



Please mark your calendar for the fall BFA Fish Fry and Fundraiser

Sunday, 10 December 2023

11:00 -2:00 pm

1615 East Belmont Street, Pensacola

Join us for music by the talented Tanya Gallagher

And back by popular demand are the local artisans with

Pensacola Arts Market



Hello BFA Friends & Members,

This has been another unusual weather year for the area. First, we had a hard freeze which did a lot of damage to local fruit trees and other sensitive plants; then we had an extremely hot summer during which we experienced a drought. Many folks may not realize that plants, much like people and animals, can experience stress.

When oak trees experience stress, they may experience a mast year, like what we are experiencing now with an over abundance of acorns. One large oak may produce upwards of 10,000 acorns, and that means more food for squirrels, deer, and bears. This cornucopia of food will translate into larger litters such as twins and triplets, for wildlife that may only have one offspring at a time. (<https://www.scientificamerican.com/article/this-fall-is-full-of-acorns-thanks-to-a-mast-year/>) Some stressors like strong hurricanes can rip leaves off vegetation, thereby removing the mechanism by which the plant can make their food (photosynthesis), which is why within days the plant will put energy into new growth.

The aquatic environment also experienced unusually warm temperatures, which is really bad news for sensitive species that require high oxygen levels to survive. Turns out, warmer waters hold less dissolved oxygen thereby stressing the many organisms (fish, shrimp, crabs, oysters, etc.) that live in the water column. Bacteria, on the other hand love warmer water and are often stimulated to bloom (reproduce) during these conditions.

Many of our inland waters, creeks, streams, and rivers 'were' once deep in depth, and narrow – such that in the smaller systems, a grown man could touch both banks and often have his head under water. Those days are long gone. Today our creeks are shallow, some barely supporting a sheet flow of water. The once shaded canopy of mature trees which hid the creeks are now long gone, either clear cut or replaced with non-native plants or grasses. The trees and vegetation that lined these waterways were also responsible for stabilizing the banks by knitting together root systems that supporting vegetation that transitioned between land and water, thereby mitigating erosion.

Many people living in the Panhandle may not be aware of the high biodiversity of native plants and animals found in south Alabama and northwest Florida. The area is known as a biological hotspot. Sadly, this lack of knowledge coupled with the attitude that "it's my property, and I can do whatever I want on it" are modifying the natural resources – in a negative manner.

Most residents and visitors are excited when they see dolphins, manatees, and the occasional otter in our waterways, which gives us hope that conditions may be improving. After all, it wasn't that long ago that we didn't have pelicans or ospreys in our area – in part because the waters were so contaminated that their food source, mainly fish, died in fish kills that were measured in square miles (1960s & 70s in Escambia Bay).

Today, we know so much more about water quality, habitat, buffering the land/water interface, the importance of seagrasses, floodplains, riparian zones, forests, and how all these components interact with each other. Surprisingly, while technology zips along at lightning speed, common sense and the protection of natural resources seem to still be in the dark ages. Occasionally, a fine may be levied here or there, long after the damage is done, to which the responsible party shrugs and says "well, that's the cost of doing business". Nowhere is this more visible than in the Panhandle of NW FL.

In the four decades I've lived and worked in this area, I've had the good fortune to meet and work with many locals and old timers who shared their wisdom and concerns with me. I've come to recognize that one of the worst offences to the area's natural resources comes from one of the easiest to mitigate, the so called 'low hanging fruit' - Sedimentation.

Look at an aerial map on Google Earth, and you'll notice that from Panacea, FL to Breton National Wildlife Refuge, LA, the inland landscape is protected by a series of barrier islands. Within that barrier island chain, the area from Port St Joe

west to the Perdido Pass, the Gulf of Mexico barrier islands are made up of blinding white sand quartz, the remnants of the last ice age which pushed glaciers south scouring the Appalachian Mountains while carrying flora (and depositing the seed bank) and fauna to this area of the Panhandle (resulting in the Biological Hotspot). Nicknamed “The Emerald Coast”, this unique landscape complete with shifting sand bottom rivers draws tourists worldwide to this slice of paradise and drives the successful economic engine we call tourism.

