



Agenda

Santa Fe River Commission Agenda

Thursday, October 10, 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 September 12, 2019
4. COMMUNICATION FROM OTHER AGENCIES /COMMITTEES
 - a. SF Watershed Report (Andy Otto, andy@santafewatershed.org, 820-1696)
5. INFORMATION/DISCUSSION/ACTION:
 - a. Santa Fe Reuse Strategy: Santa Fe River Considerations (Bill Schneider, Water Resource Coordinator, Public Utilities, Water Division, whschneider@santafenm.gov or 955-4203)
 - b. Stormwater Strategic Management Implementation Plan, the presentation explores creating an equitable rate structure and ensuring revenue moving forward; and Outreach Update (Melissa A. McDonald, River and Watershed Coordinator, mamcdonald@santafenm.gov, 955-6840)
 - c. River Commission Goals Plan, Potential Projects, and Action Plan (Precipitation Monitoring, Scoop-the-Poop campaign, Water-Quality Sampling, etc.) (Zoe Isaacson, River Commission Chair, zoe.isaacson@gmail.com)
6. MATTERS FROM STAFF
 - a. Saturday, October 5th, 2019 RiverTalks Educational Series (mamcdonald@santafenm.gov, 955-6840)
 - b. Public Engagement Meeting on Water Reclamation Reuse Strategy, to be held November 14 from 4 pm to 7 pm at the Fogolsen Library at the mid-town campus at the former Santa Fe University of Art and Design, 1600 St. Michael's Drive*
 - c. Upcoming January Commission Elections
7. CITIZENS' COMMUNICATION FROM THE FLOOR
8. MATTERS FROM COMMISSIONERS
9. ADJOURN

*Next Meeting: The November 14, 2019 Santa Fe River Commission will be cancelled. Commission members are strongly encouraged to attend Water Division's public engagement session that evening.

Next Scheduled River Commission Meeting is October 10, 2019
Captions & Packet Material are due by 10 am on October 1, 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.

RECEIVED AT THE CITY CLERK'S OFFICE
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October 10, 2019 – 6:00 PM**

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**MINUTES OF THE SANTA FE RIVER COMMISSION
THURSDAY OCTOBER 10, 2019**

CALL TO ORDER

Zoe Isaacson, Chair of the SF River Commission, called the meeting to order at 6:10 p.m. in the Conference Room of the Railyard Market Street Offices.

1. ROLL CALL

A Quorum was not established; the meeting was for information only.

Present:

Zoe Isaacson, Chair
Susan Coulter
Vanessa Springer (Alternate)

Excused:

Andrew Black
Phillip Bove
Anna Hansen
Heidi Klingel
Rachel Kullman
Emile Sawyer (Alternate)

Staff and Others Present:

Melissa McDonald, River & Watershed Director
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 – No Quorum

3. APPROVAL OF MINUTES FROM SEPTEMBER 12, 2019 – No Quorum

4. COMMUNICATION FROM OTHER AGENCIES /COMMITTEES:

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

Mr. Otto introduced himself and Morey Hensley. He indicated he provides this report monthly to Ms. McDonald.

Mr. Otto reviewed the highlights of the report:

- September had a total of 9 reaches; 8 river reaches and 1 arroyo reach.
- 79 volunteers collected 148 bags of garbage for a total of 142 volunteer hours.
- River-wide community clean-up is Saturday, October 19, 10:00 a.m. to Noon and volunteers and River Commission participation is invited.
- The City of Santa Fe will celebrate the 10-year anniversary of Santa Fe Municipal Watershed Plan adoption by resolution on Thursday, October 17 from 5-7 at the Randall Davey Audubon Center. Key players are the Nature Conservancy, the City of Santa Fe, the Santa Fe Watershed Association, and the US Forest Service.

Chair Isaacson asked that Ms. Hensley talk more about herself.

Ms. Hensley stated she was born in Santa Fe and grew up in Santa Fe and Taos. She studied Environmental Science at Emory University with a focus in Ecology and Conservation. She is excited to be back in Santa Fe working for the Watershed Association.

5. INFORMATION/DISCUSSION/ACTION:

- a. **Santa Fe Reuse Strategy: Santa Fe River Considerations (Bill Schneider, Water Resource Coordinator, Public Utilities, Water Division, whschneider@santafenm.gov or 955-4203)**

Mr. Schneider provided his background. He explained currently the main project is to develop a more sustainable, resilient water supply and water reuse. Two public meetings will be held November 12-14 to share new developments on reuse, aquifer storage and recovery, and various water supply strategies. Members will receive an official announcement.

