



Agenda

DATE 7/3/18 TIME 11:48
PREPARED BY Melissa McDonald
SUBMITTED BY [Signature]

Santa Fe River Commission Agenda

Thursday, July 12, 2018 (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 JUNE 14, 2018
4. COMMUNICATION FROM OTHER AGENCIES /COMMITTEES
 - a. SF Watershed Report (Andy Otto)
5. INFORMATION/DISCUSSION/ACTION:
 - a. Information Item: Optional Water Management Practices in Support of the Santa Fe River Greenway Project (Andrew Erdmann)
 - b. Information Item: Update on the Santa Fe River Study-Monitoring & Management of River Flows (Alan Hook)
 - c. Information Item: Scoop-the-Poop Campaign Ideas (Erin Gantt)
 - d. Discussion Item: River Commission Mission Review (Zoe Isaacson)
6. MATTERS FROM COMMISSIONERS
7. MATTERS FROM STAFF
8. CITIZENS' COMMUNICATION FROM THE FLOOR
9. SUB-COMMITTEE BREAKOUT SESSION
10. ADJOURN

Next Scheduled River Commission Meeting is August 9, 2018
Captions & Packet Material are due by 10 am on August 1, 2018
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.

Santa Fe River Commission
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Information/Discussion/Action a. Information Item: Optional Water Management Practices in Support of the Santa Fe River Greenway Project (Melissa McDonald) b. Informational Item: Update on the SF River Study-Monitoring and Management of River (Alan Hook) c. Informational Item: Scoop-the-Poop (Melissa McDonald) d. Discussion Item: River Commission Mission Review (Zoe Isaacson)	<i>Postponed</i> <i>PowerPoint, Exhibit A</i> <i>Exhibit B</i> <i>Informational</i>	Page 3-8
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Adjourn/Signature Page	There being no further business to come before the Santa Fe River Commission the Chair called for adjournment at 8:10 pm	Page 9

Santa Fe River Commission
MINUTES
Thursday, July 12, 2018
6:00 pm to 8:10 pm

1. CALL TO ORDER

The Chair, Zoe Isaacson, in the Roundhouse Meeting Room, Market Station Building at the Railyard, 500 Market Street, Santa Fe, NM, called the Santa Fe River Commission meeting to order at 6:10 pm.

ROLL CALL

PRESENT:

Zoe Isaacson, Chair
Jerry Jacobi
Dale Doremus
F.M. Patorni, Alternate

NOT PRESENT/EXCUSED:

John Buchser
Phil Bové
Luke Pierpont
Anna Hansen
Emile Sawyer

OTHERS PRESENT:

Melissa McDonald, River and Watershed - Staff Liaison
Raquel Baca-Thompson, Admin. Dir. and Program Dir.,
Santa Fe Watershed Association
Alan Hook
Erin Gantt, Intern with City of Santa Fe
Anna Serrano for Fran Lucero, Stenographer

Introduction of Audience:

Bruce R. from the Acequia Cerro Gordo
Susan Colter, Audience
Raquel Thompson, Santa Fe Watershed Association
Steve Finch, Hydro geologist and works for John Shomaker and Associates Inc. who are contracted by the city.
Bill Snyder, City of Santa Fe, Water Resources Coordinator
Erin Gantt, Intern for the City of Santa Fe

2. APPROVAL OF AGENDA

Ms. Doremus moved to approve the agenda as presented, second by FM Patorni, motion carried by unanimous voice vote.

3. APPROVAL OF MINUTES FROM JUNE 14, 2018

Amendments:

Page 2: Information and Discussion Item 5A – ~~affluent~~ should be effluent

Page 8: septic systems (fills in the blank)

Page 9: 1st paragraph, last sentence – ~~wretched it down~~ should be ratchet it down

Mr. Jacobi moved to approve the minutes of June 14, 2018 as amended, second by Ms. Doremus, motion carried by unanimous voice vote.

4. COMMUNICATION FROM OTHER AGENCIES /COMMITTEES

a. SF Watershed Report – Raquel Baca Thompson

Next Thursday, Friday and Saturday the National Governor's Meeting will be in town, want to make sure the river is clean. Recruiting volunteers to go out and clean the river. Volunteers can contact the SF Watershed directly.

5. INFORMATION/DISCUSSION/ACTION:

a. Information Item: Optional Water Management Practices in Support of the Santa Fe River Greenway Project

Scott Kaseman from Santa Fe County asked that this item be postponed to August agenda due to the recent rains the plants got plenty of water and they thought it was sufficient. As the water came through it did take out quite a few of the cottonwoods and they can be replanted. Many of the willows were washed down but they will come back up. Some of the structures did have damage as the boulders got shifted and they are evaluating the flood damage and they are intending to apply for some insurance money to do repairs to the structures. The Chair asked about the status of the 1-year maintenance. Ms. McDonald said that there is a warranty period for a 1-year period; she is not sure what it is for the structure. There will be a point where the city will officially take over and the city will assess if everything has been checked off and in place. It probably is covered under that 1-year period as we are not meeting with them for a year.

b. Informational Item: Update on the SF River Study-Monitoring and Management of River (Alan Hook)

(Power point presentation followed by the commissioners) A CD will be sent to each Commissioner for their review due to the volume of the report. (133 pages) Exhibit A

Mr. Hook continued to present the report and referred to a memo with objectives and background as it will be going to Public Works. This is the Santa Fe River monitoring that occurred in 2016-17, an RFP went out and John Shoemaker and Associates were selected for the contract. Primarily over the last 2-years the objectives, Mr. Hook listed 5 in the memo, compliance with the living river initiatives, Ordinance 2012-10 and also established Chapter 25-Sec. 13. Subsequent to that was the administrative procedure, which was Resolution 2012-28. Administrative procedures as you may all be aware having read them a number of times, there is a whole section on monitoring, that is section 4.9 and many parts was to track straight flow and the wetted distance from the flow point. It also talked about future monitoring, soil moisture, ecological health

indicators, storm flow (being addressed in this report and information on water quality). It also has the infiltration of the flows, seepage rates through the rear corridor and finally surface water ground water interaction.

(Power Point presented)

Q&A with Mr. Hook and the River Commissioners.

Ms. Doremus: These findings are based on the small time frame of data collected?

Mr. Hook responded, yes.

Ms. Doremus said that it seems like it should be qualified to say based on this period of time. When she reads this and is says all we need is 3 CFS but it really may not be the case.

Mr. Hook stated that sustained is a qualitative measure.

Ms. Doremus asked, this data set is post 2 years, right and it doesn't extend into this particular draught season?

Mr. Hook stated that it would be nice to move this kind of water out. When you get sustained 3 CFS on the day you are measuring it all the way down from Nichols and it goes all the way down San Isidro given you have a dry, hot channel. It would take more than that and we are restricted to the inflows above the forest. This year is going to show you that it barely made it to Cerro Gordo Rd. because we only had .15 CFS. We will have some of the other information like 2-mile pond system because we have had to release to make irrigation deliveries for Cerro Gordo and Acequia Madre. Ideally if you could do this, if you had enough water and you could test out the system in an extremely dry year and see if it is only 3 CFS or will it take more than that or at 5.9 CFS will it continue or sustain flow to the waste water treatment plant continuously. But again we are limited by the stipulation of the effluent flows.

Ms. Doremus said she knows this is data on a slide but she does worry about that kind of statement later taken and being used for a different purpose.

Mr. Finch: Another way to look at it is you are not going to have 5.9 CFS when it is a year like this. We don't have to worry about our dry channel conditions; we just won't have the 5.9 CFS so you can't sustain that.

Mr. Hook said it doesn't necessarily say sustained, the data within the report is a graph; it is showing you what occurred during this period of time. It doesn't necessarily have that qualitative descriptor of sustained. That is a matter to a valid point and to be clear to everybody that this is sustained during the period that it was measurable.

Mr. Hook did confirm that they will continue the study and it will be different and they hope to do it into the following year as well. Again, also we would like to take advantage of this year and the following years that we are going to have more data based on those 15-minute intervals below Nichols Reservoir and also at St. Francis. Those were not available recently, it was a field measure for them

to go out and do those. That will give us a better picture, an aggregate of all the other information. This year won't show much for St. Francis but it will show some of the storm flows, which is valuable for the Storm Water plant.

The Chair asked if the data is available from the Storm Water plant to the regular citizen or city staff.

Mr. Hook said it would be available.

The Chair noted that it looks like there are 3 USGS sites above McClure, below Nichols and Cochiti. Are those the only 3 listed?

Mr. Hook said yes. We pay for two of those. The nice part for Santa Fe is the one between McClure and Nichols; Santa Fe River near Santa Fe is over 100 years. Most communities don't have gauging stations like that with a long period of records. It is a nice database to have for historical information.

Ms. McDonald stated that they have agreed to have reports regularly so the Commissioners will always have an opportunity to send questions to Mr. Hook for updating.

c. Informational Item: Scoop-the-Poop (Melissa McDonald)

Power Point (Exhibit B): Erin Gantt: City Intern from Water Division, attends the University of Georgia in Environmental Engineering

Scoop-the-Poop is a campaign to help dog owners to dispose of their dog's waste in a sustainable way. Recent water testing done in five different areas of the Santa Fe River proved the presence of fecal pollution, a majority of which came from dogs. 1/3 came from dogs, which we can control. A research was done with other cities and ideas are included. Colorado Springs has a video on their website to show how they can help. Another city has a pledge and small gifts if they commit to assist. There are suggestions in the power point. Unattended pet waste can harbor diseases transmittable to humans (cryptosporidium) giardia, salmonella, hookworms, ringworms and tapeworms. Children and pets are especially susceptible to this. These parasites spread more easily when pet waste makes its way into bodies of water. The waste acts as a breeding ground for toxic bacteria and alga. This toxic algae steals oxygen from fish and is harmful to wildlife. The City of Santa Fe has over 400 pet waste cleanup stations in the area to make a clean environment convenient for dog walkers.