Sedimentation of natural material, quartz, isn't a problem - rather it's required to feed the barrier island system which is constantly shifting, shaping, and rolling over itself while it migrates westward in the longshore current that feeds and maintains the barrier island complex. The problem is the “fill” that is used for roadbeds, and building up elevations so homes can be built in low-lying areas. This “fill” is mined from inland areas in the upper portions of the coastal counties and transported to the coast where the ‘opportunity’ for it to enter waterways is far too common. The fill is a combination of clay and silt, which is favored in the building industry for its ability to be compacted. When this clay and silt are capped, either with vegetation or asphalt, cement, etc., the compacted matrix becomes stabilized until the cap is removed or damaged.

Unfortunately, the clay and silt matrix are very soluble in water, so when the area receives heavy rains, the fill makes its way into nearby waterways. Therein lies the rub and the vulnerability of the system. While the ‘right hand’ is trying to protect the natural resources (wetlands, tidal marshes, and seagrasses), the ‘left hand’ is trying to hurry up and build new roads, new subdivisions, and new hotels...and in doing so – we are placing non-native materials in highly vulnerable locations, namely near waterways or conveyances to those waterways. Once the silts and clay enter the water column, they shade out the bottom of the waterbody so much so that important seagrasses can't get the light they require to produce their food. The seagrasses are also responsible for pumping oxygen into the sediments where they are rooted, and they serve to capture and trap sediments, while sequestering carbon, and serving as a nursery area for most of the commercially important seafood available.

The conundrum is that we want both, we want our area waters to be fishable and swimmable, to recreate in, and we need more affordable housing which creates jobs for the masses that are moving into the area. But somewhere along the line we lost our way for factoring in the weather patterns, and being good stewards, and integrating what we now know as climate change, and selecting the best places to build (always high ground), and the quality of the developers and builders who are building these developments.

I once had a carpenter share this situation. They were framing new houses in a subdivision in Pace, FL, and he noticed pitcher plants and sundews (plant species) on the building site. He said I knew we shouldn't be building there because those plants only grow in wetlands, but I have a wife and three kids and if I said anything, I'd be let go. And you know, there are 10 guys standing in line behind me, who would take my place in a heartbeat, and I'd bet they wouldn't care. That's a tough situation to be in.

That's why this next part of the newsletter is so interesting and may finally be the catalyst that aligns citizen concerns, the county, state, and federal personnel to protect these natural resources. Just prior to this Thanksgiving (2023) in Indian Bayou, Santa Rosa County, FL, a man decided he could cut down trees and bring in fill to prepare a few lots for a quick sale.

Indian Bayou is small rural bayou located due south of I-10 and has one small subdivision known as Monterey Shores in the lower portion, near the mouth of the bayou system. This subdivision features two canals that were dug in the 1990's, in which sand dug out of the wetland was piled up on the banks to raise the land. The ditch and drain method. Houses built along the canals are mainly built on pilings; all are on septic systems. The picture above shows the beginnings of a third canal (west side) which was never completed.