A Power Point Presentation was presented: *An Overview of the Lower Santa Fe River Hydrologic Budget.*

The greatest value for reuse in terms of water supply and ecological benefit would be to route the City's unconsumed San Juan Chama water. Water would be imported from the Colorado River Basin through Abiquiu down through the City through the Buckman Diversion. People consume about 40% of the water and the rest is wastewater related to the lower Santa Fe River. The strategy is to divert and reuse the imported water allowing them to continue release to the lower Santa Fe River.

Almost half of the water comes from the Buckman Diversion and Canyon Road surface water adds another 30% to 40%. The City uses 10-15% of demand since BDD came online and consumption demands vary. In the winter consumption is 20% with 80% going back to the wastewater and in the summer shifts the other way. That will probably trend upwards as seen in the increase in the City's demand in February in last summer's drought. By March consumption was a million gallons a day.

Slide – Showing Santa Fe River System

- A question on reuse is whether it makes sense not to release water to the lower Santa Fe River other than what nature provides and the concern is if water is diverted back to the pipeline and Santa Fe River for reuse, what will happen to the lower Santa Fe River and wetlands.

Slide – geologic model showing La Cienega as where several watersheds come together

- Among the challenges is for people to understand the vulnerability of the system for forest fires in the watershed.

Slide—La Cienega Hydrogeologic Conceptual Model

- This is a separate hydrogeologic system that feeds a lot of areas and what happens in the Santa Fe River impacts riparian habitat.

Slide—Riparian Vegetation 1996

- Overview of the area in 1996 with wetland planting.

Slide—Riparian Vegetation 2017

- Area of growth of wetlands currently of 153 acres, considered successful but requires more water.

Slide—Estimated Riparian Evapotranspiration

- They are trying to develop a water budget to sustain.

Slide—La Cienega Permitted Wells 1960

- Pumped about 540 acre-feet per year.

Slide—La Cienega Permitted Wells 2016

- In 2016 there was an explosion of wells.

Slide—Estimated Surface Water Budget for Lower Santa Fe River

- Consumptive demand calculated from ground water use is over 1,000 acre-feet per year. They want to build a simple water budget.

Slide—Estimated La Cienega Water Budget

- A graduate student from New Mexico Highlands is conducting a seepage study. They need to better understand where the water goes once it leaves the wastewater plant; who is harmed; and how to better manage the system. A question is what rights downstream users have.

The Water Division proposal to re-divert its imported water would allow the City to rest their wells and keep native water in the Santa Fe River Basin and enhance the Living River.

Slide—Total Effluent Generated

- Shows the amount of effluent generated. They are arguing the need to reuse/recycle the 23 billion gallons of Buckman water or 5 billion of BDD needs to be recycled and reused.

Slide—Average Seasonal Flows 2011 to 2016

- Shows that summer months have diminished flow of the amount of effluent going to the River.

Slide—Key Takeaways

- The City is interested in feedback of how to balance the needs of the water supply.

Mr. Schneider noted there have been declines in La Cienega, and people have been harmed and are frustrated and the Cienega Ditch no longer runs. The County is working to improve the hydrological system; the penitentiary well is off-line. Quill plant is being upgraded because it is noncompliant, and wastewater is dumped into ponds and evaporating instead of recharging the aquifer.

Commissioner Coulter stated the issue as she understood it is the water is being released from the treatment plant. A riparian area has been created and is growing and the proposal is to redivert the water at the treatment plant for reuse in the City.

Mr. Schneider clarified that was generally it, but he would never suggest all the water be diverted. He explained the four sources of life and the analogy of the four colors of water. The proposal is to divert the color of imported water and bring it back through the system for reuse allowing the Santa Fe Watershed to recharge for the future and drought. The City has 5,230 acre-feet and the County, 375, of the San Juan Chama water rights. On average 60% (3,138 acre-feet) leaves the wastewater plant that is not put to use.

Mr. Ellenberg asked about the winter and summer releases that are affected; there is higher consumption in the summer than in winter.

Mr. Schneider agreed. The City would argue they should stagger operations at Canyon Road and Buckman Direct Diversion, emphasize deliveries from Buckman and bring the water back around in the winter when demand is less, below the wastewater plant. Conceptually, if irrigators need water in the summer, they could use Canyon Road, and the City wells if needed.

Mr. Ellenberg asked about the priority rights in Cochiti that are senior to the City's rights and how the releases match those rights.

