

San Antonio River Authority Environmental Advisory Committee (EAC)

March 15th, 2024 11:30 a.m. to 1:30 p.m. (Q3) Meeting Notes

San Antonio River Authority Boardroom, San Antonio TX 78204

EAC Attendees:	EAC Absent:
Carl Clapsaddle (virtual) (CC-1)	James Katcsmorak?
Dr. Heather Hansen (HH)	Bree Jameson?
Dr. Janis Bush (JB)	Joedy Yglesias?
Annalisa Peace (AP)	Dr. John Hooker?
Glynis H. Strause (virtual) (GS)	
Mary Lozano (ML)	San Antonio River Authority Staff Attendees:
James Dodson (JD)	Amanda Spencer (AS)
Connie Waters (virtual) (CW)	Minna Paul (MP)
	Shaun Donovan (SD)
	Caille Marshall (CM)
	Rebecca Reeves (RR)
	Austin Davis (AD)
	Nicole Marshall (NM)
Citizens to be heard:	Brian Mast (BM)
Grant Basset (GB)	
Alan Montemayor (AM)	
Rachel Cywinski (RC)	
Matt Stellbauer (MS)	
Clinton Carter (CC-2)	
Charles Blank (CB)	

1. Welcome

- James Dodson **(JD)** and Dr. Janis Bush **(JB)** give opening remarks.
- Introduction of committee & River Authority staff.
- Approval of December 15, 2024 EAC Minutes.
 - **(HH)** makes a motion to approve the Q2 meeting minutes. **(ML)** seconds. **(JD)** calls for a vote, and minutes are approved by consensus.

2. Texas Clean Rivers Program Overview and Update

Rebecca Reeves

- Overview of the program
- Monitoring map, sites, and parameters
- Coordinated monitoring schedule
- Water quality viewer
- CRP data
- Objectives and priorities

- Please provide input on basin-specific priorities, special studies, parameters of concern, sampling locations that EAC members are interested in.
- Work plan and allocation of resources
- **(BM)** What is SWQM?
 - **(RR)** Surface Water Quality Monitoring – They have volume 1 and 2 of surface water quality sampling guidance and they provide training.
- Draft 2024 Basin Highlight Report. This will be sent out to EAC members for comments.
- Outreach
- Questionnaires

Post Presentation topics discussed:

- **(GS)** What is *benthic*?
 - **(RR)** We call them water bugs. They are the foundation of the food web and are an important food source.
- **(AM)** – Why is measuring PFAS beyond our capability, and can you speak to how that might change in the future?
 - **(RR)** We don't have the equipment and methodologies have not been standardized. Without standardized values we don't know what results mean regarding the health of humans or other organisms in the watershed.
- **(RC)** – Developers have removed vegetation from a construction site near S. WW White Rd. all the way down to the creek. How long will it take to capture water quality data that would show degradation of that site?
 - **(RR)** Likely non-point source pollution that will remain there until a rain event washes pollutants into waterway. We monitor for total suspended solids (TSS) and see high levels of TSS along with *E. coli* during storm events. Site should have silt fencing to stop runoff.
 - They will speak after meeting to get exact location and we'll send environmental investigators.
- **(JD)** – Can you match your flow data to gages downstream to see relative contributions of each subwatershed? Can that data be made available?
 - **(RR)** All of our data is available on our website. Our flow data is limited to our sampling events.
 - USGS has many gages through the basin that record flow rates approximately every 15 minutes.
- **(GS)** – Referring to RC's previous question: Why would they clear a place like that? Don't they have to have permission or permits?
 - **(SD)** Stormwater pollution prevention plan (SWPPP) required for development in city of San Antonio. Our environmental investigator can visit the site and will coordinate with the city to figure out if preventative measures are being implemented appropriately.
 - SARA has a planning team in the engineering department that focuses on nature-based solutions. Progress is slow but we will continue working with entities towards making nature-based solutions more common.
 - **(JD)** We appreciate work SARA is doing in the community.