Ms. Doremus asked what the distance of the testing was.

Ms. McDonald said it was Patrick Smith Park, Cerro Gordo, Paseo de Peralta, Guadalupe, Agua Fria by Frenchy's and Cerro Gordo.

The Chair asked what Ms. Gantt is working on specifically for Santa Fe?

Ms. Gantt: Working with the Water Division and Engineering. She is also working with Ms. McDonald to develop some expanded suggestions for the River Commissioners to consider at a future date, this is a good piece of

information that can be shared with the general public, i.e., schools or neighborhood meetings.

Ms. McDonald reiterated that the goal for Ms. Gantt was to put together a piece of collateral and fun presentation to get the message out to people to communicate the need.

The Chair asked if the first page is the official logo and if they are working on signage for around Santa Fe.

Ms. Gantt said she was thinking of a design the logo contest and she will be working on signage for around Santa Fe to introduce the program.

Ms. Doremus said she like the idea of an art competition for schools.

Ms. Gantt said she won a competition such as this at El Dorado elementary school; she got to meet the Mayor and congratulations for the design.

Mr. Patorni asked a sensitive question, are we concentrating on dogs rather than people.

Ms. McDonald said no, this is a small piece of a bigger puzzle, a bigger program. It is the easiest one to address because it is something that we can control rather quickly. We will address the larger problem and human waste is a much more difficult problem to tackle. Ms. McDonald is also collaborating with other departments, one being Human Services as we cannot say it is only homeless people. It is certainly something that we found to be a problem. She has asked that in their strategic plan they look at different places in the river.

A copy of the power point will be placed on the website once it is perfected. Ms. Gantt is also working on a script for a video and she will be making contacts with members and/or city councilors to be a part of. It is a bigger issue and we need to get the message out to the community who own dogs.

Mr. Jacobi congratulated Ms. Gantt for her exceptional work and time dedication.

d. Discussion Item: River Commission Mission Review (Zoe Isaacson)

The Chair noted that she has e-mailed an inquiry as to what the Commissioners would like to ask the Mayor at next month's meeting and what are the accomplishments from the past and the importance to educated the Mayor on our milestones, past achievements, where do we want to go in the future and what are his priorities for the River Commission.

Mr. Jacobi asked if we would have full attendance at the next meeting. The Chair said she believes we should have close to a full house. Mr. Buchser said that his suggestion was that Mr. Jacobi could talk about the Mayor Coss years; Mr. Buchser could talk about the Mayor Gonzales years.

Jerry Jacobi: Stated that he, Mr. Buchser and Mr. Bové were the initial members. He also noted that FM Patorni was one of a big community group that has worked with the River Commission for at least 15 years. The River Fund was

initiated before the commission was created. Mayor Coss platform was to get the River Commission going and he can bring information on that. The Honorable Max Coll, NM State Representative was one of the first Chairs for the River Commission and Mr. Jacobi succeeded as Chair for about 8 years.

Ms. McDonald said that it is a good balance to bring forward the accomplishments and any disappointments as well. Charlene Owens has provided Ms. McDonald with a file of articles on the River she is willing to share but will need to get them back. Ms. McDonald can also help with PDF's or projection of photos such as the Alameda Rain Garden. Ms. McDonald will wait for direction from the River Commissioners. Next meeting is August 9th.

Ms. Doremus said she would like to see a cohesive presentation between Mr. Buchser and Mr. Jacobi and the Chair would like to be a part of that meeting. It was noted that if Mr. Buchser were not available to participate due to the time frame, Ms. Doremus would like to be a part of this process. This is noted due to the quorum possibilities.

FM Patorni said that when we start the meeting he would like to do a roundtable in the introductions and we could emphasize the professional collective expertise we have with the River Commissioners.

Ms. McDonald noted that membership will change in February, 2019. Ms. Doremus said it is important for the Mayor to know whom the commissioners are to date. Ms. McDonald said it will be a good opportunity from him to know that type of representation on the River Commission and to give the Mayor recommendations on what would you like the next Commission to look like or if there are skill sets that the River Commission members would like to have.

Mr. FM Patorni said are we going to focus our discussion strictly for the River or can we expand the conversation.

The Chair and Ms. Doremus said that is a good thought for future initiatives, in our purpose it also addresses the Watershed.

The Chair will moderate the introduction of the Mayor and the introduction and agenda for the commissioners who are going to present.

Ms. McDonald said that if anyone would like to have handouts to please let her know. The Chair reiterated that Mr. Jacobi suggested that we have a packet of information for the Mayor to leave with.

Ms. McDonald will send the meeting notice to an expanded list for audience attendance.

Ms. Doremus asked how far we are going back.

The Chair said that we can mention our future goals; she has reviewed the Master Plan when priorities were ranked. Now we can tie them in with the future goals and objectives to continue a flow of information such as the electronic library for

information. There are opportunities to achieve our priorities under the umbrella of updating the Santa Fe River Master Plan.

Mr. Jacobi said for the last couple meetings he has brought maps, which will be useful in laying out, section by section, a lot of this takes place in the Master Plan.

The Chair said we should make it a point to review them at the meeting after August. Ms. McDonald will send the information to the Commissioners electronically.

Ms. McDonald asked the Commissioners if they wanted to contribute towards cookies or beverages. (City does not have budget).

The Chair asked FM Patorni to draft a short vision for the future, send to the Chair and Ms. McDonald for review.

6. MATTERS FROM COMMISSIONERS

7. MATTERS FROM STAFF (Exhibit C)

Ms. McDonald said her reason for urgency on this matter in asking for general conceptual approval. They city was asked by the EPA to consider applying for a technical assistance letter of interest for a project on their Greening American cities. A lot of this evolves around the technical assistance relationship the City has with the EPA on storm water. The main purpose of this was that we are looking at the Acequia trail extension, which is adjacent to and within the Agua Fria traditional community. It doesn't directly relate to river issues but it would be connecting to the river trail. Also it would be something that we could expand some storm water effort. It would certainly help the infiltration and aquifer. Ms. McDonald said she wanted to make sure that the Commissioners were aware of this as it will be going to BTAC next week and she wanted to show what the project is. (Ms. McDonald showed the visual boards that were created showing the boxed area which is the trail they are talking about which ultimately will connect to the River Trail.

The Chair asked where is the Acequia trail going to come in to the Santa Fe River.

Ms. McDonald said that is undetermined right now and it will be part of the project. The main goal of these Greening American cities is to bring conceptual help to a project. We are looking at this trail connection; it is a much-needed one because there is a huge amount of population in the area, a lot of them below the poverty area. Ms. McDonald said she could send the grant to the commissioners for review. At this point the city is going to submit a letter of interest. There is no commitment of funds on the city's part; it is more to let them know about city projects. It is important because of the fact that it is a bigger issue than just the small connection shown on the board. Basically what we are going to do is that when we did this project and the ENN it was discovered that there were many drainage problems in that area. We are trying to expand this vision. The overall context is to create more shade, create more permeability, that type of thing. What this grant entails is not to do a final design, what this grant mainly entails is to get to a much more detailed concept that we can use to look for other monies to do this project. Most of our trail and road projects are done through grants from NMDOT or other type of funding agencies. It would check in with the community to find out what the needs are and to come up with preliminary designs to show the community what is

out there. It would be helpful to receive a conceptual approval from the River Commission. Is this something that you are interested in finding more information about? The city will not have any fund commitment only staff participation, which they are doing so now.

River Commission members said yes, they would be interested in learning more about this technical assistance program through the EPA.

The Chair inquired about the new water budget. Ms. McDonald provided an update on the target flow hydrograph inner projections. We were scheduled to go up to .6 from the .15, which is the critical flow we have now. Given with the extreme draught conditions we are not proceeding with the .6 increases. Our goal is to get up to the .6 as soon as we can. Typically I would inform the Chair beforehand, but as we have a meeting tonight it was appropriate to let the full River Commission members to know. We will continue to watch the inflows and try to calculate that out.

The Chair pointed out that in the Administrative Procedures it does specify that .15 is the minimum critical flow and it is the minimum expectation of what the river should get to sustain life. I think that with these monsoons that we are getting we should keep a close watch on what those flows are and make sure that we get our water if it becomes available.

Ms. McDonald said she will carry that forward.

8. CITIZENS' COMMUNICATION FROM THE FLOOR

None

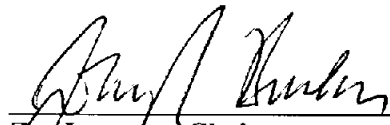
9. SUB-COMMITTEE BREAKOUT SESSION

None

10. ADJOURN

There being no further business to come before the River Commission, Mr. Jacobi moved to adjourn at 8:10 pm, second by Ms. Doremus, motion carried by unanimous voice vote.