Mr. Schneider agreed the City did not have an adjudicated rights and priority calls could happen. He offered two rebuttals: 1) The City is only looking at the re-diversion of contract water; and 2) the Pueblo has no entitlement to federal water.

Mr. Ellenberg thought that different because the question is if the City has the right, given the priorities adjudicated, to consume as much water from the River when they do not contribute to the City's federal imported water.

Mr. Schneider replied that is unresolved. The bigger contributor to the lands at Cochiti and Santo Domingo is the La Cienega system and that is a County issue. It is sad the system is used to exhaustion and is basically an arroyo. That would raise the validity of Santa Fe's SP1677 consumptive permit on the Santa Fe River but does not have any bearing on contract water. The strategy is that the City is trying to not fully utilize their consumptive right every year, but that may not be sustainable or the right thing to do.

Mr. Schneider commented that he has tried to meet with the Governor on their expectations about Cochiti. Cochiti's water rights do not predate to any development in Santa Fe and as he understood, are from land acquired. That is very dated and more a federal issue than state.

Mr. Ellenberg asked what the water budget needed to meet needs to La Cienegulla.

Mr. Schneider said the County should also be at the table. He noted that the horse park is watered with groundwater and used to be with effluent. A wetland that has a consumptive demand has been created. He questioned how much water is enough to create a habitat while still delivering water to downstream users. It is counter opposing principles and there are many diversions along that stretch to resolve before looking at ecological requirements. Looking at the need to sustain flow, it could range in the winter from 1/2 to 1 CFS and 2 or 3 in the summer. A lot of studies are needed because there are too many variables.

Mr. Schneider stated the next step would be a public meeting to get feedback and recommendations. He has written a grant application that would allow the City to get 25% cost recovery if the project proceeds.

Ms. McDonald reminded everyone that next month's meeting was canceled, and she would be sending a reminder. She encouraged people to attend one of the meetings on this issue, so everyone understood the concept.

Mr. Schneider noted the meeting times are from 4:30 to 7 p.m. on November 12th and 14th and explained they would have more interaction and less presentation. A series of stations will be set up; the Santa Fe River, the reuse strategy, the feasibility study and then they would breakout into groups.

Mr. Otto clarified that only a feasibility study on reuse had been done.

Mr. Schneider replied there were 40 years of study on the reuse issue, the most recent the 2017 Feasibility Study and 2018 Implementation.

Neal Williamson clarified that the proposal was to pipe less than 3,000 acre-feet per year to the Rio Grande and pump an identical amount of additional San Juan Chama Water back up.

Mr. Schneider explained with that water they could do a one-to-one exchange through Buckman, creating a closed loop. The environmental benefit is that Buckman would have to be shut down for 3 weeks because the flows went below permitted allotment. The City and County collaborated to allow the San Juan Chama to be predominant flow allowing Buckman to continue to operate.

Mr. Schneider noted that the Bureau of Reclamation saw the benefit of using 1,000 acre-feet of pipe that goes to Cochiti reservoir as meeting their purpose. In exchange they would give a like amount in Heron and move water uphill to put in reserve. The City is trying to look for operational flexibility, system resiliency and environmental benefit. They also have the Living River and there is a consequence to that.

He suggested a project for the Commission would be to revisit the Living River Ordinance and turn it into a recovery project because it would accomplish more of goals.

Chair Isaacson asked the number of times the water could be reused in the closed loop system. The answer was theoretically 5, 230 acre-feet could be almost 13,000 acre-feet of available water supply.

Mr. Ellenberg asked if a feasibility study was done on the odds and prospects, particularly in a dry decade, to bring the San Juan Chama water to complete the closed loop.

Mr. Schneider replied the City and County partnered with the Bureau of Reclamation and used available climate models to project 40 years. The potential reductions are 20-35% in four years. The water division director was one of the modelers and would be a great resource.

He indicated he has received a grant to redo the study and look at other things. There is the San Antonio model sending water back up the Santa Fe River and having the Living River

through the whole city. He could talk about that at the public meeting, but there is no one solution. The project will help for the next 30 years but not solve Santa Fe's water crises.

Ms. McDonald commented that Bill Armstrong with the Forest Service brought up an interesting point during the tour on the riparian zone; he said to create resiliency, look at the soil. Trees and plants along the river and riparian areas in climate change may change and a little water can go a long way if treated properly. The point may be to identify the baseline conditions and as the climate changes, stop the erosion and enrich the soil.