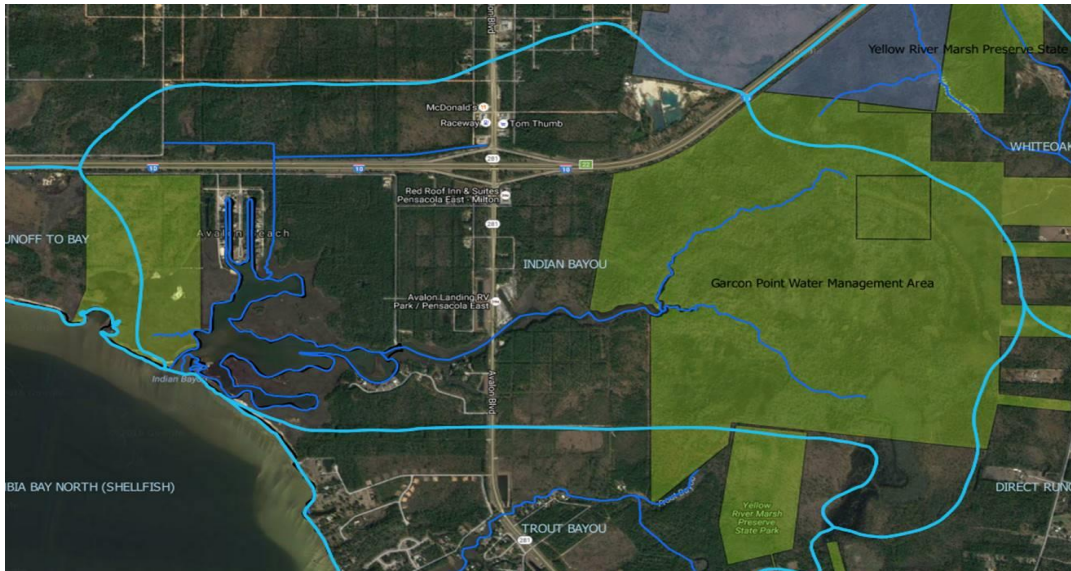


Indian Bayou was impacted in 2017-2019 while the I-10 expansion (2-lane to 3-lane) was underway, and in tandem the county had been grading a one-mile-long road on the north side of I-10 (San Juan Street) for ~30+ years. Turns out the bayou had a small portion located north of the interstate, but back in the 1960s-70s while the interstate was being built – the upper system became fragmented, except for a box culvert that connects the northern and southern portion, all the while the underground the system continues to be hydrologically connected. This region of FL receives an average annual rainfall of 66”, but in 2017 the area received 91.91” and in 2018 90.01”, according to NOAA. All that rain carried red fill (Silt and Clay) into a small feeder creek which enters a tidal wetland, these two activities resulted in the bayou bleeding red.

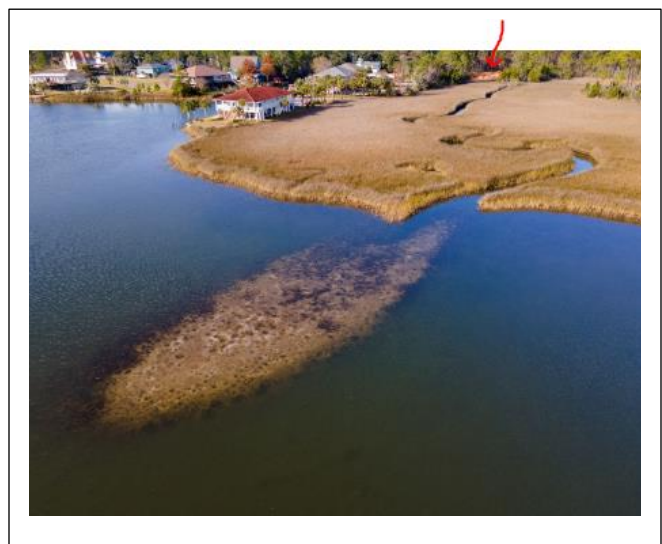
<https://www.pnj.com/videos/news/2017/08/29/red-clay-sediment-indian-bayou-raises-concerns/105096882/>



The aerial from 1994 shows how the roads were platted through forested wetlands which are ringed with tidal marshes. Remnants of the roads cut through these wet areas are still visible today. Note the white sand in the disturbed areas around the canal, this is native to these systems.



The map above outlines the Indian Bayou Watershed (light blue) and the navigable waters in dark blue. The dark blue line which connects the upper portion of the watershed straight down into Monterrey Shores is a drainage ditch built during the I-10 development to keep water from flooding the road. Back then stormwater concerns were not an issue or even considered. The upper boundary of the watershed (west side of Avalon Blvd) is San Juan Street, a one-mile-long red clay road with no homes, no utilities (electrical or water), and no sewage hook up available.