SIGNATURE PAGE:


Zoe Isaacson, Chair

John R Buchser Vice-Chair


Fran Lucero, Stenographer



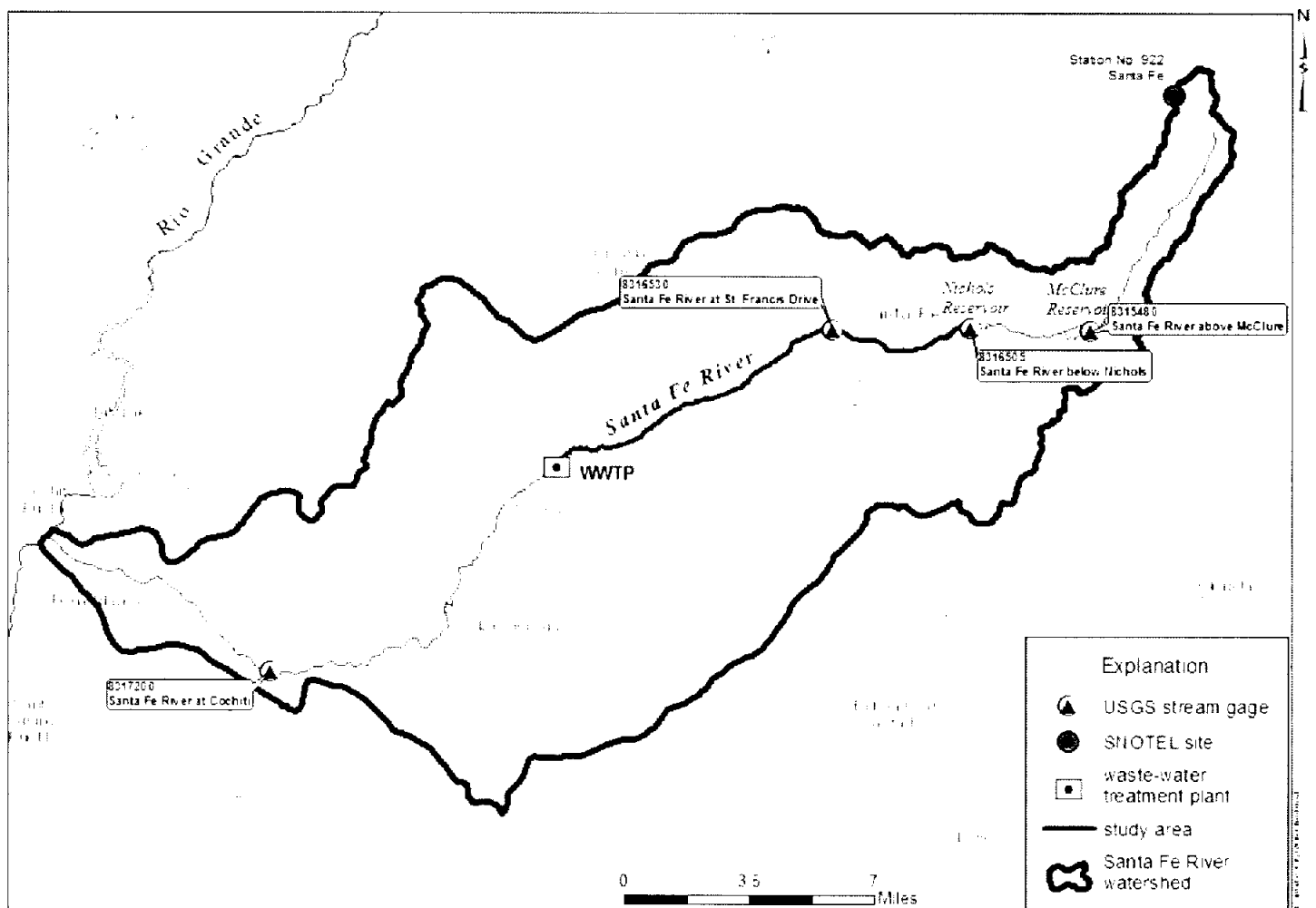
RESULTS OF
2016 AND 2017
SANTA FE RIVER MONITORING
CITY OF SANTA FE, NEW MEXICO



JOHN SHOMAKER & ASSOCIATES, INC.
CIVIL ENGINEERING, ENVIRONMENTAL CONSULTANTS

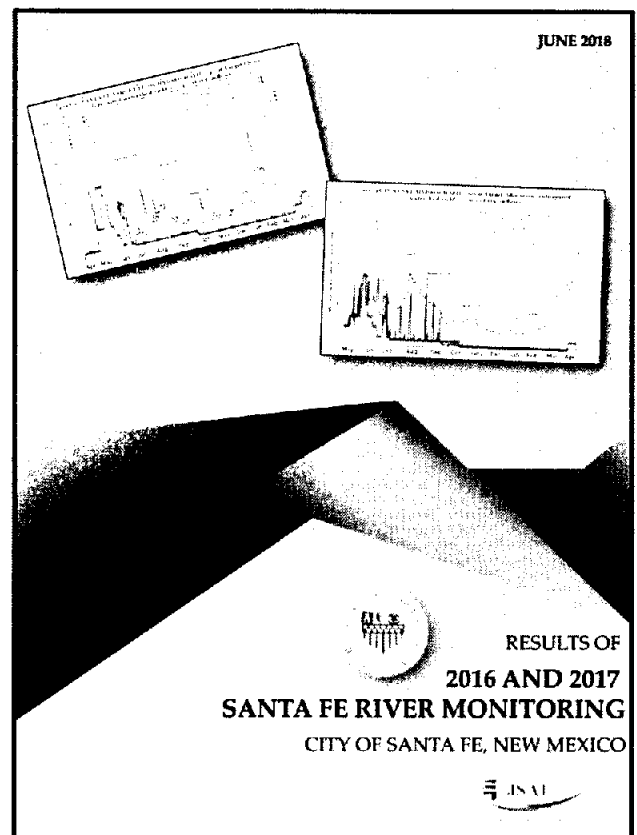
Exhibit A

SANTA FE RIVER WATERSHED AND LIVING RIVER SEGMENT OF SANTA FE RIVER



REPORT CONTENTS

- ✓ Climate data
- ✓ Streamflow data
- ✓ Diversion monitoring
- ✓ End of flow measurements
- ✓ Groundwater levels
- ✓ Surface water quality
- ✓ Water budgets



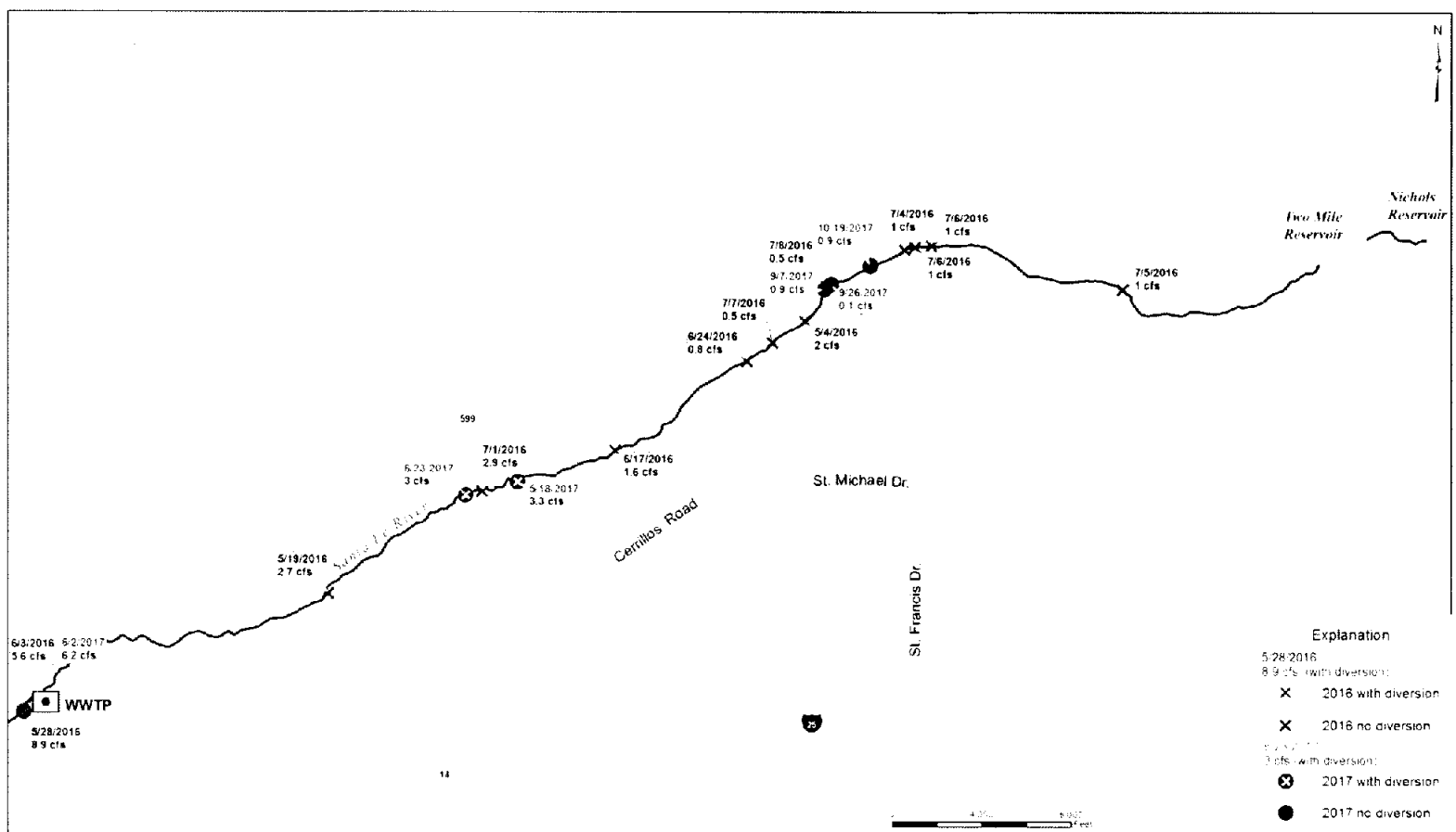
Santa Fe River station	river station No.	latitude, WGS84	longitude, WGS84	miles downstream
below Nichols Reservoir	1	35° 41' 22.2"	105° 52' 57.2"	0
below Two Mile Pond ^b	2	35° 41' 11.4"	105° 53' 49.7"	1.0
at Camino Pequeño	3	35° 40' 50.7"	105° 54' 58.1"	2.2
at Patrick Smith Park ^b	3a	35° 40' 49.7"	105° 55' 09.4"	2.4
at Guadalupe Street ^a	4	35° 41' 12.8"	105° 56' 37.6"	3.9
at St. Francis Drive	5	35° 41' 18.7"	105° 57' 04.3"	4.4
at Ricardo Road	6	35° 40' 40.4"	105° 58' 36.3"	6.0
near Frenchy's Field ^a	7	35° 40' 20.7"	105° 59' 11.9"	6.7
at San Ysidro Crossing ^a	8	35° 39' 36.1"	106° 00' 46.0"	8.6

