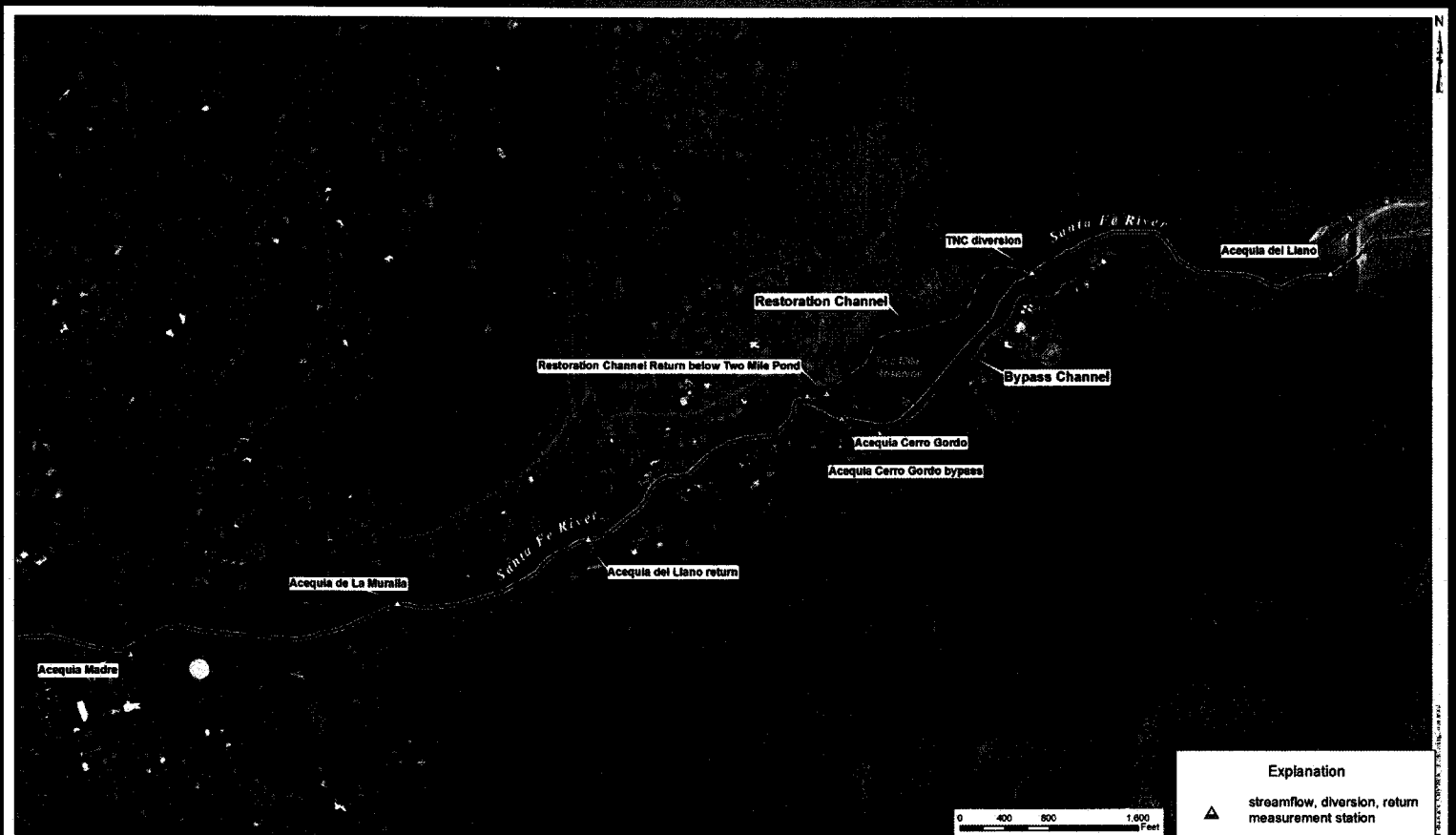
(b) Graph of daily snow-water equivalent for Target year 2018



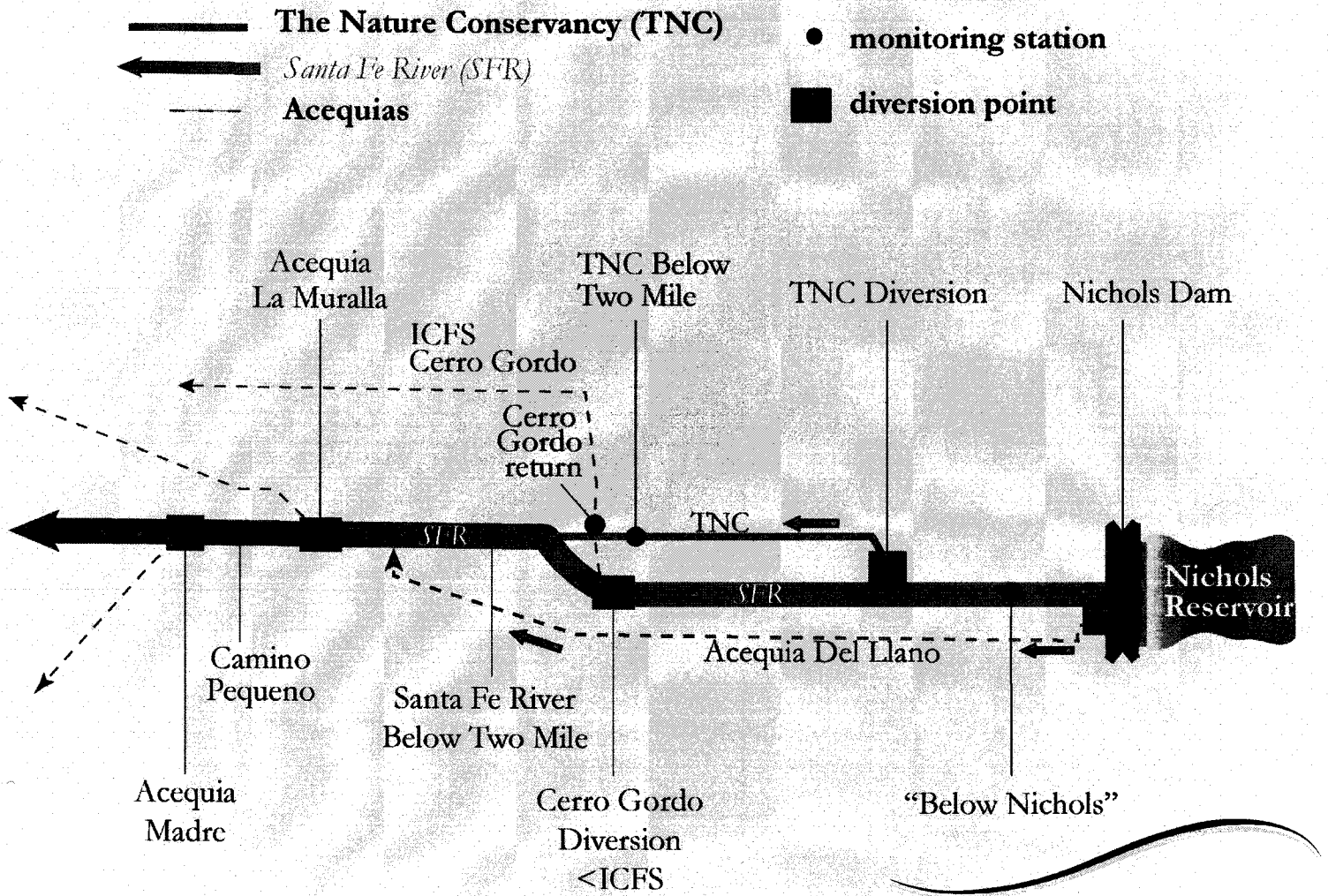
(c) Graph of daily precipitation for Target year 2018



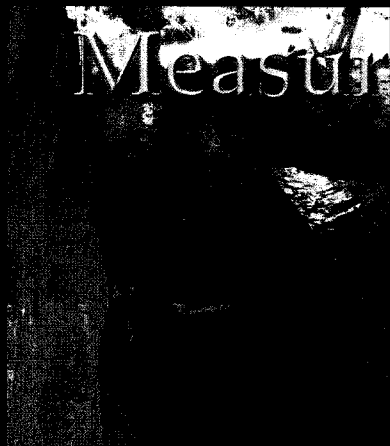
# Two Mile and Acequia Monitoring Locations



# Diversions



# Diversion Measurements



Cerro Gordo



Cerro Gordo Return



Acequia Madre



Acequia La Muralla



TNC Diversion  
staff gage

# Upper Santa Fe River Acequia Diversions

Acequia	Madre	Cerro Gordo	Llano	Muralla	Totals
<b>Length</b>	<b>7.6 miles</b>	<b>2,200 ft</b>	<b>8,200 ft</b>	<b>3,200 ft</b>	<b>10.18 miles</b>
<b>Irrigable Acres</b>	<b>14.21</b>	<b>1.91</b>	<b>17.77</b>	<b>5.58</b>	<b>39.47</b>
<b>FDR (afy)</b>	<b>38.37</b>	<b>5.16</b>	<b>47.98</b>	<b>15.07</b>	<b>106.58</b>
<b>Present Delivery Obligation (afy)</b>	<b>82.40<sup>1</sup></b> (PDR)	<b>11.08</b> (PDR)	<b>47.98</b> (FDR)	<b>15.07</b> (FDR)	<b>156.53</b>
<b>PDR (afy)</b>	<b>82.40</b>	<b>11.08</b>	<b>103.01<sup>2</sup></b>	<b>32.36</b>	<b>228.85<sup>3</sup></b>

<sup>1</sup> The PDR for Acequia Madre and Cerro Gordo were determined in a Court proceeding with the Office of the State Engineer.

<sup>2</sup> At present, there is no Project Delivery Requirement (PDR) for acequias Llano and Muralla, but using the PDR calculation that the Court employed for Acequia Madre and Cerro Gordo (5.7987 acre-feet/acre), we can estimate the PDR for the four upper acequias on the Santa Fe River

<sup>3</sup> This table is for illustrative purposed only and does not represent an admission by the City of Santa Fe in the Anaya adjudication or any other claim to determine water rights in the Santa Fe River.

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FIRST JUDICIAL DISTRICT COURT  
COUNTY OF SANTA FE  
STATE OF NEW MEXICO

NO. D-101-CV-1971-43347

HENRY P. ANAYA, *et al.*,

Plaintiffs,

Vs.

PUBLIC SERVICE COMPANY OF  
NEW MEXICO, *et al.*,

Defendants.

## ORDER ON ACEQUIA MADRE DE SANTA FE'S MOTION TO AMEND JULY 5, 1990 ORDER

This matter comes before the Court on the Motion of the Acequia Madre de Santa Fe Community Ditch Association ("Acequia Madre") for an order amending the Court's Order entered July 5, 1990 ("Order") (which was subsequently supplemented on August 20, 1991 by the Court's Order on Acequia Cerro Gordo's Motion for Supplemental Order on Interim Priority Enforcement). The Acequia Madre and the City of Santa Fe have reached agreement on the form of the Order and on an Amended Stipulated Operating Agreement which they request the Court to enter. The State of New Mexico does not oppose the proposed Order or Amended Stipulated Operating Agreement.

The Court having considered the matter and being advised in the premises, finds that the amounts of water rights adjudicated to members of the Acequia Madre under Consent Orders 11.381/11.382, 11.381/11.382A, 11.381/11.382B, 11.381/11.382C, 11.381/11.382D and 11.381/11.382E should be reflected in the Order, that the amount of water to be delivered to the

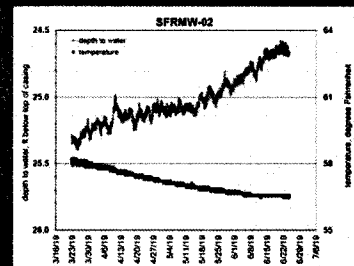
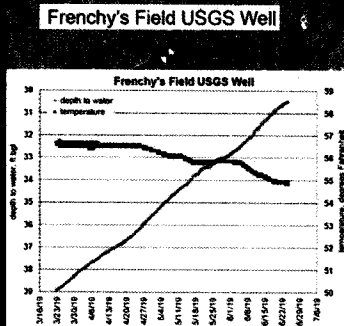
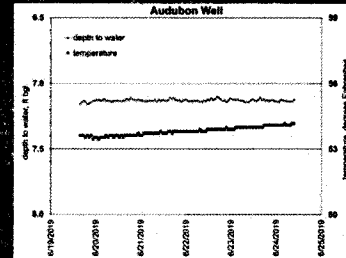
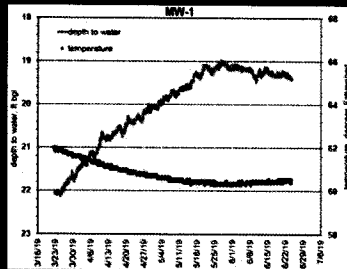
Water budget for the Santa Fe River from below Nichols Reservoir to  
below Two Mile Pond, July 23, 2018 to March 16, 2019

component	station	average flow (cfs)
midpoint outflow outflow	below Nichols river station	0.527
	Stilling Well A bypass station	0.458
	Stilling Well B bypass station	0.154
	TNC Restoration Channel return below Two Mile Pond	0.320
	(inflow – outflow)	0.053

Table B2. Measurements of streamflow (cfs) for  
Santa Fe River diversions in Target Year 2018

date	The Nature Conservancy Diversion	Restoration Channel Return below Two Mile Pond	Acequia de La Muralla Diversion	Cerro Gordo Acequia Diversion	Cerro Gordo Acequia Bypass	Acequia del Llano Return	Acequia Madre
5/3/2018	0.0	0.2	---	0.0	0.0	0.1	0.0
6/11/2018	0.0	0.1	---	0.5	0.0	0.1	0.1
6/25/2018	0.0	0.1	---	0.5	0.0	0.0	0.0
7/26/2018	0.0	0.2	---	0.2	0.2	0.0	0.0
7/30/2018	0.0	0.3	---	0.6	0.0	0.0	0.7
4/12/2019	0.1	0.9	---	>0.71	0.8	0.2	0.0

# Groundwater Monitoring



MW-1

SFRMW-02

Audubon Well

Frenchy's Field USGS Well

1

2

mi

## Summary

### 1. Study of Hydrogeologic Factors

- Stream flow monitoring including end of flow
- Seepage studies
- Groundwater monitoring


### 2. Design and Construction of Infrastructure

- Installation of monitoring system

### 3. Evaluation of credit for water releases to Santa Fe River

- Preliminary ASR and City Well Field Optimization Studies
- Recharge from Living River supports City WF Optimization

### 4. Annual Fishing Derby at Two Mile Pond

- NMOSE determination there are no water rights for storing water
  - NMDG&F guidelines consider pond unsuitable for stocking trout
- 

# THANK YOU, AND QUESTIONS



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Steven Finch Jr. [sfinch@shomaker.com](mailto:sfinch@shomaker.com)



CITY OF  
**Santa Fe**