Which is why it was so alarming when neighbors began calling about the recent activity and the amount of dump trucks coming and going to this quiet neighborhood. The pictures depicted here were taken by a drone pilot and capture the amount of fill, the color of the fill, and that no care (Best Management Practices, such as silt fencing and hay bales) were taken to keep the fill out of the wetland. The upper right picture shows the sediment tongue (deposited in 2017-19) and how seagrasses are just now starting to revegetate that system (note the red arrow on the top of the picture identifying the new fill). Mother Nature is resilient, but SHE doesn't stand a chance against this type of carelessness. Thanks go out to the fine folks connected to Save Our Soundside (SOS), Save Blackwater River, the Santa Rosa County Watershed Protection Committee, and the citizenry who have spent countless hours advocating against clear cutting, and requesting an increase in buffers for additional wetland protection.



Kudos also go out to Santa Rosa County to hire staff to enforce the laws currently on the books and invest in additional environmental resource staff. All eyes will be watching how this mess will be addressed, remediated, and restored by the state (FDEP and NFWFMD) and federal (USEPA and ACOE) agencies tasked with protecting our waterways.

And a special thanks to Tom McLaughlin with the PNJ, who recently coined me as 'Always Outspoken' in the article he penned 2 Dec 2023. <https://www.pnj.com/story/news/local/milton/2023/12/01/santa-rosa-code-enforcement-halts-illegal-milton-land-clearing/71739969007/>

The Bayou Texar Foundation 1975 - 2023

The Bayou Texar Foundation was established in 1975 at a time when building proliferated around the bayou. Red clay streamed from construction sites into the bayou smothering sea grass and ruining sea life nurseries as it settled like a blanket on the bottom of the bayou. Stormwater volume increased as the city grew. Stormwater was delivered straight into the bayou via ~65 stormwater outfalls that carried debris of all sorts including garbage, animal feces, dirt, and anything else that washed into the streets. It became obvious to the community that this stormwater was causing great harm.

The Bayou Texar Foundation Members were able to connect-the-dots regarding sediment input from the outfalls and the new development occurring around 9th Ave and Bayou Blvd (the new Sacred Heart Hospital complex and Cordova Mall and the neighboring vicinity). The BTF Membership attended regular City Hall Meetings and politely petitioned the city to buy street sweepers (to get sand off the road before it entered the creek and ultimately the bayou). Their many requests fell on deaf ears. All the while fish kills were happening weekly.

The newly minted University of West Florida had several top-notch ecologists and biologists who began working on area waters, they included Drs. Tom Hopkins, Gerald Moshiri, Peggy Winter, Charles D'Asaro, Steve Bortone, and Sneed Collard. Their combined research provided the foundation for the many studies focused on area waterways, and they worked closely with the Bayou Texar Foundation, the Bream Fishermen Association (now BFAwater.org), the State of FL Pollution Prevention Dept (which became the FDER then the FDEP), and the new USEPA.

The Bayou Texar Foundation was begun by many concerned citizens and waterfront property owners in 1975, including Drs. Aronson, Kraselsky, and Payne, the Pattons, Tippins, Mayos, Hess', Emmanuels, Bennetts, and Kahns, to name a few. For over 20 years they met among themselves, attended meetings, and persistently worked to save their bayou. In 1998, after 23 years as president, Dr. Payne called a meeting to order, where the leadership was passed onto Walter Biggs (Biggs Sporting Goods) and Marty Donovan who served as co-chairs and saw to it that the Stormwater Utility Fee was adopted and implemented. Marty Donovan stepped down as co-chair in 2001, after winning a position on the City Council. Blair Stevenson and Eleanor Godwin, best friends since childhood who also grew up on the bayou stepped up as co-chairs and have served loyally until November 2023, at which time this important organization decided to sunset.