STATIONS



Aerial photography: USGS, 2016

END OF FLOW MEASUREMENTS

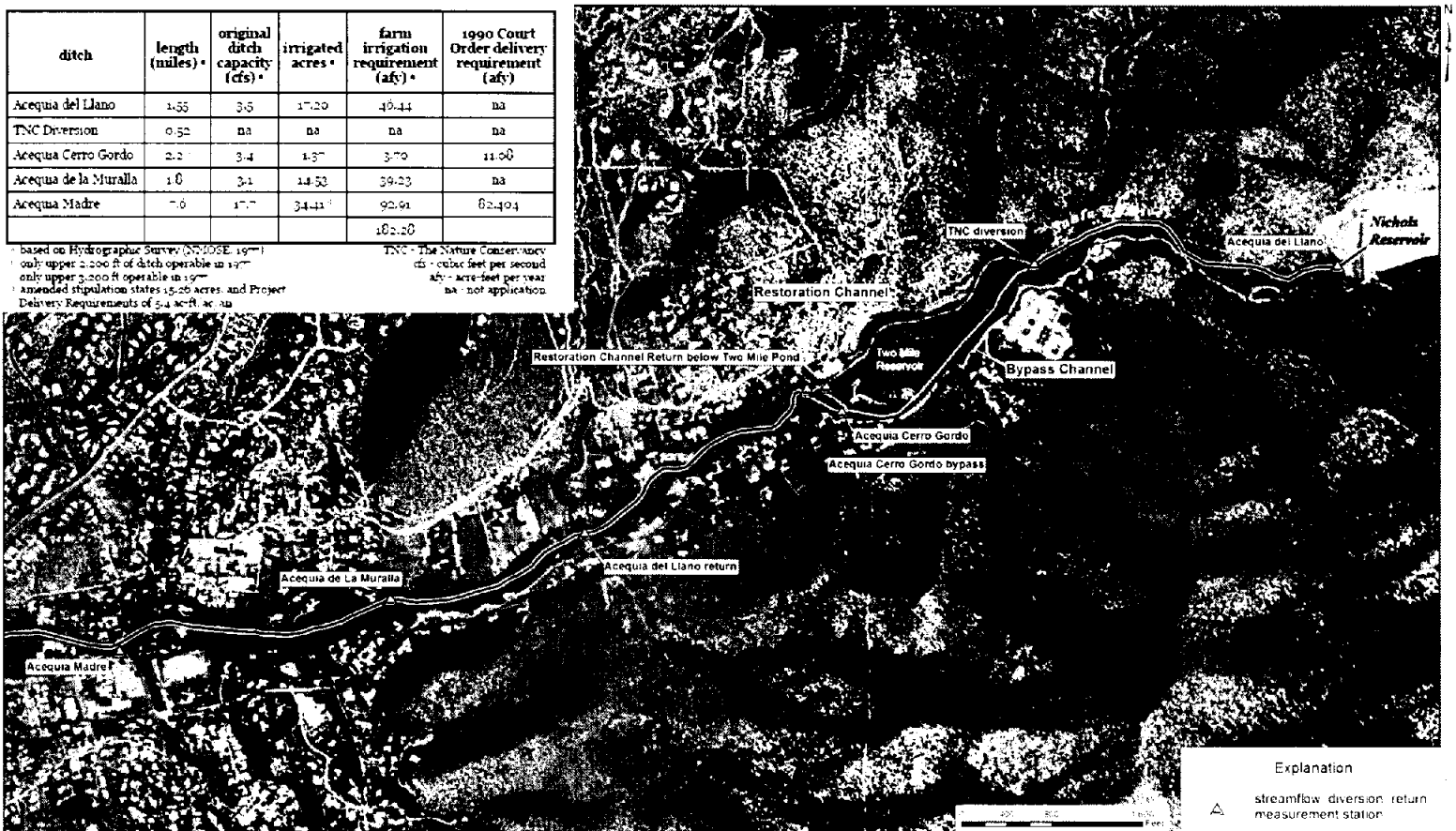


RIVER DIVERSIONS

ditch	length (miles) *	original ditch capacity (cfs) *	irrigated acres *	farm irrigation requirement (afy) *	1990 Court Order delivery requirement (afy)
Acequia del Llano	4.55	3.5	17,20	49.44	na
TNC Diversion	0.52	na	na	na	na
Acequia Cerro Gordo	2.2	3.4	1.57	3.79	11.60
Acequia de la Muralla	1.0	3.1	14.50	39.23	na
Acequia Madre	7.0	17.7	34.41	92.61	62.404
				162.20	

* based on Hydrographic Survey (NAD83E, 1977)
 only upper 2,000 ft of ditch operable in 1977
 only upper 3,000 ft operable in 1977
 amended stipulation states 15.25 acres and Project
 Delivery Requirements of 5.4 ac-ft/af na

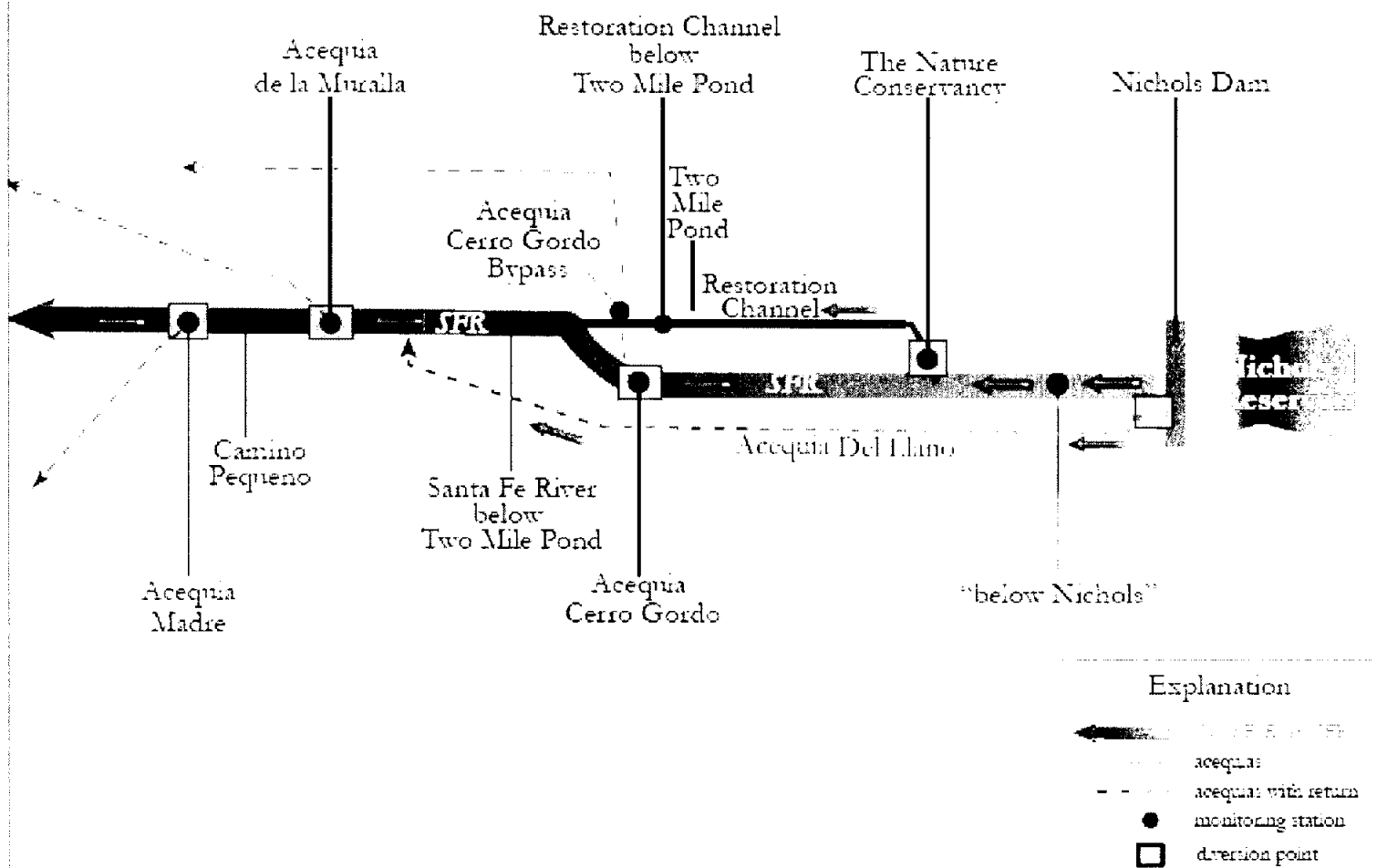
TNC - The Nature Conservancy
 cfs - cubic feet per second
 afy - acre-feet per year
 na - not applicable



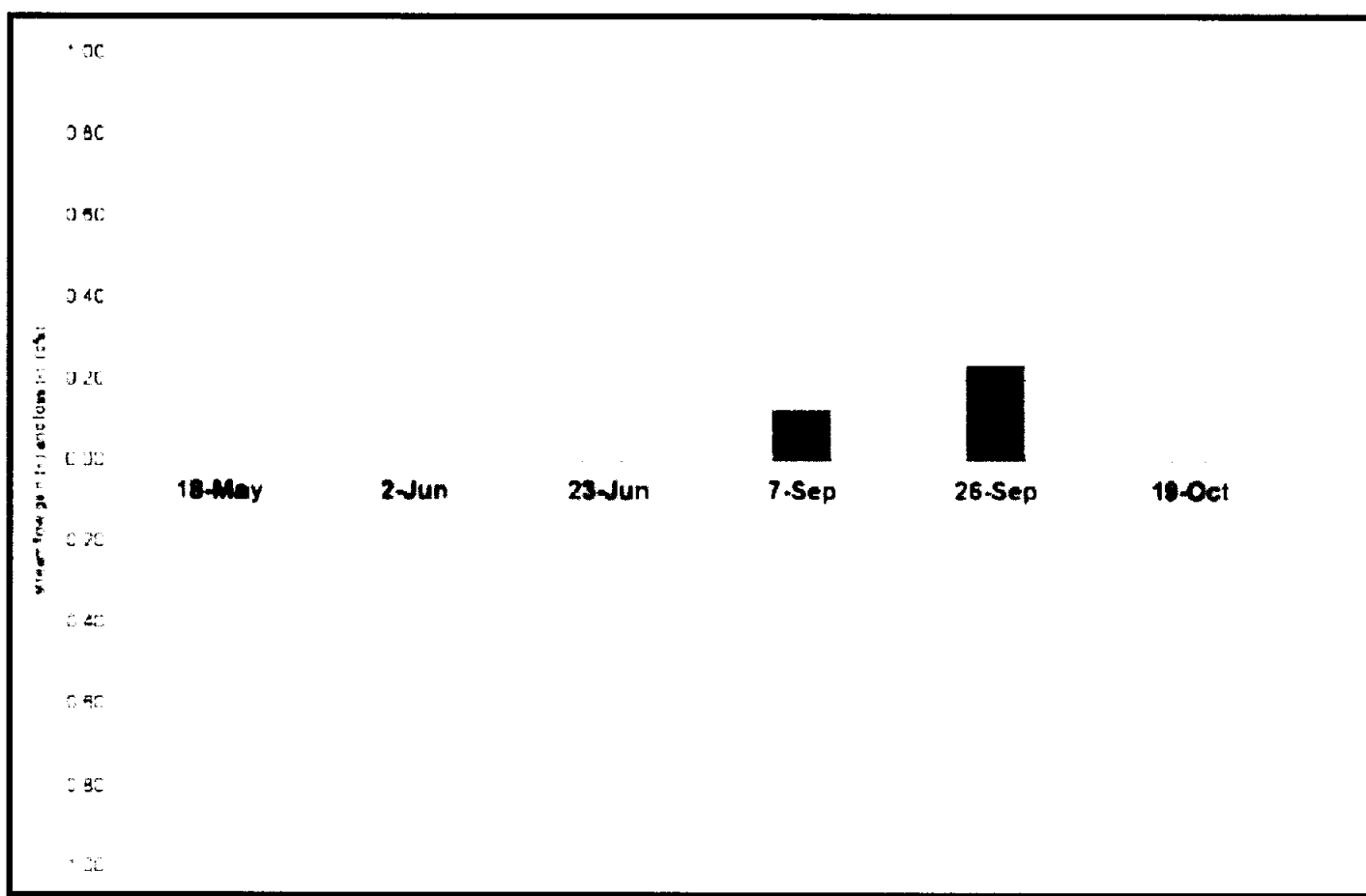
Explanation

△ streamflow diversion return measurement station

RIVER DIVERSION MONITORING



STREAM FLOW EFFECTS FROM TWO MILE POND SYSTEM



WATER BUDGETS

component	acre-feet	percent of total
<i>Living River calendar year 2016 (April 15, 2016 to April 30, 2017)</i>		
total volume of bypassed flows	731	100
loss due to evaporation	76	10.3
estimated acequia diversions *	181	24.8
ET losses from Two Mile Pond system	21	2.9
streamflow past Wastewater Treatment Facility	41	5.6
streamflow infiltrated	412	56.4
<i>Living River calendar year 2017 (May 1, 2017 to April 14, 2018 ^a)</i>		
total volume of bypassed flows	1,000	100
loss due to evaporation	40	4.2
estimated acequia diversions *	157	15.7
ET losses from Two Mile Pond system	21	2.1
streamflow past Wastewater Treatment Facility	102	10.2
streamflow infiltrated	680	68.0

* unmetered diversions estimated from delivery schedules

^a Living River calendar year 2017 extends to April 14, 2018; water balance prepared for Living River calendar year 2017 to-date

FINDINGS

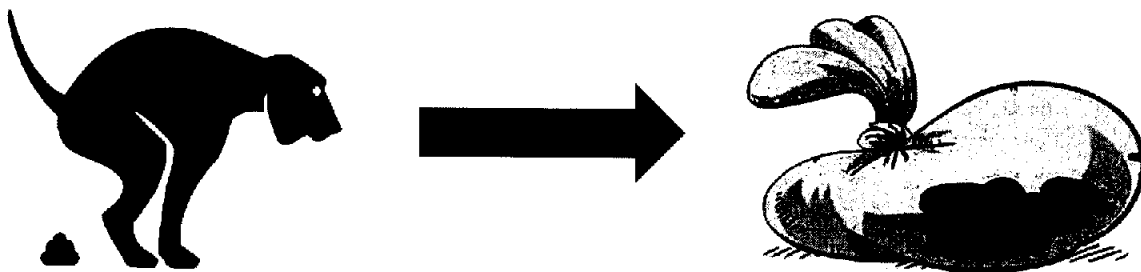
- Sustained target flows of 0.5 cfs are expected to remain above St. Francis gage
- Sustained bypass flows of 3 cfs are needed to create a Living River to San Ysidro Crossing
- Sustained bypass flows of 5.9 cfs and higher will reach the Paseo Real WWTP
- Two Mile Pond system has a significant effect on low flow events (< 2 cfs)



Exhibit B

What is Scoop the Poop?

Scoop the Poop is a campaign that encourages dog owners to dispose of their dog's waste in a sustainable way.



© Can Stock Photo

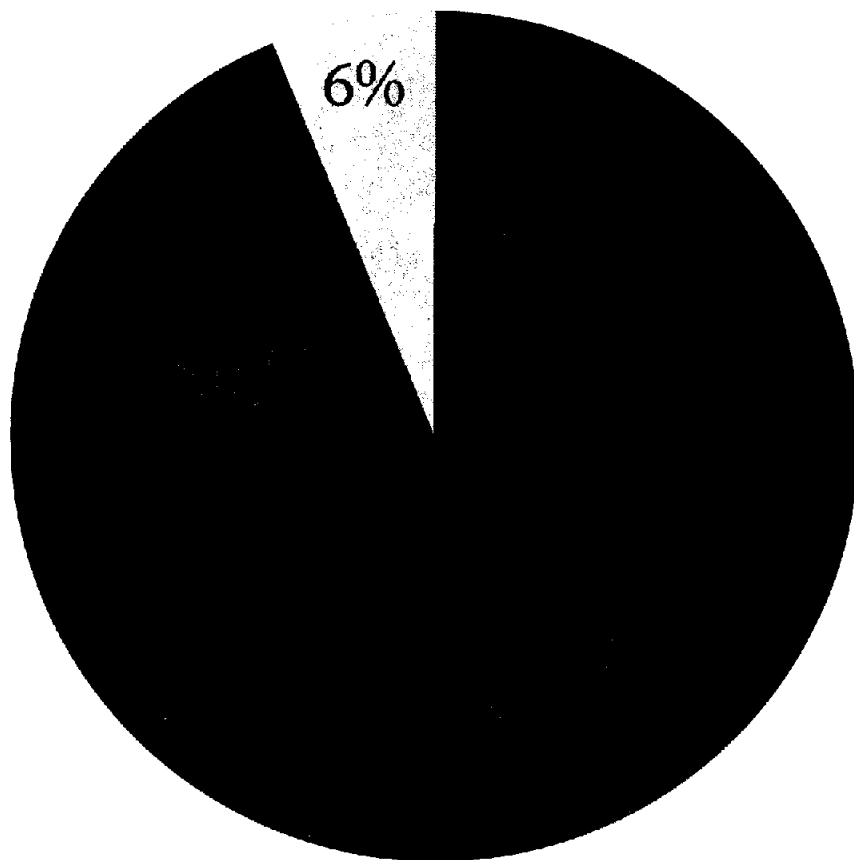
Why is it important?

It harms our water.

Recent Water testing done by Source Molecular in the Santa Fe River proved the presence of fecal pollution, a majority of which came from dogs.



Client Reference	Analysis Requested	SM Number
# 1 Cerro Gordo	Human Bacteroidetes ID: Dorei	SM-7129001
# 2 Patty Smith Park	Human Bacteroidetes ID: Dorei	SM-7129002
# 3 Paseo	Human Bacteroidetes ID: Dorei	SM-7129003
# 4 Guadalupe	Human Bacteroidetes ID: Dorei	SM-7129004
# 5 Agua Fria	Human Bacteroidetes ID: Dorei	SM-7129005
# 1 Cerro Gordo	Beaver Fecal ID	SM-7129006
# 1 Cerro Gordo	Bird Fecal ID	SM-7129007
# 2 Patty Smith Park	Bird Fecal ID	SM-7129008
# 3 Paseo	Bird Fecal ID	SM-7129009
# 4 Guadalupe	Bird Fecal ID	SM-7129010
# 1 Cerro Gordo	Dog Bacteroidetes ID: Target 1	SM-7129011
# 2 Patty Smith Park	Dog Bacteroidetes ID: Target 1	SM-7129012
# 3 Paseo	Dog Bacteroidetes ID: Target 1	SM-7129013
# 4 Guadalupe	Dog Bacteroidetes ID: Target 1	SM-7129014
# 5 Agua Fria	Dog Bacteroidetes ID: Target 1	SM-7129015
# 5 Agua Fria	Ruminant Fecal ID: Target 1	SM-7129016



- Human Bacteroidetes ID: Dorei
- Beaver Fecal ID
- Bird Fecal ID
- Dog Bacteroidetes ID: Target 1
- Ruminant Fecal ID: Target 1

How does it affect you?



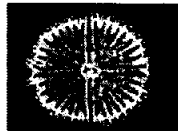
- Unattended pet waste can harbor diseases transmittable to humans (cryptosporidium, giardia, salmonella, hookworms, ringworms, and tapeworms).



- Children and pets are especially susceptible to this.



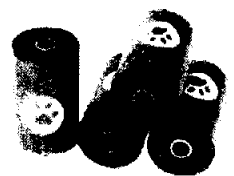
- These parasites spread more easily when pet waste makes its way into bodies of water.



- The waste acts as a breeding ground for toxic bacteria and algae. This toxic algae steals oxygen from fish and is harmful to wildlife.

What can you do?

- Bring it: Carry a scooper bag when you walk your dog.
- Scoop it: Use the baggie like a glove, scoop the poop, invert and seal the bag.
- Toss it: It belongs in the trash.
- Place a sign: Put a “scoop the poop” sign in your yard to encourage your neighbors to scoop it up, too.
- Be a role model and practice good dog-ownership behavior. It is crucial to keep dog waste off the ground. If you see un-scooped poop, pick it up. You are sending a message to others, and hopefully your actions will encourage people to do the same.



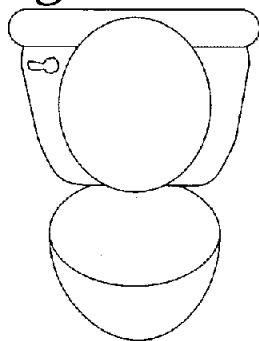
Are plastic bags really more sustainable than dog waste?

Yes and no. It is true that plastic bags are bad for the environment and it is important to try and not use them while grocery shopping, etc. However, pet waste that is not contained and put into landfills outside of bags gives off large amount of methane which contributes heavily to global warming. This is all in addition to the bacteria and disease that manifests in unattended dog waste.



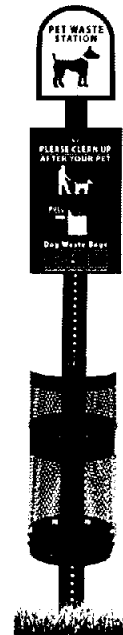
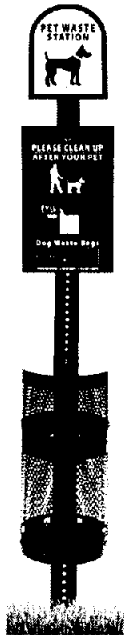
What are some sustainable alternatives?

- Flush it! Dog waste can be flushed down the toilet and treated like human waste is.
- Reuse plastic bags. Use plastic bags you find already in your day to day life such as bread bags. You could also put several piles of dog waste in each bag.
- Use multi-use dog waste bags. There are many options available for dog waste bags that can be used time and time again.



What are we doing?

The City of Santa Fe has over 400 pet waste clean-up stations in the area to make a clean environment convenient for dog walkers. Stations include bags for dog poop and trashcans.



Above and Beyond

- Dog waste can affect our air quality in addition to water quality.
- Leaving pet waste to sit in a yard is bad for soil and air.
- Keep yards clean of dog waste, even if no one is around to see it.
- Clean up dog waste when you see it, even if it is not from your pet.
- There are services available in Santa Fe and surrounding areas that will come to your home and clean up dog waste for you!
- Clean yards help to keep our environment completely clean of pet contaminants.



A black and white illustration featuring a globe as the central element. A small car is positioned on top of the globe. The globe is decorated with various elements: a large flower on the left side, a bird on the right side, and a small tree at the bottom. The globe is surrounded by several stylized trees and birds. A large, stylized flower arches over the globe. The word "Goals" is written in a large, bold, sans-serif font in the center of the image.

Goals

Cleaning up pet waste is just one step in the process. Eventually, we all strive to see a cleaner and more beautiful Santa Fe and world.

DRAFT

Acequia Trail Extension (Historic Agua Fria Traditional Community)

1. Project Contact:

Melissa McDonald, River & Watershed Coordinator, Public Works Department-River, Watershed & Trails Section, City of Santa Fe, P. O. Box 909, Santa Fe, New Mexico 87504-0909 Phone: Office 505-955-6840, mamcdonald@santafenm.gov

2. Description of the Design Challenge and Project Area:

The proposed **Acequia Trail Extension** (*Rufina Street to San Felipe*) project located within the Agua Fria Traditional Historic Community would help transform an overburdened, underserved, and economically challenged, neighborhood including a mobile-home park, several tract-home subdivisions, and a population that is 23% below the poverty line (2010 US Census). Recently annexed by the City of Santa Fe, streets are dusty and windswept in the spring, hot and dry in the summer, and mostly free of fallen leaves in autumn. There are few leaves because there are few trees compared to other parts of Santa Fe. Throughout the year the local landscape is relatively desolate and highly erosive. With approximately 300 days per year of unabated sunshine, less than 12" of annual rain, and limited native existing vegetation, the trail extension--especially with a strong commitment to green-infrastructure--would reduce the current heat-island effect in the neighborhood. With convenient access to a user-friendly, ecologically-important, and biodiverse corridor, trail improvements would not only increase connectivity to Santa Fe's existing trail infrastructure, but it would also address significant drainage problems in the area.

The design challenge will be to create a schematic design that will build on a completed preliminary 30% trail design plan and address the important design parameters listed below:

- Identified in the 2012 Bicycle Master Plan, this trail would improve the overall urban trail system's connectivity and gives area residents access to the Acequia Trail and other routes.
- The entire proposed 1-mile long urban trail will eventually provide an off-road, non-motorized, 10' wide paved trail extension of the existing Acequia Trail and connect to the existing El Camino Real Trail north off Agua Fria Road.
- Creating connections to local parks, especially the neighboring park (Prior to annexation, Santa Fe County developed a master plan for the undeveloped open space at the far northern point of the proposed corridor/trail at the intersection of Morning Drive)
- During an Early Neighborhood Notification (ENN) meeting held November 3, 2016 on this connection corridor, concerns arose around creating climate

Exhibit C

modifications by introducing shade to reduce local heat-island effects and looking more closely at existing drainage conditions to reduce flooding in the area. Additionally, residents discussed the need to create a sense of place and a naturalized corridor that all residents-- kids, young people, parents, elders, and the physically challenged could enjoy.

Important Design Goals are to create:

- a shady corridor that can reduce temperatures in the neighborhood
- a safe and attractive place for pedestrians and bicycles
- an aesthetically pleasing, environmentally sound, user-friendly design that is culturally inclusive to the history of the area
- increased connectivity to the city's existing trail system with easy access to nearby schools, shopping, recreational areas, downtown
- access to connections for existing bus stops
- a design that turns drainage from a problem into a solution and seeks to offset potable water using green infrastructure/low-impact development strategies while creating a biodiverse, vegetative corridor that offsets ever-increasing temperatures

There are over 2000 residents within a 1-mile radius of the proposed trail. With children under 18 years old making up 42% of the population. The median age of the surrounding residents is 31 years of age and the population over 65 years of age is 7%. The city's median age is 43 years old. Eighty percent of residents are Hispanic or Latino. Twenty-five percent of this neighborhood population lives below the poverty line. Transportation costs consume up to 1/3 these of working families' income. By increasing trail connectivity and safety, we are offering less-expensive and healthier transportation options.

The topic of Southside trails connections and associated equity issues have been raised in the past, and it continues to be a topic of discussion in the community today. The consensus is that more resources should be allocated for neighborhoods in this area.

3. Two Locations:

The City is mindful that any implementation must include public involvement, buy-in, and transparency, but two obvious locations for green infrastructure are apparent.

First, the long stretch of asphalt road (located between Morning Drive and Camino Tierra Real) that separates the mobile-home park and the proposed trail extension would be an excellent place to install a rain garden. Not only would the community see how trees and native plant material reduce the heat-island effect while they create privacy, beauty, and wind protection, but people would also be drawn toward using the trail given an inviting, new, and intentional access point that could easily be created there.

Second, the large, bulbous patch of dirt at the end of Morning Drive that gets flooded during every significant rain event would also provide an excellent community showcase

when it comes to designing and building a site for green infrastructure for the purpose of reducing the heat-island effect in the neighborhood. Regular flooding indicates the presence of stormwater that could be harvested passively on site for appropriate shade trees and drought-tolerant shrubs. There are existing detention ponds that service the area that at a minimum should be cleaned but have potential for greater improvements that increase infiltration and biodiversity. This location's proximity to a large tract of open space that has already been designed to become a community park makes it an even better choice.

Both locations could actually use the cooler temperatures that will be draining down the old acequia (agricultural ditch) route during the evening. If properly placed, trees could theoretically divert some of these cooler temperatures toward houses in the neighborhood while they also generate their own cooler temperatures with the shade they provide.

4. Leverage of Other Federal Investments

The Santa Fe City Council allocated a project budget for design and construction (approx. \$113,000) and is applying for TAP funds to finance its remaining design and construction needs. The City of Santa Fe owns most of the rights of way along this stretch. There is currently no timeline for trail construction.

The City has received an EPA technical-assistance for the long-term stormwater planning and welcomes this opportunity to submit a request for technical assistance for the **Acequia Trail Extension** at Agua Fria Historic Traditional Community. The City is delighted to provide the design team logistics support, outreach and communications. We will be very attentive to other needs that may arise.

The City has been very successful obtaining; private, state and federal grant funding for many of its capital improvement projects. Recently, the Acequia Trail Underpass Connections at St Francis and Cerrillos received CMAQ funds for its recent completions. Also, Re-Leaf grants have been received through New Mexico Forest ReLeaf and the Energy, Minerals and Natural Resources Department of the New Mexico State Forestry allowed the City to purchase and plant (46) trees in City Parks and in the Santa Fe River Corridor. With such a valuable schematic, plan in hand, that this project will produce the City could seek additional funding offered by private, state and federal grantors.

The schematic plan will be a core component in the City's application process in its efforts to secure additional funding for this very worthwhile capital improvement project. The momentum from this process will galvanize the community and elected officials to take special note of this over-burdened neighborhood so that State Legislative funding may be secured. The City is highly optimistic that the return on investment for the schematic plan will be significant. Initial documentation & outreach already conducted will provide project members with a true baseline from which success can be measured.

5. Project Support

The City's governing body in Resolution 1999-46 identified this project as a needed trail extension. Additionally, Resolution 2016-84 sought further funding for the trail design and construction by authorizing and supporting a submittal request for grant funding for the project.

This project currently enjoys the support of...

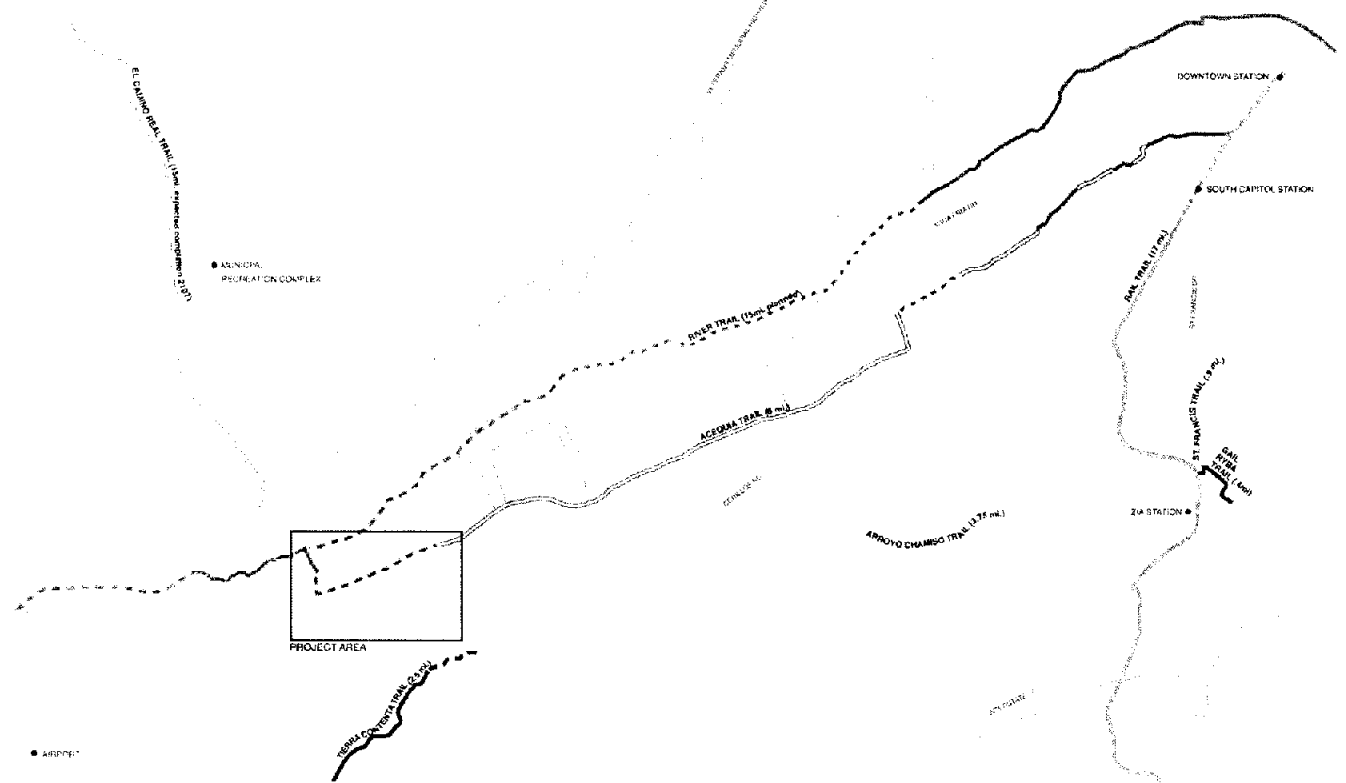
****Currently being developed****

6. Summary

The enhancement of this important corridor by improving its safety, reducing the heat-island effects by implementing low-impact development strategies to use the drainage flows to create a shady, oasis for kids and making it pedestrian and bicycle with access to the transit system are goal everyone can support. By making this project a priority area, we are showing our commitment to achieving an increased quality of life and substantially better connectivity on the southside.

A location map of the area and conceptual plans at 30% are provided as an attachment. We greatly appreciate your consideration. Thank you for the opportunity.

TO DIMEO CANYON
TRAILHEAD - RIO GRANDE

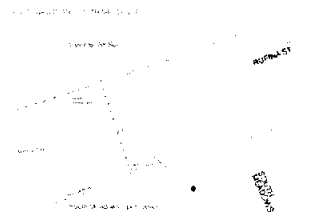
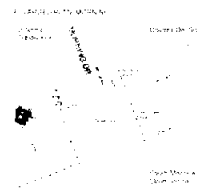
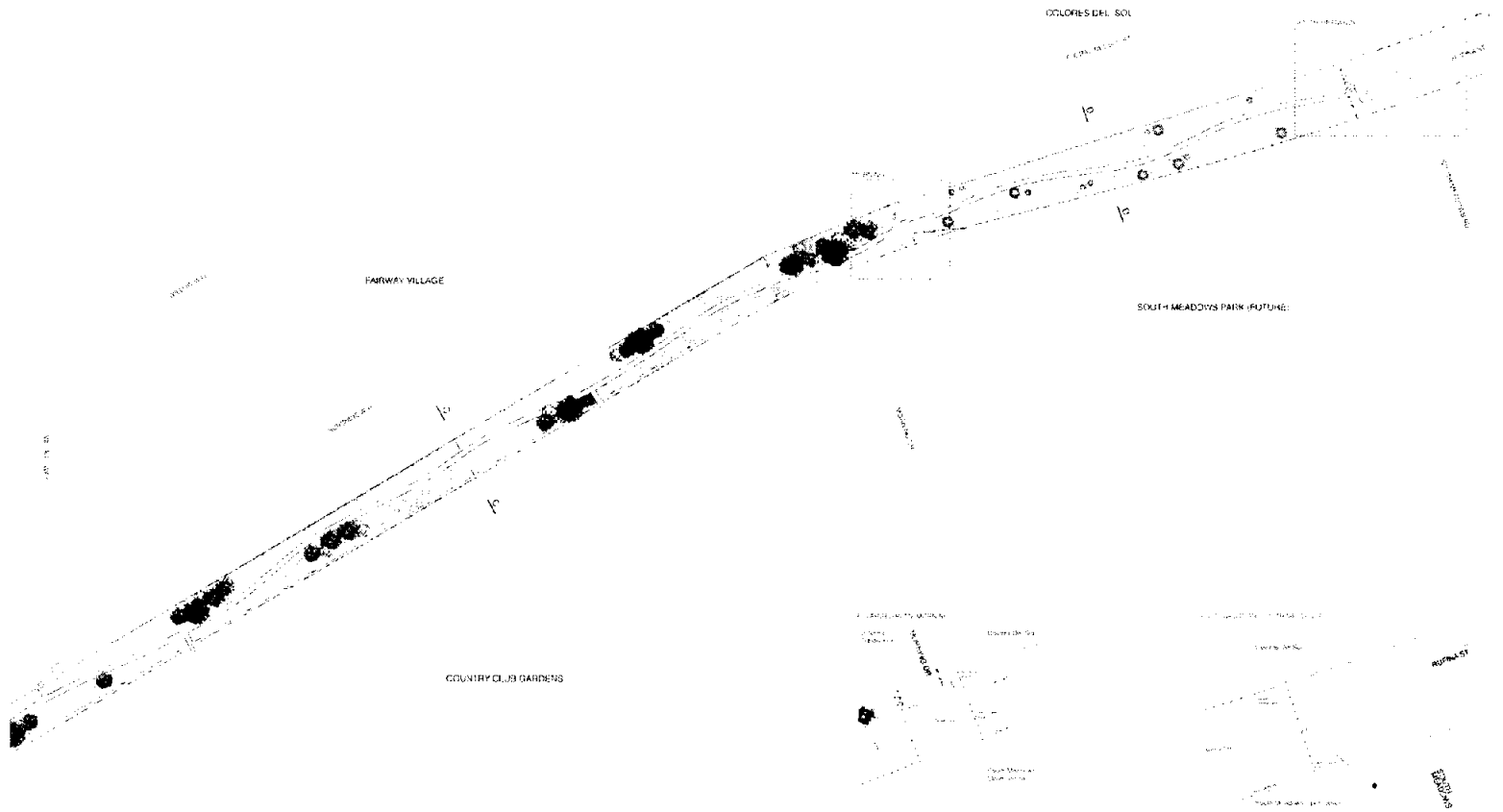


ACEQUIA TRAIL EXTENSION - CONTEXT MAP [DRAFT]

Map created by the City of San Antonio Parks and Recreation Department

RUEFNA ST / SOUTH MEADOWS RD TO SAN FELIPE RD / AGUA FRIA ST

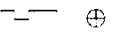
Legend	Scale	North Arrow
<ul style="list-style-type: none"> ACEQUIA TRAIL ACEQUIA TRAIL (10.0 mi) ACEQUIA TRAIL (8 mi) ACEQUIA TRAIL (1.7 mi) ACEQUIA TRAIL (1.4 mi) 	<ul style="list-style-type: none"> 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 	<ul style="list-style-type: none"> 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

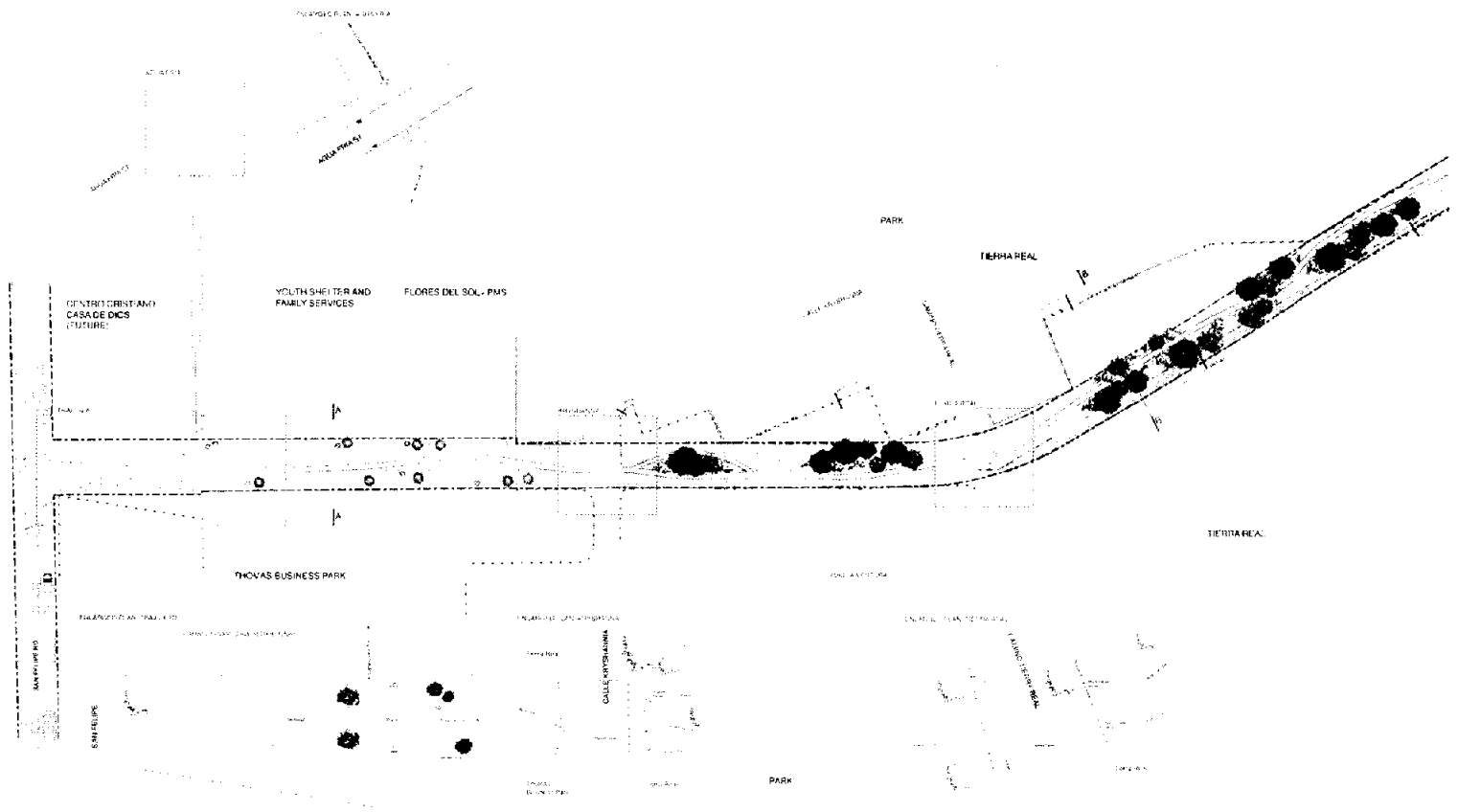


ACEQUIA TRAIL EXTENSION - SITE PLAN (EAST) DRAFT

Prepared for the City of Santa Fe by the Santa Fe Planning Department

RUFINA ST., SOUTH MEADOWS RD. TO SAN FELIPE RD., AGUA FRIA ST.



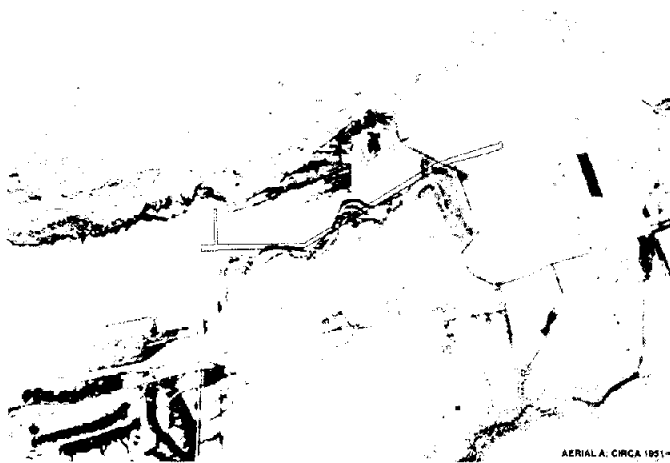


ACEQUIA TRAIL EXTENSION - SITE PLAN (WEST) DRAFT

Prepared for the City of San Antonio by the design firm of [redacted]

RUMINA ST / SOUTH MEADOWS RD TO SAN FELIPE RD / AGUA FRIA ST

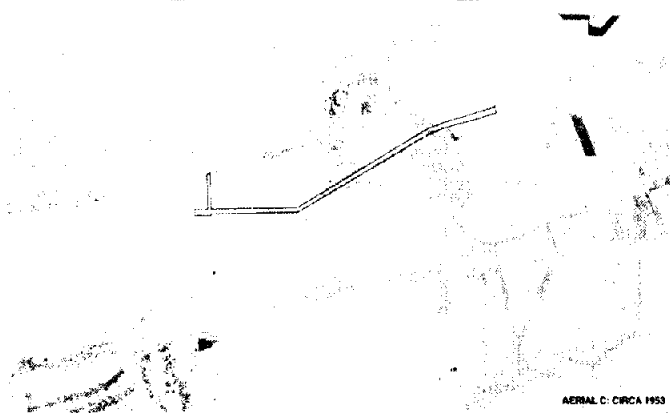




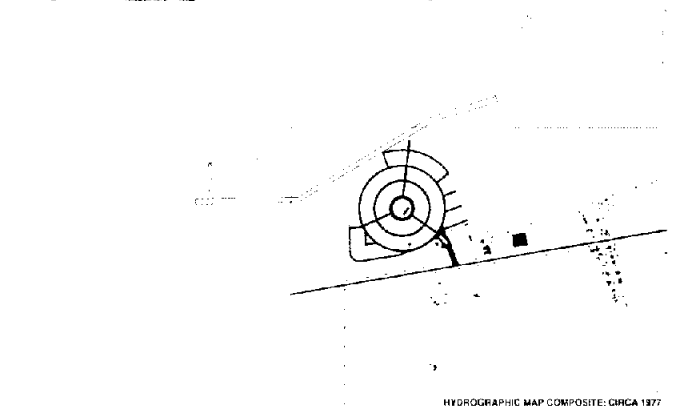
AERIAL A: CIRCA 1951



AERIAL B: CIRCA 1953



AERIAL C: CIRCA 1953



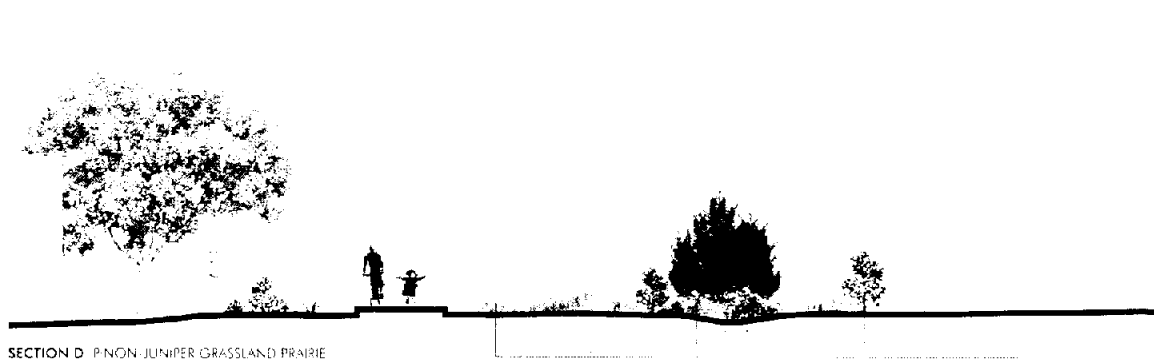
HYDROGRAPHIC MAP COMPOSITE: CIRCA 1977

ACEQUIA TRAIL EXTENSION - HISTORIC IMAGES - DRAFT

Prepared for the City of Santa Fe by the Santa Fe Historic Preservation Commission

RUFINA ST. / SOUTH MEADOWS RD. TO SAN FELIPE RD. / AGUA FRIA ST












SECTION D: PINON-JUNIPER GRASSLAND PRAIRIE

-  House Wren
-  Greater Roadrunner
-  Gambel's Quail
-  Coyote
-  Rio Grande Gnatcatcher
-  Desert Sparrow
-  Gambel's Quail



SECTION C: WOODLAND GRASSLAND

-  House Wren
-  Greater Roadrunner
-  Gambel's Quail
-  Coyote
-  Rio Grande Gnatcatcher
-  Desert Sparrow
-  Gambel's Quail

ACEQUIA TRAIL EXTENSION - TRAIL SECTIONS DRAFT

Project: ACEQUIA TRAIL EXTENSION - TRAIL SECTIONS DRAFT

RUFINA ST / SOUTH MEADOWS RD TO SAN FELIPE RD / AGUA FRIA ST