3. Coordinated Monitoring Meeting

Caille Marshall

- Proposed that some monitoring sites be removed, adjusted, or added.
- Adjustment of monitoring frequency will be discussed at coordinated monitoring meeting.

Post Presentation topics discussed:

- **(GS)** – Asked why a landowner would not want SARA to monitor water quality on their property. Volunteered to help in Karnes County if needed.
 - **(CM)** – People have different attitudes regarding government involvement on their property. Some relationships work well, and some don't.

4. Reintroduction of native mussels into the Mission Reach of the San Antonio River

Austin Davis

- Mussel survivability study
- Mission Reach intensive nekton survey
- Habitat suitability modeling
- Juvenile propagation
- 5,000-6,000 mussels ready to be stocked in the river in the coming months.

Post Presentation topics discussed:

- **(RR)** – Can you speak to the ecological value of freshwater mussels?
 - **(AD)** Freshwater mussels perform multiple ecosystem services like nutrient cycling, substrate stability, and bolstering the ecological food web.
- **(JB)** – Are you still monitoring the mussels you studied for the survivability part of the project?
 - **(AD)** That project started fall 2017 and concluded in fall 2020. We've taken all gear out of the water and mussels survived a while longer, but would have survived longer if we maintained the gear.
- **(JD)** – What is the lifespan of a mussel?
 - **(AD)** Depends on species, 5-10 years or up to 100 years. Yellow sandshell mussels can survive approximately 10-15 years.
- **(ML)** – Can you give a summary of the reproductive cycle involving host fish?
 - **(AD)** Male mussel broadcasts sperm, the female takes it in, and then transforms that into glochidia and holds on to them. There are different strategies to entice fish such as mimicking a prey fish. When a host fish is in range, the female mussel releases glochidia onto those fish and the glochidia adhere to its gills. They parasitize for no more than a couple of months and then drop off and settle.
 - **(MP)** – ESD does a great presentation about that!
- **(JD)** Are mussels eaten by wildlife?
 - **(AD)** Not in significant numbers. Racoons may eat them when water levels are low and they are exposed.

- **(AM)** – What factors caused the mussels to be extirpated in the first place, and how do we avoid repeating that?
 - **(AD)** The river was channelized for flood control, and this interfered with their population as well as urbanization and water quality issues. We can avoid this by reintroducing native mussels and being better stewards.
- **(HH)** – Do predators eat them while they're in the baskets?
 - **(AD)** No, they're protected by mesh.
- **(BM)** – Can you talk about the upcoming ceremony?
 - **(AD)** Currently planning a reintroduction media event tentatively on May 17 where we'll talk to folks about the project and place mussels into the Mission Reach.
 - **(NM)** We'll hold the event at a different location than where the mussels will actually be released to ensure that they're left alone.
 - **(BM)** How many other agencies are doing this, and have you shared what you've learned with other entities?
 - **(AD)** No one is doing this with common species. Reintroducing state-listed species may be mandated in the future, but we're doing this because we can and should.
 - Yes, we've provided lessons learned over the years and shared with other organizations.
 - **(HH)** – Are there any potential regulatory reintroductions in our area any time soon?
 - **(AD)** Not to my knowledge. No aquatic species is a candidate right now.
 - **(CB)** – Will you have projected population goals?
 - **(AD)** We don't have a goal number right now. Our numbers are mostly a product of propagation success, and it can vary widely from year to year. Maybe down the road we have a population number but now we are aiming for as many as we can.

5. General Discussion

- **(GS)** –Conoco would like someone from SARA to advise and observe as they prepare to lay a pipe under the river in November. Minna, please send contact information.
 - **(SD)** – We can assist. Our environmental investigator has worked on many pipeline crossings.
- **(GS)** –Installed a Cal Ripken STEM center in Kenedy Elementary and now installing one at Karnes City this year. Would like contact information of anyone who is interested in being involved.
 - **(MS)** – TWRI does grade school outreach through National Geographic and could see this as an extension of that work.
- **(GS)** – Dobie West Performing Arts Theater wants to put on a birdwatching environmental workshop in the theater and feature experts on birding and the environment. She needs a contact if anybody has one.
 - **(JB)** –Talk about involving graduate students, undergraduate students, and faculty.

- **(CC-1)** *in the chat* – Texas Master Naturalists can help as well.
- **(BM)** SARA has an education team that’s engaged with students throughout the watershed and Minna can provide their contact info.
- **(BM)** We have staff conducting avian surveys on the Mission Reach with data and resources we can share.
- **(GS)** – Rivers they’re studying do not run through San Antonio River watershed.
 - **(BM)** Birds don’t see barriers so that is fine.
 - **(SD)** We have good connections with local and statewide Audubon and can connect you with them.
- **(GS)** – asking for armadillo advice!
- **(MP)** iNaturalist and upcoming City Nature Challenge information.

6. Future meetings dates and items for future consideration:

- Discussed next meeting time, date, location:
 - Q4 (June 14, 2024) Location: held at Conoco Phillips in Kenedy, TX.
 - Tentatively starting at 11:00am for lunch and concluding at 1:30pm.
- Future consideration
 - **(JD)** - Using water markets to acquire and set aside water for environmental flows.
 - **(JB)** – What has SARA done to help monarch butterflies and other pollinators? The count in Mexico this year was low again.
 - **(HH)** – What are the challenges of keeping SARA running, and how can we ensure it keeps running into the future? (e.g., finances, equipment, personnel, relationships with land owners, regulations, etc.)
 - **(MP)** – Possibly incorporate a tour of Escondido Creek Parkway.

7. Citizens to be Heard

- **(AM)**
 - Concerned about plastics in our rivers. Third priority of Sierra Club is to reduce plastic in the environment. Sierra Club gives lectures about plastics, contact AM to request a presentation. River Aid SA holds many river cleanings.
 - **(SD)** – Agreed that microplastics are a concern and River Aid does a great job.
 - PFAS is a growing concern. Advises that our lab begins conducting baseline tests so we can tell if things are getting better or worse.
 - **(SD)** – We’ve sent baseline samples from Leon Creek, Salado Creek, and the San Antonio River to Texas A&M College Station. Currently looking into most cost-effective way to sample.
 - **(AM)** – SAWS did some baseline testing, but that data has not been made publicly available.
 - **(SD)** – Our data is publicly available, but we don’t have a mechanism to put that data on our water quality viewer, but we can share that data.

- Guajalote Ranch may be dumping treated effluent into Helotes Creek. Can we put in a sampling site to establish baseline data?
 - **(SD)** – Harder to sample an ephemeral creek because rainwater is gone so quickly. He has taken a tour of the area. George Vinney has asked ESD to sample springs in the area, so they are examining where those springs would be and hope to be further engaged and will keep everyone updated.
 - **(MP)** – Our citizen science volunteers test for water quality throughout the watershed through Texas Stream Team.
- **(JD)** SARA been sponsor (through financial sponsorship and also volunteers) of San Antonio Bay Partnership cleanups in the San Antonio Bay. Time and effort is greatly appreciated.
- **(MP)** We have 600-member River Warrior volunteer program who conduct cleanups monthly or as needed by our Watershed and Park Operations team. We've taken volunteers to the coast for nurdle patrol and can coordinate to get them down there again.
- **(RC)** – River Authority staff previously tried to give volunteers bottled water. Symbol of environmental racism to put clean water into plastic bottle. If we won't be the leaders, then who will?
 - Discussion about how bottled water doesn't have to go through the same level of testing as municipal water as far as EPA testing and is expensive. Documentary "Tapped" and a Greater Edwards Aquifer Authority YouTube video "Imagine a Day Without Bottled Water" were recommended.

Meeting adjourned at 1:26 PM.