There were two consultants from Albuquerque that helped guide the strategy that wanted stormwater catchment and the Water Authority did that because the people wanted it.

- b. **Stormwater Strategic Management Implementation Plan, the presentation explores creating an equitable rate structure and ensuring revenue moving forward; and Outreach Update (Melissa A. McDonald, River and Watershed Coordinator, mamcdonald@santafenm.gov, 955-6840)**

A Power Point presentation regarding Stormwater Management Strategic Plan Implementation was shown.

Ms. McDonald said this is the same PowerPoint presentation given to homeowners' groups and the community. There is a list Under Outreach Update of some groups presented to and their feedback.

She noted that Councilor Ives introduced two resolutions, first to increase the storm water fee by \$2.50. Secondly, he urged them to look at strategies for implementation. In April they contracted with Tetra Tech because of the big flood and the need to determine how to meet the challenges of stormwater. They began by going to the people most affected by the storm.

Ms. McDonald reviewed things the group was familiar with such as the flooding, regulatory requirements and Total Maximum Daily Loads (TMDLs). The new program will require more green infrastructure and there are unmet supply demands and changing climates. A challenge is people failing to understand their responsibility for the water running through the Arroyo that takes their property away. The question is how to work with them to assume that responsibility.

She pointed out roads left by the flood are in horrible condition and some areas have no stormwater collection like South Capitol and Casa Alegre, and people's yards and properties are damaged. Every time it rains, she receives three or four calls and several times a week gets calls on arroyo conditions. Part of her budget is maintenance and street cleaning and acequia intrusion. The City no longer introduces stormwater into tributaries of the Acequia from St. Francis to Siler and is finding it challenging to avoid doing that.

The question is how Santa Fe can effectively manage and pay to protect ground water, surface water, from pollution from roads. The new permit will be on infiltration and infrastructure that allows them to easily clean out pollutants. She has contacted others throughout the State on what they spent and what they did differently this year than last. Albuquerque spends a tremendous amount of money on this and has had a similar permit for 6 to 8 years.

Santa Fe is an MS4 collaborative (Albuquerque has 8-13 groups) and may have larger entities join their collaborative as they grow. The new permit creates an incentive for the City, County and DOT (Department of Transportation) to work together. Collaboration reduces the requirements and requires less money with a less restrictive timeline.

The Stormwater Management Plan has identified sediments as a primary problem in the Santa Fe Arroyo. A culvert assessment study showed sediments are 60% of the major problem. Green infrastructure and infiltration can efficiently deal with the sediment catchments and is less work to clean out.

Another problem is how to collaboratively address the amount of vegetation that needs thinning in certain parts of town. Green infrastructure could allow that to be done in a way that slows the water and creates natural places. There would be opportunities to make it beautiful, productive, reduce problems and protect the pavement. The hope is to align the effort with the City's 25-year Sustainability Plan.

Ms. McDonald indicated the \$1.5 million a year received for stormwater, basically allows one project a year. There are five projects on the priority project list since the flood that have gone unrepaired. They have identified \$30 million in projects in need of repair and have also been tasked with on-call contracts with drainage. The City needs to find a way to work with the funds available.

Options developed by the group were to adjust the drainage fee, apply for additional grants and apply for bonds and loans. They are applying to the Clean Water Revolving Loan Fund, and grants with the Hazard mitigation monies among others. They are also working closely on collaborative grants with the Watershed Association. The Association has been very helpful with the Adopt Arroyo Program, many of which are privately owned. The homeowner bears the responsibility for repair and the program assists them in applying for grants and improving the area with their neighbors.

They are also considering impact fees and special levees where voters decide if they want to give money to address the issue, or it could be a combination of those. Councilor Ives proposed \$2.50 fund increase in the stormwater fee would make the average household pay about \$5.50 a month/\$30 a year. The additional \$1.5 million generated is being considered to

invest in bonds for more capital. However, many smaller projects needed, the bond money cannot be used because they are considered maintenance.

Mr. Williamson asked about using the Street Division money for erosion control, repairs etc.

Ms. McDonald explained the Street Division is actually paid through her department and they are trying to align more clearly. Public Works directed her to develop a plan for that, which she is happy to do, but comes down to where the money will come from. There is not enough money to do the things needed and highlights the need to identify projects. A lot of areas are not being maintained and that puts them at risk.

Allen Hook asked if EPA had provided information on the long-term benefits of the investment because that could help with a bond.

Ms. McDonald replied they are looking into that. Looking at surrounding states, Colorado, Arizona, Utah, and Texas, a number of them have an impervious surface fee. After speaking with many of the entities, it would take some time to implement. The stormwater fee is based on meter size and has no relationship to the amount of water that falls on the property. As needs develop and systems grow it is not as aligned as people would like and the impervious surface fee gets them closer.

She noted there is information on the Boulder, Colorado website of how they set up their fee. There are pros and cons. The existing fee is simple to administer, but not related to run-off and offers no incentive to reduce run-off and is not equitable. An impervious area fee would mean larger properties with a lot of paving would pay more, but if they put in retention they could pay less. They would like to look at rebates and credits for better alignment.

The system is complex and will take a lot of explanation and they plan to get City Council's commitment to continue with that approach and ask the community what incentives they would like.

Mr. Hook asked if they have talked to the Chamber of Commerce.

Ms. McDonald replied they have gone to the Chamber, the Homebuilders Association, the Rotary Club, and five or six homeowner associations. Positive feedback was received on aligning the fee with what falls on the property. The fee would also be helpful because much of the space the flooding occurred was grandfathered and the City cannot make them have catchments. The property has not been improved and this could be a way to get them to do that.

Mr. Ellenberg thought Ms. McDonald should be talking about reuse and capturing stormwater.

Ms. McDonald replied ideally, they prefer dealing with water on-site, off the roof for that, but governments cannot do that as easily as a homeowner. Both systems require maintenance, cost more to install, and it is harder retraining people to clean the systems. Ultimately the permits are pushing them to ecologically, because of benefits. Also 60% of their problems are sediments, and not good for inlet systems.

Mr. Ellenberg clarified he was referring to treating stormwater to get drinkable quality.

Ms. McDonald replied the City would not tackle that. It would be expensive and that has a lot of contaminants.

Commissioner Coulter asked the timeline for implementation.

Ms. McDonald thought it might be a year before they have a plan to view. She noted that the state is well below the surrounding states, most pay \$13-\$16 a month. Even catching up would be a great help. If there is another storm, Santa Fe is not prepared, and their budget has not allowed them to repair the damage from the last storm. The rate has not been adjusted in 10 years, before that it was seven years. She noted this proposal does not address the impervious fee, only the rate increase and potentially switching it out.

Commissioner Coulter noted that many people do not realize they pay a storm water fee.

Ms. McDonald said ultimately, they want to infiltrate at the site before having to spend a lot of money to repair. The impervious surface fee would facilitate education and water conservation, water quality, and a rebate program, etc. but there are a lot of steps. Part of the momentum is to get enough ahead to protect the public safety.

She said the group had helped and she would like to continue the conversation. She acknowledged the great work of Mr. Hook, Mr. Armstrong and others in their presentations.

The Commissioners continued discussing how to continue talking about the issues of stormwater and educating the community if a bond is done, on the costs to maintain.

- c. **River Commission Goals Plan, Potential Projects, and Action Plan (Precipitation Monitoring, Scoop-the-Poop campaign, Water-Quality Sampling, etc.) (Zoe Isaacson, River Commission Chair, isaacson@gmail.com)**

Not discussed.

6. **MATTERS FROM STAFF**

Chair Isaacson asked that the minutes reflect there is no Santa Fe River Commission meeting in November, however, a quorum maybe be present at the Public Engagement Meeting

on the Water Reclamation Reuse Strategy referred to by Mr. Schneider and will be posted as such.

Ms. McDonald said they are required to elect a new chair in January and those interested should submit their name to Chair Isaacson. She suggested the vice chair could be "in training" and rotate into the Chair position later.

Commissioner Coulter asked Chair Isaacson her thoughts on remaining the chair.

Chair Isaacson replied she would be willing, however at times it deserved more attention and a co-chair would be a solution. She had been vice chair and became the chair.

Ms. McDonald noted the need to turn in the meeting schedule. She will send out the dates and note the January date. Tentatively the information will be turned in to the city clerk, but members could discuss that more and vote in December.

7. CITIZENS' COMMUNICATION FROM THE FLOOR

None.

8. MATTERS FROM COMMISSIONERS

None.

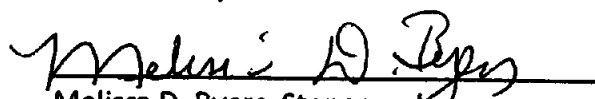
9. ADJOURN

Chair Isaacson closed the meeting at 8:00 p.m.

Approved by:

Zoe Isaacson, Chair

Submitted by:



Melissa D. Byers, Stenographer
Byers Organizational Support Services