The City of Pensacola formed the Citizen Stormwater Committee (1980s) which then recommended the City conduct a bathymetric study of Bayou Texar, that resulted in a report by Dames and Moore Engineering Firm in the late 1990s. The sonar used by the researchers (today it would be antiquated but back then it was state-of-the-art) identified areas of accumulation of 'unnatural' sediments (into the bayou) which provided the evidence needed to get the Citizen Stormwater Committee to propose a city-wide Stormwater Utility Fee (2001) annually for all city residents. This fee resulted in funds 100% dedicated to retrofitting all the outfalls entering the bayou and many along Carpenter Creek. This fee also allowed the city to keep up with continued growth, much of what we are observing today. The positive results are undeniable, as there have been no fish kills in the past 15 years!

Today, we can compare conditions in one watershed, Carpenter Creek and Bayou Texar, located in two jurisdictional zones (City of Pensacola and Escambia County Florida) with similar watersheds (Bayou Chico and Bayou Texar), in the same county and undergoing similar growth patterns. Escambia County unfortunately does not have the dedicated funding towards stormwater utility fees. Groups such as Bayou Chico Association are grappling with sediments, many of which are contaminated and extremely costly to remove. Homeowners are disgruntled because they cannot swim in their waters nor pull their boats up to their docks, and pay higher taxes based for waterfront properties.

They say the best time to plant a tree was 20 years ago, the second-best time is today. This can also be said for the Stormwater Utility Fee, 22 years ago the City of Pensacola adopted this fee, and today we are seeing the benefits of less sedimentation and more life returning to the lower bayou.

The picture on the right is a 6-year-old Phil Payne with his dad in 1936, learning how to swim with his dad in 1936 on Bayou Texar.

Dr. Philip Almon "Hally" Payne. Hally lived almost his entire life on Bayou Texar in Pensacola, Florida. He enthusiastically explored the surrounding shores and woods of this bayou. Hally believed it was his mission to protect the ecosystem of the bayou and was a lifelong advocate for Bayou Texar.

The Bream Fishermen Association is also undergoing a transition, and in doing so is rebranding to reflect the current identity and purpose more accurately. To the early members and their families, the Bream fish (a small pan fish) sustained many in the region through famine and the Great Depression of the early 1930s and 40s. This generation and their children depended on the land and water to sustain them.



The Bream Fishermen Association may inadvertently suggest a recreational fishing club, rather than an environmental monitoring organization. By rebranding to BFA, we believe the name change symbolizes the organizations adaptation and growth alongside the community. BFA has expanded the important water quality monitoring program (which we will resume in 2024) to encompass a wider environmental and conservation effort in the region, including Project Oyster Pensacola (POP), a Phyto- and Bioremediation project in partnership with SOS, and working with several public and private schools. Another effort by BFA included winning an Impact 100 grant in partnership with the Satori Foundation, which allowed our organization to purchase a large van for sampling and basic analyses, while Satori was able to purchase a tritoon boat. Together our organizations have been able to work with underserved young people in our region to educate and foster a sense of stewardship and appreciation for the environment.

The BFA is a not-for-profit organization dedicated to promoting environmental conservation and recreational opportunities for anglers, hunters, campers, and people invested in related outdoors activities.

It is the objective of the BFA to support, develop, and implement programs that will: 1) Improve the quality of our environment; 2) Protect and maintain our present wilderness type lakes, rivers, swamps, marshes, bays, forests, and beaches in their natural undeveloped state; 3) Advance the causes of plant, marine, and wildlife preservation; and 4) Environmental education and outreach.

The vision for the BFA is the re-connection of communities to their watersheds through a thriving regional watershed monitoring approach. The activities of citizen volunteers through this organization foster the appreciation, conservation, restoration, and appropriate management of our area waters. The desired outcomes for the resources are increased biological diversity and productivity from head-water streams to our panhandle bays.

Membership is open to all individuals who support these objectives. Please join the BFA by sending us your contact information (name, mailing address, phone, and email) be sure to notify us if you prefer to receive notices and announcements by mail or email, and \$20 annual dues to our mailing address: